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INTRODUCTION

The United States Transportation Command (USTRANSCOM) was established by Presidential Directive, effective 15 April 1987. This directive at long last signifies the strategic importance of transportation systems to the national defense. This has not always been the case. In fact, airlift, the subject of this thesis has gone through a long hard struggle to get where it is today.

Jack Snyder hypothesizes that service doctrines are biased in that, inevitably, "doctrines spawn plans, force postures, and institutional structures which generate a vested interest in self-perpetuation." Whereas most service doctrines try to expand and promote their own constituent professions, this has not been the case with the Air Force's doctrinal treatment of the military airlift profession. This is because airlift was not originally perceived as a military function central to the Air Force mission. In fact, the primary purpose of airlift has been to support the deployment of Army combat forces. Therefore, a major allocation of Air
Force resources to airlift actually would serve the purposes of the Army deployment mission rather than the traditional Air Force missions of strategic bombardment and air superiority. Morton Halperin, Priscilla Clapp and Arnold Kanter claim that "the part of the Air Force that has been least effective in challenging the dominant role of SAC is MAC, charged with movement of men and material primarily for the Army." This phenomenon recently received official acknowledgment in a staff report to the United States Senate Committee on Armed Services entitled "Defense Organization: The Need For Change," which stated "functions (i.e. airlift) which are not central to a Service's own definition of its mission tend to be neglected."

According to John Endicott, the post-World War II advent of strategic nuclear weapons "has produced a renaissance in the study of strategy ... [because of] the critical nature of possessing the correct strategy." He states that "this is especially true in the United States, where academicians as well as military professionals have attempted to ascertain the most suitable national military strategy for the United States." Although this study makes no attempt to ascertain the most suitable national military strategy for the United States, it does examine that military strategy, or what I will call strategic doctrine. Strategic doctrine is the broad military strategy which is implemented by the Office of the Secretary of Defense in response to the President's overall
THE UNIVERSITY OF PENNSYLVANIA

UNITED STATES STRATEGIC DOCTRINE

AND THE

EVOLUTION OF MILITARY ARLIFT

A THESIS SUBMITTED TO
THE FACULTY OF THE SCHOOL OF ARTS AND SCIENCES
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

DEPARTMENT OF POLITICAL SCIENCE

BY

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PHILADELPHIA, PENNSYLVANIA
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Having served for the past five years as a C-141 strategic airlift pilot, I was able to develop an expertise in an Air Force major weapon system. Yet, according to Lieutenant Colonel John E. Endicott, as an Air Force Officer I have a "further responsibility of assessing the relationship of my specialty to national defense policies in general."¹

While assessing this relationship, there is a conflict which exists between my role as an inquiring scholar and as an obedient soldier. Richard R. Rosser describes this dichotomy as follows: "There is tension ... in the character of the soldier-scholar. The soldier must function in a disciplined and highly structured organization. The scholar must consistently question the most sacred dogmas of his profession in the endless search for truth. Yet the roles can be compatible. The soldier-scholar searches for new answers to defense problems, but ultimately acquiesces in the decision of his civilian and military superiors. The role of the soldier must always prevail."²

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his patience, wisdom, and enlightenment throughout the entire summer. Moreover, I wish to thank Professor Edwin Haefele for sponsoring this academic endeavor.

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NOTES


"Ibid."
CHAPTER I

INTRODUCTION

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Jack Snyder hypothesizes that service doctrines are biased in that, inevitably, "doctrines spawn plans, force postures, and institutional structures which generate a vested interest in self-perpetuation."1 Whereas most service doctrines try to expand and promote their own constituent professions, this has not been the case with the Air Force's doctrinal treatment of the military airlift profession. This is because airlift was not originally perceived as a military function central to the Air Force mission. In fact, the primary purpose of airlift has been to support the deployment of Army combat forces. Therefore, a major allocation of Air-
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national security policy, which includes political, economic, psychological as well as military instruments. Since World War II, U.S. strategic doctrine has been articulated under the auspices of containment, massive retaliation, flexible response, and realistic deterrence. Snyder states that in developing service doctrine, the military planner uses strategic doctrine, which as "the most important simplifying device ... imposes a structure on the strategic problem and suggests possible solutions."

If internal service bias has not driven the evolution of military airlift, then what has? The answer is strategic doctrine, formulated by the Chief Executive and implemented by the Office of the Secretary of Defense. The subject under consideration is military airlift and its response to strategic doctrine. It is my contention that there is a direct relationship between strategic doctrine and military airlift which can be found through an eighty-year historical perspective. Military airlift will be examined in terms of historical achievements, Air Force doctrine, force structure and organization. By examining these four dimensions over an eighty-year period, this study will attempt to determine the effect U.S. strategic doctrine has had upon military airlift. For the purposes of this study, U.S. strategic doctrine will be considered the independent or causal variable. Military airlift will be the dependent or resultant variable. This study examines, through an eighty-year historical chronology,
the evolution of military airlift as it has adapted to
external United States strategic doctrine rather than internal
Air Force advocacy. My thesis is that military airlift has
evolved in direct response to U.S. strategic doctrine,
especially when this doctrine has been reinforced by strong
civilian support for additional development of airlift.

Admittedly, besides strategic doctrine, there are
numerous other factors which have had a profound influence on
the evolution of airlift. Examples abound. Leaders within the
military airlift profession, such as Lieutenant General
William H. Tunner, have pushed for autonomy and the
centralization of resources. The Army, claiming to have
received insufficient airlift support in Vietnam, threatened
to take the airlift mission away from the Air Force. More
recently, having accepted the fact that airlift is an Air
Force mission, the Army has become airlift's foremost
proponent in Congressional budget testimonies. National
crises, such as the Berlin Airlift, have demonstrated the
neglect of U.S airlift capabilities and have provided an
impetus for minor improvements. Although these factors should
all be taken into account, the point I want to emphasize is
that military airlift has only made significant,
across-the-board (i.e. doctrine, force structure and
organization) breakthroughs under two Presidential
Administrations. The Kennedy Administration pushed for the
development of a jet powered, global strategic airlift fleet
under the auspices of flexible response. The Reagan Administration has sponsored an expanded and more powerful airlift fleet in order to bolster the newly formed USCENTCOM. In other words, although the other factors mentioned may have motivated minor improvements in military airlift, only with the strong backing of an administration and a strategic doctrine that favors strong conventional forces has airlift managed to make significant, across-the-board improvements. In support of this argument, the Georgetown Center for Strategic Studies recently wrote in Toward A More Effective Defense, that the Air Force has only increased its airlift capabilities when "heavily pressured by civilian officials or when threatened by Army moves to take the function away." 

In order to analyze the impact strategic doctrine has had upon military airlift, I will examine significant airlift historical achievements, official Air Force doctrinal treatment of airlift, airlift force structure and airlift organization.

By examining the major milestones in the history of airlift, the reader is better able to appreciate the role airlift has played in the conduct of U.S. foreign policy. Moreover, such an examination gives him a deeper understanding of the significance of airlift as a profession. Furthermore, the prevailing Air Force doctrine and the airlift force structure and organization are all set in the context of the world situation during the time frame under consideration.
The current edition of Air Force Manual 1-1 (AFM 1-1), Basic Aerospace Doctrine of the U.S. Air Force, defines doctrine as such: "Aerospace doctrine is a statement of officially sanctioned beliefs and warfighting principles which describe and guide proper use of aerospace forces in military action. The Air Force promulgates and teaches this doctrine as a common frame of reference on the best way to prepare and employ aerospace forces. Accordingly, aerospace doctrine drives how the Air Force organizes, trains, equips, and sustains its forces [emphasis added]."*

Air Force doctrine is an important measurement because, according to Perry Smith, it is the "life blood" of the Air Force and gives the service a justification for its existence. I.B. Holley believes that Air Force doctrine "is the point of departure for virtually every activity in the air arm ... [and] like a compass bearing; it gives us the general direction of our course." According to Holley, AFM 1-1 "defines the roles and missions of the service, the scope and potential capabilities of its weapon systems ... it lies behind the decisions as to what weapon will be developed and gives guidance as to the relative importance of several competing roles or weapon systems when the time arrives to apportion the invariably inadequate supply of dollars."*

The postwar planners neglected airlift in their postwar force structure because of their doctrinal focus upon strategic bombing, which had been used to justify the U.S. Army Air
Corps' case for autonomy. This study examines every issue of AFM 1-1 since its initial publication in 1953 and analyzes how it has treated the airlift mission under the strategic doctrine of the various Presidential Administrations. Thomas Greer states: "doctrines governing employment of the particular branches of aviation have been affected to some extent by national strategic policies and the state of technological development." Throughout the years, doctrine which has proven to be irrelevant or ineffective has been discarded and replaced with new doctrine which may have recently proven itself to be relevant and effective in combat employment. Besides combat experiences, doctrine has been subject to change due to new technologies or national security policies.

Force structure is a good indication of the importance the Air Force places on airlift. It can be measured in terms of force levels and technological advances. In the limited Air Force budget, decisions had to be made as to the allocation of scarce resources among competing interests from the bomber, fighter and airlift communities. The trend as to whether or not more resources were being devoted to airlift can be deduced by measuring the number of aircraft devoted to the airlift mission over the past forty years. Technological development can be measured by the number of new weapon systems researched, developed and deployed. In addition to new aircraft, technology would include any modifications.
made to existing airframes to enhance their capabilities to handle more complex tasks.

The organization of military airlift has evolved from a transport service to its new plateau as a major combatant command which is a key component of the unified command structure. Throughout its short history, the importance of airlift has always been manifest by its place in the pecking order of the hierarchy of Air Force commands. This examination will reveal that airlift’s stature within the Air Force has always been a reflection of the emphasis the current strategic doctrine placed on conventional forces and the political backing which airlift received from the administration in office at any given time.

The second chapter, spanning from 1917 to 1947, deals with the initial development of military aviation and airlift in particular, through World War II. Special emphasis will be placed on the China "Hump" airlift operation, which served as the initial proving ground for the military utility of the airlift mission. Chapter Two closes with the initial establishment of a separate Air Force in 1947. In this study, the evolution of airlift will be examined in five chapters. The third chapter begins in 1948 in the aftermath of the newly established Air Force and finishes with the end of the Eisenhower Administration in 1960. Truman’s policy of containment and Eisenhower’s strategic doctrine of massive retaliation will both be examined. Special attention will be
given to the Berlin Airlift, which demonstrated the strategic importance of airlift and was used as a catalyst for improvements in the airlift force structure. Major emphasis will be placed on the negative impact of the Eisenhower Administration's strategic doctrine of massive retaliation on military airlift doctrine, force structure and organization, which almost led to the total demise of U.S. military airlift as an entity. The fourth chapter covers the 1961 - 1968 McNamara era of flexible response under the Kennedy and Johnson Administrations. Placing a profound emphasis on conventional forces, flexible response was responsible for the genesis of a modern military jet airlift fleet, the establishment of the Military Airlift Command and the first acknowledgment by official Air Force doctrine that airlift, although playing a support role, was at least an Air Force mission. Historical emphasis will be placed on the Vietnam War and its impact on airlift. The fifth chapter deals with the Nixon and Ford Administrations from 1969 until 1977 under the strategic doctrine of realistic deterrence. Realistic deterrence placed increased reliance on the indigenous forces of the allies to provide for their own conventional defense. Since the administration de-emphasized the United States' role in providing massive conventional reinforcements should its allies be attacked, there was little justification to boost the military airlift forces. This strategic doctrine, combined with a majority of defense funds going to the Vietnam War and
the cutbacks in defense spending in its aftermath, meant that military airlift was allowed to stagnate. The chapter also examines the contributions of airlift during the withdrawal from Vietnam. The sixth chapter covers the period from 1977 to 1980 under the Carter Administration. The pronouncement of the Carter Doctrine lead to the renaissance of military airlift. Air Force doctrine emphasized rapid deployment for the first time. In addition, efforts were made to modify and expand the existing airlift fleet. Special emphasis is placed on the Nifty Nugget exercise and its impact on the establishment of the Joint Deployment Agency. The seventh chapter examines the Reagan Administration’s across-the-board military buildup from 1981 until 1987. One major beneficiary of the buildup has been strategic airlift, with the procurement of fifty new C-5B s and forty-four KC-10s. Plans are also on the drawing board for the C-17 with a projected operational capability of 1992. The joint deployment lessons learned from the Urgent Fury rescue mission to Grenada are examined in detail. Furthermore, the major result of those lessons, the disestablishment of the Joint Deployment Agency and establishment of the United States Transportation Command are both explained. Finally, Chapter Eight draws general conclusions from the study and makes projections for the future of military airlift.
NOTES


4Endicott and Stafford, p. 209.

5Snyder, p. 18.


8Endicott and Stafford, p. 403.


CHAPTER II

1917 - 1947

Introduction

This chapter traces the early development of military aviation in general and airlift in particular. Before World War II the military utility of airlift had not been realized. As a result, when the war began there was nothing more than a skeleton organization with no established doctrine or force structure. Consequently, old bomber airframes had to be modified for transport use. In addition, many multiengined aircraft were commandeered from the airlines. Aircraft built specifically for the airlift mission were virtually nonexistent. By the end of the war many lessons had been learned from the exploits of the Air Transport Command (ATC), especially the "Hump" operation in China. This campaign laid the foundation for the future doctrinal development of military airlift.
Airlift has been neglected since the earliest days of military aviation. In 1917 the early military aviation pioneers accepted the Clausewitzian formula of warfare, that of destroying the enemy's armed forces. Military aviation consisted of nothing more than pursuit airplanes in World War I. These pursuit planes flew two primary missions, supporting the ground troops in the close air support mission along with maintaining control of the air with the "dogfighting" or counterair mission.¹

Through the decade of the 1920s, aviation pioneers such as the Italian Field Marshall Giulio Douhet and U.S. Brigadier General Billy Mitchell advocated that air power should become a force of its own, striking with mass indiscriminate bombing against the enemy population centers and industrial base. By 1941, the Air Corps had taken this idea and developed it into a "highly analytical, selective, and precise" method of attack. Airpower would be used to attack "carefully chosen key points in the enemy's national structure. Collapse of the structure, it was thought, would lead the enemy population to surrender." This strategy was called daylight precision bombing, which was a far cry from World War I nighttime indiscriminate bombing. The theory worked as follows: "heavy bombers would attack from high altitude and in large formations; it was generally believed that their defensive
fire power in cross fire would render fighter escort unnecessary." Official Air Corps doctrine "heavily emphasized the strategic offensive role and slighted other functions of airpower." The bomber replaced the pursuit (fighter) as the primary weapon system of the Air Corps by 1930, largely due to technological advances in the construction of larger aircraft capable of carrying heavy bombs over long distances.

The concept of military airlift had not even been enunciated, except for a minor mention from General Mason M. Patrick, the first Commander of the Air Corps, when it was formed in 1926. When asked what the possible uses of aircraft were in warfare, he replied, that when developed, airpower could "carry destruction to the vitals of an enemy nation, disrupt war industries, attack communications, and secure information otherwise inaccessible ... and as carriers of troops and supplies."

Because of the new air doctrine of daylight precision bombing, pursuit aviation was now relegated to the role of local defense. Although there was a need for an escort fighter, in the 1930s it was not technically possible to build a fighter with the range to stay with a bomber fleet. Therefore, "the judgment of pursuit experts was largely ignored, ... and consequently, while America was to lead the world in bombardment, she was to fall behind in fighter development."

This following description, though about attack aviation,
mirrors the prewar airlift predicament, which was even more neglected than close air support: "Air Corps theory gave a strictly secondary place to support aviation (also airlift), and insufficient stress was placed upon the development of appropriate doctrines and material, ... they did not succeed in working out the precise relationships and practical arrangements between ground and air commanders, or the detailed composition and employment of support units. There was failure also to reach clear-cut agreement on the optimum type of equipment and tactics for ground support (also airlift). The United States, as a consequence, entered World War II with inadequate preparation in this important branch of military aviation."

In the years immediately following World War II, military planners did not give serious consideration to developing a strategy for fighting the next war. U.S. intelligence services estimated that the Soviet Union would need several years to recover from the massive damage inflicted on their economy. It did not seem necessary to formulate a warfighting strategy when the U.S. held a nuclear monopoly and no power was capable of launching a surprise attack to destroy that capability. As a result, U.S. conventional forces were demobilized.

The Joint Chiefs of Staff understood that the atomic bomb had secured a measure of deterrence for the United States. But, deterrence was seen as a unique function to be served by strategic bombers carrying nuclear weapons and nothing else.
This was probably because the U.S. held a monopoly and had no fear of retaliation. Yet, when policy makers considered the future and the probability that the Soviets might someday develop their own atomic device, it became evident there would be a need for an eventual change in defense policy, placing greater reliance on conventional forces. In December of 1947, the President's Air Policy Commission predicted the Soviets would have "substantial quantities" of nuclear weapons within a five year time frame and suggested "this means that the traditional peacetime strategy of the United States must be changed radically. We can no longer count on having our cities and the rest of our mainland untouched in a future war, ... we must count on our homeland becoming increasingly vulnerable as the weapons increase in destructiveness and the means of delivering them are improved." This would not happen, though, for another fifteen years.

Evolution of Military Airlift

The Hump Airlift of World War II

Without a doubt, the single most important operation to demonstrate the capabilities of airlift was flying the "Hump" (Himalayas) to keep the Chinese equipped to fight the Japanese. President Roosevelt personally expressed his views on the importance of this mission on 25 February 1942 by
stating that "it is obviously of the utmost urgency ... that the pathway to China be kept open." The prevalent view at the time was that China held the key for a counterattack against Japan. Therefore, it was considered essential that China not collapse. Because of the Hump airlift, the Chinese were able to put up enough of a fight to occupy a two million man Japanese Army on Chinese soil. This, in turn, reduced the Japanese forces available to combat the American forces in the Pacific islands.

At the beginning of the war, Tenth Air Force, headquartered in India, was given the responsibility for the Chinese airlift operation. Yet, being a combat command, it was more concerned with generating bomber and fighter sorties, rather than the airlift support effort. Tenth AF flew its first airlift mission on 8 April 1942 to transport bladders of fuel in support of Lieutenant Colonel James H. Doolittle's famous raid on Tokyo, which took place on 18 April 1942. Throughout April and May only 308 tons of supplies were airlifted to China. By August the operation was averaging only 700 tons a month with a small force of C-47s.

Realizing this was not nearly enough airlift to keep China in the war, Generalissimo Chiang Kai-shek began to put pressure on both military and civilian officials in Washington to provide more airlift. An investigation team reported that the 10th Air Force operation was short of aircraft, maintenance, personnel and the morale was low.
Colonel Cyrus R. Smith, Deputy Commander of Air Transport Command, proposed that ATC takeover the Hump operation. His only stipulation was that all the personnel, aircraft, maintenance, and supplies come under the jurisdiction of ATC, which would be supervised by General Hap Arnold, Chief of the Army Air Force, rather than the theater commander. His exact wording was "the principal experience of the Air Transport Command is in air transportation, as contrasted with the experience of the theater commander being principally in combat and in preparation for combat, ... the India-China ferry operation must be conducted on the best standards of transportation if it is to have maximum effectiveness."  

The Air Transport Command was given responsibility for the Hump operation on 1 December 1942. The primary means at its disposal was the reliable C-47, which carried 2 1/2 tons and the undependable C-46, which carried 4 tons. Later on, the operation also got the brand new C-54, which had four engines and could carry three times as much as the C-47. ATC increased the number of air bases in India from just a couple to seven. They also increased the number of planes, maintenance troops and equipment, parts and personnel. By the last year of the war, ATC was airlifting 45,833 tons of supplies per month. Each day an average of 650 planes would fly, one taking off every 2 1/2 minutes, 24 hours a day. This infamous airlift operation provided 100% of the fuel, ammunition, weapons, administrative supplies and C-rations (virtually everything)
to the American forces stationed in China. This feat was a milestone in the history of transportation, never before had a community been supplied virtually all of its needs by airlift. To further dramatize this feat, it all took place under hostile conditions, adverse weather, and treacherous terrain. Thus to quote Lieutenant General Tunner, the most successful commander of the Hump operation, "the Hump Airlift proved, forever, the efficacy of air transportation ... and those of us who had developed an expertise in air transportation knew that we could fly anything anywhere anytime." 18

The Hump was not only a great military success. In addition, it was, in the words of General Tunner, "directly responsible for scores of capable junior officers going on to serve the Air Force well in the technical and demanding field of air transport." So, the Hump demonstrated that only men who were trained to be specialists in airlift could run an operation of the same magnitude of the Hump with any measure of success. In essence, the Hump set the standard for all future airlift missions to follow. Airlift had proven itself as a viable, if not superior method of transport. In General Tunner's words, "from the Hump on, airlift was an important factor in war, in industry, in life." 19

For the record, the Hump airlift operation kept 60,000 American soldiers and 19 Chinese Armies supplied in order to keep one and a half million Japanese soldiers immobilized in China. Almost one million tons of cargo were flown over the
Hump to China throughout the war delivering food, ammunition, petroleum, mules, steam rollers and four Chinese armies.20

Air Force Doctrinal Treatment of Airlift

On 9 July 1941, feeling the impending threat of war, President Roosevelt requested logistical war requirements from the Army Air Force.21 The Air Force strategic plan, AWPD/1, was devised in August of 1941. According to AWPD/1, the airlift mission was to be divided into two distinct categories. The first category called for 1200 ground support troop-carrier aircraft which could double as cargo planes and fulfill the same sort of supply missions the 50th Transport Wing had done (see airlift organization). The second category called for 160 four-engine long-range transports and 380 two-engine medium-range transports to transport critical aircraft parts and supplies on intratheater and intertheater missions.22

More than 1000 four-engine long-range transports and 2000 two-engine medium-range transports were actually utilized. The major reason for the low projections was the fact that the Air War Plans Division of Air Force Headquarters had no basis upon which to make an estimate, except for their own experiences with the 50th Transport Wing. Therefore, they focused primarily upon the need to supply spare aircraft parts and neglected to take into account the various other demands which
would be put upon the airlift operations such as construction equipment, medical supplies, USO contingents, ammunition, VIPs, raw materials, wounded soldiers and so on.23

During the war, the primary mission of Air Transport Command was to provide long-range airlift from the United States to the battle zone on a regular schedule.24 The ultimate goal of the Air Transport Command was to establish a strategic airlift capability. In order to accomplish this goal, a centralized command structure had to be developed which would take into account the prevailing national strategy when issuing operational orders. Therefore, no local commanders would be allowed to interfere with ATC missions to satisfy their own requirements, except in the case of "specific emergencies."25 The central command center would devise schedules to assure the most efficient use of airlift, taking the "big picture" into account. The theater commanders were expected to utilize their own troop-carrier units to provide their local intratheater transport needs. This new perception of airlift caused much controversy among the theater commanders, since the traditional Army view was that the theater commander had authority over all the military forces operating within his jurisdiction. To get his point across, General Arnold had to issue two separate directives, one on 6 June 1942 and the other on 21 September 1942, reminding all theater commanders that ATC was "the War Department agency for airlift of personnel, material and mail"
and could not be violated except in cases of extreme weather, mechanical failures, security or other reasons of extreme urgency."

Airlift Force Structure

The Army Air Corps placed transport aircraft orders shortly after the fall of France in 1940. All told, they ordered 615 C-47s, 456 C-46s, 150 C-53s, and 61 C-54s. All of these planes had originally been designed for commercial air carriers, since few military cargo planes had been designed by aircraft manufacturers and the ones that had, were only produced in small numbers and the assembly lines had long since closed. The shortage still persisted when the United States entered the war. Moreover, the production of transport aircraft had to compete with the overriding priority granted to bomber and fighter aircraft. Needless to say, hardly any military cargo aircraft were produced during the war. Instead, the transport command had to rely primarily upon converted passenger and bomber aircraft. Describing the predicament of World War II transport aviation, an ATC historian said "men, after all, can ride in freight cars, with or without improvised seats; freight cannot well be loaded in passenger cars.""29

During the 1930s, the civil airline industry had grown into a major transportation service. The transport planes in
use by the airlines were more advanced than the Air Corps. They were using the long-range two-engine DC-3 (C-47) and the four-engine DC-4 (C-54). Taking advantage of the airline's capabilities, the Ferrying Command contracted with several civilian carriers to provide needed airlift. In the summer of 1941, three subsidiaries of Pan Am were established as a result of an agreement between the United States and Great Britain. Pan Am Air Ferries delivered U.S.-built aircraft from Miami to Khartoum, Pan Am Airways Co. ran a transport service from the United States to West Africa and Pan Am Airways-Africa, Ltd. provided air transport across Africa. Eastern Air Lines supplemented Pan Am's services from Miami after May of 1942. Northeast, Transcontinental and Western Airlines began providing services across the North Atlantic beginning in January of 1942. Northwest, Western and United Airlines began providing transportation to Alaska beginning in February 1942.

President Roosevelt mobilized the civilian airlines on 13 December 1941 by means of an executive order to the Secretary of War, which directed him to take possession of any part of the civil aviation system required for the war effort. With 2600 pilots at their disposal, the airlines held the greatest single source of pilots. Yet, due to the Army Air Force's dependence on contracted services, they could not recruit them all. Northwest Airlines built routes in the Aleutians; American and TWA flew the North Atlantic to Great Britain; Pan
Am and American Export crossed the central Atlantic to Africa; United and Pan Am flew the Pacific routes to Guam, New Guinea, and Australia; and Panagra (Pan Am - Grace Airways) and Eastern flew to Central and South America. All told, the airlines provided the following percentage of ATC airlift during the war years: 1942 - 88%, 1943 - 68%, 1944 - 33% and 1945 - 19%. By the war's end, the airlines had contributed a total of half of the airlift services provided by ATC.

When ATC was activated in June of 1942, it had only 11,000 military personnel. By the end of the first year it had grown to over 60,000 members. By July of 1944 that number had increased to 125,000, with 80,000 stationed overseas. When hostilities ceased in 1945, the command had grown to over 200,000 strong. The number of aircraft ferried was 30,000 in 1942, 72,000 in 1943, 108,000 in 1944 and 57,000 in 1945. The transport command had the following number of aircraft assigned after each year of the war: 782 in 1943, 2292 in 1944, and 3090 in 1945.

Airlift Organization

Beginning in 1931, the Army Air Corps used air transport for intraservice delivery of airplane parts. In order to save costs associated with stockpiling larger amounts of supplies at each individual Army base, the Material Division officials established the 1st Air Transport Group in 1932, which
consisted of four squadrons, one for each major supply depot. This group was responsible for distributing spare aircraft parts to the various bases from these major supply depots. They flew the C-36 and C-39 aircraft, which were both forerunners of the C-47. By 1939 these responsibilities expanded to include moving government equipment and supplies to aircraft factories to assist in the effort to expand fighter and bomber production. In 1941 the four individual squadrons were consolidated into the 50th Transport Wing.

On 29 May 1941 the Army Air Corps Ferrying Command was signed into existence with just four assigned personnel, including Major William Tunner as the personnel officer. Tunner would go on to command the Berlin Airlift and Korean Airlift. Also, as one of the early commanders of MATS, he would be a strong advocate for building the fleet of workhorse C-141 jets and consolidating all of the DOD airlift under MAC.

The primary mission of the Ferrying Command was to assist the United Kingdom's war effort by delivering American-built bombers and fighters from the factories. This would decrease the burden on the British pilot force and at the same time provide proficiency training to the American pilots. At the beginning of the operation, the planes were dropped off in Newfoundland where the British would fly them home. In addition, the ferry pilots would deliver new aircraft to modification centers within the United States and on to their Army Air Corps bases. By the time the United States
entered the war, Ferrying Command was flying the aircraft all the way to Great Britain, the Middle East and the Southwest Pacific. In so doing, they had progressed from a continental to an overseas operation. The Ferrying Command was a pioneer of U.S. military air routes across the Atlantic and the Pacific. Just before the attack on Pearl Harbor, having delivered more than 1300 aircraft, the command’s functions were expanded to include a courier service to transport critical messages between American and British officials. In addition, they were beginning to transport cargo of a critical military nature. Other than the forty to fifty twin-engine aircraft belonging to the four transport squadrons of the 50th Transport Wing and the eleven converted Liberator bombers on loan from the Combat Command to the Ferrying Command, there was no organized military airlift operation in the U.S. military establishment at the outset of World War II.

Shortly after the attack on Pearl Harbor, the Ferrying Command established subordinate Foreign and Domestic Divisions. Six months later, General Hap Arnold issued General Order Number 8 to establish the Air Transport Command (ATC) on 20 June 1942. ATC was tasked with the following responsibilities: "(1) Ferrying all aircraft within the United States and to destinations outside the United States, as directed by the Commanding General, U.S. Army Air Force. (2) The transportation by air of personnel, material, and mail for all War Department agencies, except those served by Troop
Carrier units. (3) The control, operation, and maintenance of establishments and facilities on air routes outside of the United States which are, or which may be made, the responsibility of the Commanding General, Army Air Forces."

ATC was commanded by Brigadier General Harold George, a former bomber pilot. His Executive Officer was Colonel Cyrus Smith, the former President of American Airlines. ATC was to be divided along functional rather than geographical lines. The Ferrying Division, commanded by now Colonel Tunner, was responsible for all ferrying operations. The Air Transportation Division, commanded by the former Vice President of Braniff Airlines, Colonel Robert Smith, was responsible for providing the "United States Armed Forces and those of the United Nations with swift dependable world-wide transportation by air for the movement of vital passengers, cargo, and mail wherever and whenever needed."

ATC had difficulty recruiting pilots during the war. Initially, they had no choice but to hire "unattached" civilian pilots such as bush fliers, commuter pilots, test pilots, stunt fliers, crop-dusters, barnstormers and private pilots. If they could survive a 90-day probationary training period, they would be commissioned as service pilots with a rank between second lieutenant and major depending on age and experience. By the middle of 1942 ATC began to get fresh young pilots straight out of the Air Corps Flying Training Command. By the end of that year, 35% of their pilots came via
that route. In 1943 they began to get returning "war-weary pilots" and by 1944 had over 1100 pilots in that category."

As an interesting sidenote, during the deliberations to establish ATC, Mr. Pogue, Chairman of the Civil Aeronautics Board, recommended that airlift be organized independently of both the Army and the Navy and instead be directly responsible to the President. That never happened. Instead, the Navy established their own Naval Air Transport Service (NATS) on 12 December 1941."

The Joint Army-Navy Air Transport Committee (JANATC) was established through a combined effort of the two services in September of 1942. This committee was able to reach agreement on preventing duplication of effort, mutual use of facilities, and standard priority of passengers and cargo. Despite all the progress, the two commands remained independent of each other under separate services."

As ATC grew into the major airlift agency of the United States, its leadership continued to push for a consolidation with NATS. All their attempts proved to be futile, in fact the Navy tried to expand NATS to a much larger-scale operation than just providing internal Naval service. ATC protested to the Service Chiefs on the grounds of unnecessary duplication. The Chiefs in turn ruled that NATS could only serve the naval establishment and ATC had to be satisfied with being the primary military airlift service of the United States."

After World War II, although not advocating immediate
independence, most airpower leaders worked toward that eventual goal. Between World War I and World War II, twenty-six separate reorganization studies had been made, with no results. Numerous bills were proposed to merge the Navy and War Departments or to establish an independent Air Force, yet none were ever approved. For the most part, these efforts were forestalled by stubborn opposition from the Army and Navy.®

By 1941 airpower advocates achieved "virtual autonomy" with the establishment of the Army Air Force. Air Force leaders advocated that air organizations should be large and mobile, which allowed flexibility and mass employment. They were strongly against dispersing striking power by assigning small aviation units to individual ground forces. They insisted that air commanders should always have immediate control of all air forces. This arrangement did not actually go into effect until 1943, after some command problems surfaced in North Africa.®

In 1944 Congress was again interested in instituting organizational changes, and looked to the military to submit recommendations. They threatened to take unilateral action without military advice if they were not given proposals.® As a result of this threat, the JCS established a Special Committee for Reorganization of National Defense. The committee, consisting of two Army and two Navy officers, was tasked to make a detailed study with recommendations to the JCS for "the most efficient practicable organization ... concerned with national defense." One of the basic guiding
principles was that they "provide land, sea, and air forces, each organized, manned and equipped to perform most effectively its part as an essential component of the overall military organization." Moreover, when they developed their plans, the committee agreed upon the following fundamentals:

"(1) There shall be maintained as an integral part of the Navy an aeronautical organization commensurate with its needs, including requisite numbers and types of aircraft. ... (3) There shall be maintained as an integral part of the Army such specialized aviation as forms an integral and essential part of its ground forces. (4) There shall be maintained as the United States Air Force, coordinate with the Army and the Navy, that part of the aeronautical organization of the Armed Forces of the United States which does not form an integral part of the Army or of the Navy."

General Arnold argued that having the services work out their needs on their own was bound to cause duplication and therefore create excess requirements. Pointing to the existence of two air transport services, ATC and NATS, he complained that it was not an efficient way to conduct military operations. Moreover, in the struggle for its identity, he felt the new independent Air Force might not receive the forces it required if the services continued to determine their individual needs independent of each other. He argued that air requirements should be recognized as being preeminent over all the other services."
The committee made its report in April of 1945, after studying the problem for ten months and visiting the commands in the field to obtain their views. The JCS presented those results, which were supported by Generals MacArthur and Eisenhower as well as Admirals Halsey and Nimitz, to the Select Committee of the House of Representatives on Post-War Military Policy. In their final recommendations, they stated that the new legislation should include the basic fundamentals concerning aviation, which were established at the outset of the study.33

On 4 April 1946, the Army issued a memorandum on the topic of: "Statement of Approved Policies to Effect Increased Autonomy of the Army Air Forces within the War Department Structure." This memo was written in accordance with the recommendations of the Simpson Board Report. Item number fourteen pertained to airlift as follows: "(14) Responsibility of the AAF in connection with air transport. (a) The AAF is responsible for the control and operation of all air transport and related facilities. (b) Determination of policies pertaining to movement and priorities of passengers and freight on transport aircraft of the Air Transport Command, and commercial transport aircraft in conformity with the overall transportation program prepared by the General Staff, is a function of the War Department."34

On 25 July 1947 President Truman signed the National Security Act into law, which, among other things, established
an independent Air Force. Concerning the new Air Force, it states: "In general the United States Air Force shall include aviation forces both combat and service not otherwise assigned. It shall be organized, trained and equipped primarily for prompt and sustained offensive and defensive air operations. The Air Force shall be responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war."\(^{57}\)

The Act stated the following concerning naval aviation:

"All naval aviation shall be integrated with the naval service as part thereof within the Department of the Navy. Naval aviation shall consist of combat and service and training forces, and shall include land-based naval aviation, air transport essential for naval operations, all air weapons and air techniques involved in the operations and activities of the United States Navy, and the entire remainder of the aeronautical organization of the United States Navy, together with the personnel necessary therefore."\(^{58}\)

Concerning Army aviation, the Act stated: "In general the United States Army, within the Department of the Army, shall include land combat and service forces and such aviation and water transport as may be organic therein."\(^{59}\)

That very same day, the President signed Executive Order
9877, which outlined the functions of each of the Armed Services. The specific airlift functions of the U.S. Air Force were listed as follows: "(1) To organize, train and equip air forces for: ... (g) Airlift and support for airborne operations. ... (g) Air transport for the armed forces, except as provided by the Navy. (2) To develop weapons, tactics, technique, organization and equipment of Air Force combat and service elements, coordinating with the Army and Navy on all aspects of joint concern, including those which pertain to amphibious and airborne operations."

The naval airlift role was as follows: "(1) To organize, train and equip naval forces for: ... (f) The air transport necessary for essential internal administration and for air transport over routes of sole interest to naval forces where the requirements cannot be met by normal air transport facilities."

The Army airlift role was as follows: "(1) To organize, train and equip land forces for: ... (b) The seizure or defense of land areas, including airborne and joint amphibious operations. (2) To develop weapons, tactics, technique, organization and equipment of Army combat and service elements, coordinating with the Navy and Air Force in all aspects of joint concern, including those which pertain to amphibious and airborne operations."

When the Air Force was broken into separate commands, the Air Transport Command remained as it had been under the
jurisdiction of the Army. The specific responsibilities of ATC were as follows: "ATC would provide air transport for all War Department agencies (except for those served by Troop Carrier Command and local services required by overseas area commands or occupation forces) and for any other government agency as required or directed. It was also responsible for air evacuation of the sick and wounded from overseas theaters and between points within the United States, as well as the control and operation of aerial ports." Additionally, ATC was vested with the responsibility for the following auxiliary functions: Air Transport Service (new), Air Rescue Service (new), Air Weather Service, Air Communications Service, Aeronautical Chart Service, Flight Services, and Flying Safety Services. In addition to its airlift function, ATC was seen as sort of a catchall service command to provide support for the combat commands, which were the Strategic Air Command (SAC), Tactical Air Command (TAC) and Air Defense Command (ADC).

After passage of the National Security Act, it soon became apparent that differing interpretations between the services needed to be worked out so that each service was absolutely certain where the boundaries of responsibility lay. New technologies and the changing nature of war was the primary cause for disagreement. The World War II experience indicated that in the future there would be a greater emphasis on airpower and the Navy wanted part of the action.

The Air Force noted a discrepancy between the National
Security Act and Executive Order 9877 concerning naval transport aviation. The Act stated that naval aviation would "embrace air transport essential for naval operations," whereas the Executive Order authorized the Navy to "provide the air transport necessary for only the internal administration and for travel over routes of sole interest to naval forces." The Navy interpretation was that the Act, which allowed more of a role, took precedence over the Executive Order. Their argument was that air transport essential for naval operations was what they already had. So the Act served to protect the Naval Air Transport Service.

In order to settle this controversy, Secretary of Defense James V. Forrestal held two separate JCS conferences. One was in Key West from 12 - 14 March 1948; the other was conducted at Newport from 20 - 22 August 1948. The primary result was that three separate services emerged, each with their own primary responsibility, and at the same time, pledged to assist in the primary missions of the other services. The Air Force was assigned the primary responsibility for strategic air warfare, the Navy was given the primary mission of control of the seas, and the Army land warfare. In addition, all services were given collateral functions so that each one could obtain maximum assistance from the other in carrying out its mission. For example, the Air Force was vested with the responsibility of providing strategic airlift for the Army and the Navy was tasked with providing sealift for the Army.
In these early postwar controversies, one may see clearly the beginnings of military transport problems. The Air Force and the Navy each had their own primary missions to protect and had little incentive to devote budget dollars to support Army transport needs. Moreover, the way the arrangement was made, the Army had no leverage to get them to provide for their needs, since neither the Air Force or Navy were dependent upon the Army in any way.

This arrangement served to cripple the development of strategic airlift. According to Morton Halperin, since the Key West accords "the Air Force has ignored its airlift function, because its primary responsibility is long-range bombing, and in the postwar period this meant strategic delivery of atomic bombs." He contends that as a result of this, the Air Force has historically been primarily concerned with the acquisition of large, fast bombers.

Summary

The Ferrying Command was established in May of 1941 in order to assist the British in their war effort by delivering U.S. aircraft from the factories to their bases in Great Britain. Shortly after the U.S. entered the war, the Ferrying Command was transformed to the Air Transport Command in June of 1942. The majority of aircraft used by this command throughout the war were either converted civilian airliners or
bombers. This is because prior to World War II no sort of doctrine concerning the military utility of air transport had been developed. The airpower advocates concentrated exclusively on the destructive capabilities of their fighter and bomber aircraft. ATC haphazardly grew and developed to fulfill specific needs to assist in the war effort.

The first mention of airlift by American war planners took place in August of 1941 when the AAF Air War Plans Division drew up a document entitled AWPD/1. These war planners envisioned two broad categories of utilization for transports. The first category consisted of 1200 troop-carrier aircraft for support of the ground forces. In addition, when these aircraft were not needed to transport troops, they were to be used to distribute supplies to various air bases from the major depots. The second category called for a fleet of 160 four-engine long-range transports and 880 two-engine medium-range transports "to effect the movement of critical essential aircraft and engine spares and supplies within the United States, between the United States and distant air bases of theaters and within theaters." In actuality, these numbers fell far short of what was actually utilized during the war. In the second category, over 1000 long-range transports were utilized instead of 160 projected and over 2000 medium-range transports were utilized as compared to the projected 800.

The reason for the gross underestimate was twofold. First
of all, the war planners had no prior experience with big airlift operations upon which to base their estimates. Second of all, they envisioned that airlift would play a limited role of providing critical aircraft spare parts in a timely manner to the combat bases. As it happened, the Air Transport Command developed into an agency responsible for supporting any need requested by the War Department to further the war effort.

"Its planes carried out from the United States almost everything from bulldozers to blood plasma, from college professors to Hollywood entertainers, from high explosive ammunition to the most delicate signal equipment, from eminent scientists to the most obscure technicians, from heads of state to the ordinary G.I."70

According to historians Welsley Craven of Princeton and James Gate of Chicago, during the course of the war it became increasingly evident that "the ideal shaping the whole development of ATC was that of a strategic air transport service. To the achievement of that ideal nothing was more important than a centralized control exercised in conformity with the highest considerations of national strategy."71
NOTES


²Ibid., p. 128.

³Ibid.

⁴Ibid., p. 32.

⁵Ibid., p. 129.

⁶Ibid., p. 130.


⁸Ibid.


¹¹Ibid.

¹²Ibid.

¹³Ibid.

¹⁴Ibid., p. 61.

¹⁵Ibid.

¹⁶Ibid.

¹⁷Ibid., p. 71.

¹⁸Ibid.

¹⁹Ibid., p. 135.
20 Ibid., p. 8.
21 Greer, p. 123.
23 Ibid., p. 6.
24 Ibid., p. 16.
25 Ibid., p. 17.
26 Ibid.
27 Ibid., p. 5.
28 Ibid., p. 22.
29 Ibid., p. 3.
30 Ibid., p. 11.
31 Ibid., p. 21.
32 Ibid., p. 32.
33 Ibid.
34 Ibid., p. 19.
35 Ibid.
36 Ibid., p. 40.
37 Ibid., p. 4.
38 Ibid.
39 Ibid., p. 8.
40 Ibid., p. 5.
41 Ibid., p. 20.
42 Ibid., p. 10.
44 Ibid., p. 15.
41

41Ibid., p. 29.
42Ibid., p. 35.
47Ibid., p. 18.
48Ibid.


51Greer, p. 129.
52Wolk, p. 248.
53Ibid., p. 251.
54Ibid., p. 78.
55Ibid., p. 242.
56Ibid., p. 265.
57Ibid., p. 286.
58Ibid., p. 283.
59Ibid., p. 282.
60Ibid., p. 273.
61Ibid.
62Ibid., p. 272.
63Ibid., p. 137.
64Ibid., p. 170.
65Ibid.


68Ibid., p. 118.
^4Craven and Gate, p. 5.
70Ibid., p. 7.
71Ibid., p. 15.
Introduction

The Truman and Eisenhower Administrations were the first to be confronted with the nuclear dilemma and out of necessity were forced to develop new approaches to national security. President Truman articulated the basic national security policy of containment and President Eisenhower enunciated the strategic doctrine of massive retaliation to enforce that policy. Massive retaliation placed predominant emphasis on strategic nuclear bombardment at the expense of most other military functions, including airlift. As a result of this, official Air Force doctrine made no mention of the function of airlift. The airlift force structure was allowed to deteriorate. The only positive thing that happened to airlift was the establishment of the Military Air Transport Service (MATS) as the single manager of strategic airlift for the Department of Defense.
The seeds of American Cold War policy were planted in a 16-page cable from the U.S. Embassy in Moscow, to the Department of State, written by George Kennan. The purpose of the telegram was to explain to the U.S. policy makers his understanding of Soviet foreign policy and suggest how the United States should respond. This memorandum, originally written in February of 1946, was distributed throughout the tiers of government and later printed as the well known "Mr. X" article in the July 1947 edition of Foreign Affairs.

Kennan’s argument provided the catalyst for the U.S. policy of "containment," which called for the need to "imprison communism, politically, economically, and socially, within its existing boundaries."¹

The U.S. policy of containment provided the intellectual foundation for the Truman Doctrine. The international situation by the 1947 time frame was such that the Soviet Union had established hegemony over Eastern Europe and was now trying to do the same in Greece. To counteract that threat, on 12 March 1947, President Truman proclaimed that "it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures." Furthermore, he stated the support should be in the form of "economic and financial aid, which is essential to economic stability and orderly political
To further expand on the Truman Doctrine, Secretary of State George Marshall announced a European Recovery Program, known as the "Marshall Plan," at the Harvard University commencement in June of 1947. He stated that the goal of American policy "should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions can exist." So, the Marshall Plan defined how and to what extent the Truman Doctrine's foreign assistance plan would apply and that would be in the form of a comprehensive program of European economic revitalization.

In the combined judgment of James Nathan and James Oliver, all together, containment, the Truman Doctrine, and the Marshall Plan moved the Soviet-American relationship "from the crumbling edge of a tenuous wartime alliance into a crevice of distrust, fear, and ultimately, terror" of the Cold War.

On 24 June 1948 the Soviet Union instituted a full blockade on West Berlin. All surface access to Berlin was frozen. In response, President Truman decided to airlift supplies into West Berlin. To demonstrate American resolve, he deployed 60 nuclear-capable B-29s to England. From June 1948 until the Soviets lifted the blockade in May 1949, more than 7000 tons of food and fuel were delivered to Berlin each day. The Western alliance landed aircraft in Berlin every two
minutes, twenty-four hours a day." This blockade provided the justification for the establishment of the North Atlantic Treaty Organization (NATO), to protect the European reconstruction effort. The NATO alliance included nations from North America to Scandinavia down through Western Europe all the way to Mediterranean and was worded so that "an armed attack against one or more of them ... shall be considered an attack against them all." Moreover, should an attack occur, each nation was supposed to assist by taking whatever action deemed necessary, "including the use of armed force." 

The Soviet detonation of an atomic device in the fall of 1949 struck at the very heart of American defense planning, its nuclear monopoly. Not long thereafter, Nationalist China fell into communist hands. The combination of both of these factors, in addition to the Berlin blockade, lead to a reassessment of U.S. strategic doctrine. Paul Nitze headed the State Department Policy Planning Office that devised Policy Paper Number 68 (NSC-68), published in 1950 by the National Security Council. Concluding that the United States and its allies must maintain military superiority over the Soviet Union, NSC-68 called for the U.S. to "greatly increase its strategic capabilities, and simultaneously increase NATO conventional forces in Europe to deter the Red Army." NSC-68, "the first comprehensive statement of national strategy for the Cold War," stressed the need for both nuclear and conventional military forces."
After Eisenhower's landslide victory in 1952, his immediate defense concern was to terminate the Korean War. Besides promising a quick end to the war, during the election he had promised to strengthen the American economy, because he felt that, ultimately, this was where America's superior strength resided. This assumption was the basis of his "new look" defense posture. Admiral Radford, the Chairman of the JCS, argued that U.S. military forces were overextended and needed to be consolidated into what he called a "mobile strategic reserve," allowing a vast reduction to conventional force levels, and leaving conventional defense to indigenous forces. The new Secretary of State, John Foster Dulles, articulated the new defense policy as follows: "By depending on strategic nuclear, air, and naval technology the United States could free itself of the financially and politically onerous burden of a large conventional army and conventional conflict." In other words, the new Eisenhower policy called for continuing the philosophy of containment, but implementing it with a total reliance upon air and naval strategic nuclear forces rather than supplementing those forces with conventional armies.

This new national security policy called for a reassessment of the United States strategic doctrine. In October of 1953 President Eisenhower approved NSC Policy Paper 162/2 (NSC-162/2), which proclaimed that "the major deterrent would be massive nuclear retaliatory capability rather than
ground troops."10 This meant that the military services could "plan on using nuclear weapons, tactical as well as strategic, whenever their use would be desirable from a military standpoint."11 Under this new policy, U.S. strategic forces were tasked with providing the long-range deterrent, and were the backbone of the nation's defense, with local defense provided by tactical nuclear weapons. Secretary Dulles proclaimed this new policy in a famous speech given to the Council on Foreign Relations on 12 January 1954, when he said: "local defenses must be reinforced by the further deterrent of massive retaliatory power ... the way to deter aggression is for the free community to be willing and able to respond vigorously at places and with means of its own choosing."12 Even though Secretary Dulles implied that massive retaliation provided the administration with more flexibility, in actuality the structure of U.S. forces had become more rigid and had fewer options at its disposal. The first postulated theory of deterrence in the nuclear era, Eisenhower's strategic doctrine of massive retaliation provided a guideline for the new look force structure for the remainder of the 1950s.13 The practical outcome of this new policy was a drastic reduction in the FY55 through FY57 defense budgets with a concurrent reduction in conventional force levels.14 The justification for massive retaliation was threefold. First of all, in reaction to the U.S. experience in Korea, the administration did not want to fight another limited war that
could not be won in the full sense of the word. Massive retaliation seemed to provide a good alternative. Second of all, a primary emphasis of Eisenhower's Presidential campaign had been a promise to lower taxes and balance the budget. So, during this peacetime era the motto "more bang for the buck" made logical sense to help strengthen the economy. Third, in 1953 the U.S. had a definite advantage when compared to Soviet nuclear technology. The U.S. nuclear arsenal ranged in explosive power from bombs which were one thousand times stronger than the one used at Nagasaki to less powerful tactical nuclear weapons.  

In response to massive retaliation, in 1953 the National Security Council set guidelines calling for the "armed services to orient American forces toward nuclear weaponry." This translated into Army pentomic divisions, trained and equipped for nuclear conflict. NATO planned on the first use of nuclear weapons based on a "trip wire strategy which meant even a low-level conventional conflict in Europe would trigger a nuclear response." Fifty percent of the entire defense budget was devoted directly to strategic systems such as the B-47 and B-52 bombers, air-defense and warning systems, strategic missiles. On the other hand, expenditures on conventional forces was held to a minimum, and over half of the conventional expenditures were nuclear related. "In sum, military planning under the new look, constrained by budgetary pressure and nuclear air power priorities, yielded a U.S.
military posture with neither the plans nor the capacity for coping with even moderately large nonnuclear conflicts." Just a few years after the Eisenhower Administration got started conventional equipment began to deteriorate and numbers began to dwindle. "Logistics support for sustained conventional campaigns was inadequate ... in addition, airlift and sea-transport capabilities were gradually reduced to the point where U.S. forces abroad could not be rapidly reinforced or effectively shifted between theaters."10 Taken together, this meant that U.S. conventional forces had become so weak that it would have been nearly impossible to avoid the use of nuclear weapons with any conflict numbering more than a few divisions or small attacks occurring at the same time in different theaters.

Evolution of Military Airlift

The Berlin Airlift

Sparked by a reform of West German currency, the Soviets imposed a blockade on Berlin which was complete by 24 June 1948. The only conceivable way to keep the city alive short of armed conflict was to attempt an airlift supply operation. Although the Hump operation had proven the capability of airlift in combat operations, throughout history no attempt had ever been made to keep a major city alive solely through
airlift. General Lucius Clay, the U.S. Military Governor in Germany, ordered General Curtis LeMay, the Commander of U.S. Air Forces Europe (USAFE) to attempt the task on that very same day. All he had at his disposal at the time were 102 C-47s, and 2 C-54s. In addition, the British had a few C-47s. Brigadier General Joseph Smith, Commander of Wiesbaden Air Base, was delegated with the responsibility of managing the airlift on 27 June 1948.17

Berlin had imported 15,500 tons daily prior to the blockade, but minimum survival needs were estimated to be just 4000 tons a day. General Clay calculated that 700 tons a day would be all that his forces would be able to handle. Yet no one seemed too concerned, since the popular opinion was that the blockade was only going to be a temporary measure. The original purpose of the airlift was to help replenish the rations in Berlin as the negotiations came to a swift end.18

William Tunner, now a Brigadier General and the Deputy Commander of MATS, recommended to his commander, Major General Lawrence Kuter, that MATS takeover the airlift operation. His rationale was that the operation could stand improvement, since none of the people in the European theater had any prior airlift experience. Moreover, he felt the capabilities of airlift were largely unknown in Europe or in the military in general. The people running the operation were combat officers, not professional airlift officers.19

Lieutenant General Albert Wedemeyer, Director of Plans and
Operations of the Army General Staff sent a memo to General Hoyt Vandenburg, the Chief of Staff of the Air Force, urging him to let General Tunner take command of the airlift operation. He had been in command of the China Theater and had seen his results in the Hump operation. In addition, he had just come back from Germany where he saw that the airlift operation was not running as smoothly as it had in China.

This proposal met with stiff resistance in Europe. General Clay was pleased with the fact the airlift seemed to be working and the tonnage was increasing every day. General Lemay was getting notoriety worldwide for his "Lemay Coal and Feed Delivery Service" and did not want to give it up. But, according to General Tunner, the fact still remained that "airlift experts run airlifts better than combat experts." So, General Vandenburg gave in to the suggestion and ordered General Tunner to assemble a twenty man staff and take command of the airlift operation.

Upon their arrival in Europe, General Tunner was not given access to General Clay, who took Tunner's new role as a personal affront. The MATS contingent was given substandard housing and a war torn apartment building as their headquarters. According to General Tunner, his first inspection of the airlift operation revealed that it was "a real cowboy operation." There was confusion everywhere he looked. No one knew what they were doing from one day to the next. It was entirely a line-of-sight operation.
In July of 1948 General Tunner was given command of the newly formed First Airlift Task Force, which had representatives from the Army, Navy and Air Force and reported directly to USAFE. Serving in this new capacity, the first thing General Tunner did was to introduce three-minute intervals for takeoffs. Even though there were not yet enough airframes on hand for an around-the-clock operation, he wanted to ensure that when they went to that, the "cadence" would already be established. He figured that with 1440 minutes in a day, with three-minute takeoff intervals, his planes could realize 480 landings per day. Every 90 seconds an aircraft would either takeoff or land.

In addition to the European units, there were flying squadrons which had deployed from Texas, Panama and Alaska to contribute to the operation with their C-54s. The C-54s were able to carry three times as much as a C-47. Yet, General Tunner later pointed out that the C-54 had never been designed as an airlifter. It was supposed to be used strictly for commercial passenger operations.

On 14 October 1948, General Lemay and Air Marshal Sir Arthur Saunders, Commander in Chief of the British Air Forces of Occupation (BAFO), signed an agreement to create a Combined Airlift Task Force (CALTF). The directive stated: "The purpose of this organization is to merge the heretofore coordinated, but independent, USAF-RAF airlift efforts in order that the resources of each participation service may be utilized in the
most advantageous manner. Its primary mission is to deliver to Berlin, in a safe and efficient manner, the maximum tonnage possible, consistent with combined resources of equipment and personnel available. Thus, in addition to combining our efforts with the British, the emphasis on the airlift was changed from utilization of planes to maximum tonnage per mission. General Tunner was designated as the Commander of the CALTF and Air Commodore J.W.F. Merer was his deputy. In addition to the Royal Air Force (RAF), CALTF included units from the Royal Australian Air Force, Royal New Zealand Air Force, and the South African Air Force. There were also representatives from the U.S. Navy. The total number of squadrons assigned were twenty from the U.S. Air Force, ten from the Royal Air Force (and Commonwealth Countries), and two U.S. Navy Squadrons. This equated to a force of 154 assorted British aircraft, 225 American C-54s, not including an additional 75 in the maintenance pipeline and at training bases. 200 of 225 of the C-54s were flown on a daily basis.

On 20 October 1948 the daily minimum airlift requirement was increased from 4000 tons to 5620 tons. That daily requirement was broken down as follows:

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<th>Category</th>
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<tr>
<td>Germans</td>
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<td>1435</td>
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<td>Coal</td>
<td>3084</td>
</tr>
<tr>
<td>Commerce and Industry Supplies</td>
<td>255</td>
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</table>
As the CALTF Commander, General Tunner operated under a letter of authority from the Commander of USAFE. This letter permitted him to coordinate with his staff, the Task Force personnel, and individual base commanders, but not General Clay. The letter made no mention of his relationship with MATS or the Air Material Command (AMC), and General Tunner routinely put requests through to both commands concerning supply or engineering matters to which they were always quick to respond. 

That relationship came to an end with the arrival of General Cannon to replace General Lemay as CINCUSAFE. He specifically instructed General Tunner not to coordinate with MATS or AMC. From now on, all requests were to be made through USAFE Headquarters. Now, all requisition requests were either cancelled or slowed down. It took just as much time to get the request through the bureaucracy of USAFE Headquarters as it used to take to have the entire transaction completed the old
way. Surprisingly, General Tunner noted that things became more difficult when USAFE had to interact with MATS. He said "General Cannon seemed to dislike MATS and didn't want to have anything to do with it." General Tunner seemed to think this mentality was a carry-over from World War II. Apparently, many fighter and bomber pilots resented the transport pilots of the old ATC because most of them were not professional military officers and they had a reputation of breaking many rules and regulations. Therefore, General Tunner took his instructions not to deal with MATS as a personal affront, one that he felt "had no place in a military operation of the scope of the Berlin Airlift."

In essence, General Tunner felt that the Airlift Task Force was not given the authority to do what it was set up to do. Instead, it came under the inhibiting jurisdiction of the USAFE occupation forces. The General, voicing his opposition to the arrangement, stated that "an airlift command, as a command in any other large and vital operation, should always have some control of replacements, promotions, awarding of medals, and selection of its key officers. It should have, if it is to last more than a few weeks, administrative and logistical control as well as operational control."

A good example of airlift mistreatment follows. Just before Christmas it had been announced that the Bob Hope Show would be coming to entertain the airlift crews over the holidays as a morale boost. But, in actuality, when General
Cannon arranged the schedule he made sure that the performance was given to the Headquarters USAFE personnel at Wiesbaden and the Army troops stationed in Berlin instead. Upset by this arrangement, General Tunner demanded that either the schedule be changed to allow his men to attend or else he would not permit the event to be publicized as being in honor of the airlift crews. The schedule was changed.32

In addition, Secretary of The Air Force Stuart Symington came to see how the troops were getting along. Therefore, he was able to witness firsthand the substandard living conditions of the airlift crews, and their lack of equipment and supplies, or even basic tools. Although General Tunner had sent out urgent requests for all these things, USAFE had suppressed the requests and they had never reached the Secretary's Office, or the Air Staff. Symington wanted to know all the facts and figures so that he could fix the problems when he got back home. General Tunner's staff worked over the entire holiday to draft a memorandum entitled "Supply and Maintenance Problem - First Airlift Task Force."33 The memorandum cited problems with periodic aircraft inspections coming overdue, insufficient supplies, inadequate training for aircraft mechanics, and poor housing conditions.

In addition, since he had the undivided attention of the Secretary of the Air Force, General Tunner took advantage of the situation to demonstrate the need for a new transport aircraft. Although he had been able to replace his aging C-45
and C-47 fleet with the C-54 in October, the fact of the matter was that the C-54 was also becoming obsolete. Douglas Aircraft Corporation had developed a new aircraft shortly after the war called the C-74. This aircraft, designed especially for military use, could carry 25 tons. Only 13 had been built, and of those, 11 were assigned to MATS. When General Tunner pleaded with General Kuter to lend him that aircraft, Kuter only allowed one to go. The advantages of the C-74 were obvious. It could carry almost three times as much weight as the aircraft then in use. Therefore, Tunner argued, if the airlift forces had such an aircraft, all the other problems would be proportionately reduced. Only a third of the flight crews and maintenance crews would be needed, which would reduce the requirement for billeting. In addition, one third of the airframes would be needed, cutting down on the overwhelming three-minute interval air traffic in Berlin.  

General Tunner articulated the advantages of a big transport aircraft to Secretary Symington with the realization that the Berlin Airlift would probably be over before such an aircraft could be manufactured and deployed. But Tunner was concerned with the long-term needs of airlift. This Berlin operation held the attention of the world and demonstrated the importance of the airlift mission. Therefore, he figured it could be used as an effective bargaining tool.  

As soon as Secretary Symington returned to Washington he set out to get a fleet of big transport aircraft for the Air
Force. That aircraft was the C-124 Globemaster, which was capable of carrying twenty-five tons. Designed exclusively for military use, the front of the aircraft opened in a clamshell fashion, allowing any piece of the then current military inventory to be loaded, up to and including tanks. That aircraft became the backbone of strategic airlift until the mid 1960s.21

After Easter, the airlift operation grew to a point where it was transporting over nine tons a day. The Soviets finally came to the realization that the land blockade was pointless, so on 21 May 1949 they lifted the barriers. Nevertheless, the airlift continued to run at full pace for the next three months, in order to build up an inventory of reserves should the Soviets reimpose the blockade. The airlift came to a complete halt on 1 September 1949.27

The record of the Berlin Airlift was as follows:

Total Number of Flights 276,926
Total Number of Tons 2,323,067
Total Cost to U.S. Government $300,000,000

In the words of General Tunner: "the Airlift had done its job, and West Berlin was free. We had shown the world what the free nations could do."28
The Korean War

When it came time to mobilize for the Korean conflict in the summer of 1950, U.S. military airlift capabilities were insufficient due to post-World War II demobilization efforts. Because of the skeleton airlift force, as in World War II, the U.S. again had to turn to the airline industry for assistance. Contracts were made with Pan Am, Northwest, and United, along with seven other lesser known companies. They flew troops and supplies to the major staging area based in Japan. One route went via Seattle, Anchorage, and the Aleutians. The other went via Hawaii, Midway, and Wake Island.  

The services of Brigadier General Tunner were called upon again. This time General Vandenburg appointed him as the Commander of the Combat Cargo Command (CCC), located in Ashiya Japan, reporting directly to Lieutenant General George Stratemeyer, Commander of the Far Eastern Air Forces (FEAF). The responsibility of allocating airlift resided with the Far East Command Air Priority Board, in Tokyo. After the allocation, the Joint Airlift Control, located in Ashiya, would set up the specific details of what would go where. Finally, as the organization in charge of all of the airlift assets in the theater of operations, CCC's responsibility was to deliver the tonnage.  

With competing service doctrines, there were a number of jurisdictional disputes over airlift resources. For instance,
the Army felt that aircraft used for airborne operations should have been at their disposal, assigned to the individual airborne units. This would have been a waste of airlifters, parked idle on the ramp rather than flying logistical support in between airdrop missions. The Navy, Marine Corps and 5th Air Force (Fighters) all wanted their own independent airlift fleets. General Tunner was persistent and won a consolidation of all airlift assets, which consisted roughly of 250 planes. The majority of the aircraft were C-119s. In addition, there was a group each of C-54s and C-46s. Finally, there were a large number of unorganized C-47s. Another dispute concerned airlift support functions. Although CCC was in command of all the airlift assets, as with the Berlin Airlift, the transport operation was again dependent upon a tactical fighter operation, 5th Air Force, for maintenance, supply and housing. General Tunner resented this, feeling that operational control was not enough to be able to operate at peak efficiency. He argued that he also needed to be in charge of his own support functions. On this point, he lost.

The major aspect of the Korean operation which disappointed General Tunner was that, despite the fact that airlift had proven its capabilities in the Hump and Berlin operation, it was under-utilized in Korea. He felt that logisiticians were more concerned with surface transportation. Higher headquarters always put more money into construction and repair of roads, bridges, railroads, harbors and tunnels.
He suggested that if headquarters had put just a fraction of those expenditures into airdrome construction and gone to a maximum utilization of aircraft, his men could have delivered eight thousand tons a day rather than the actual one thousand they were tasked with. He calculated that amount would have been sufficient to fulfill the requirements of all the United Nations forces, both air and ground."

Although not fully utilized, tactical airlift made a valuable contribution to the war effort in Korea. It was instrumental in the success of the Inchon landing, the 8th Army's march from Pusan to the Yalu, the 187th Airborne Regiment's assault on Sukchon and Sunchon, the 5th Air Force deployment, the Marine withdrawal from Chosin Reservoir, the withdrawal of X Corps from Hamhung, the retreat of the 8th Army and the final advance through Suwon. The MATS strategic airlift flown to Korea covered the furthest distances ever recorded, bringing troops and supplies all the way from the United States across the Pacific to Japan. Once in Japan, the CCC operated the tactical airlift operation shuttling troops and equipment to Korea."

General Tunner stated in his end-of-tour report to General Stratemeyer that "air transportation must take its proper place in the military family and must be considered and planned for as necessary to support a given campaign under a given set of circumstances. It should be an integral part of the overall transportation system. We must plan for it to do
the job for which it is best suited such as evacuation of medical patients; movement of critical items of supply and equipment; fast deployment of forces; movement of all the expensive and important material to avoid wasteful stockpiling of these materials, air supply of isolated units."

Based on his Korean experience, General Tunner made several recommendations: "(1) Construct a long-range, heavy-lift aircraft for worldwide operations. (2) Increase the number of personnel in air transport units in order to achieve greater efficiency through higher utilization rates. (3) Consolidate all the assets into one command with a mission to standardize equipment, units and techniques." To finish, General Tunner referred to Korea as a "proving ground in combat air transportation."

Air Force Doctrinal Treatment of Airlift


The original document, published in 1953, stated that there were "two broad aspects of air operations, heartland and peripheral actions." It described heartland operations as those that attack the "vital elements of a nation's war sustaining resources, including the enemy's long-range air
force." This would equate to long-range strategic bombing.
It described peripheral actions as including "the tasks of
reducing the enemy's air and surface efforts and are not
necessarily limited to specific geographic areas." This meant,
in essence, the interdiction mission of fighter aircraft. The
manual elaborated that the heartland mission would "require
the priority commitment of air forces" because of the
"conclusive effects obtained by attacks on the heartland
targets, which represent the greatest threats." It also
expanded further on the peripheral mission as having the "task
of gaining and maintaining control of the air" and "to
neutralize the deployed enemy forces." Air defense was also
mentioned as a primary mission of the Air Force. The doctrine
stated that "the establishment and maintenance of an effective
operational air defense force is mandatory." The 1953 Air
Force doctrine also established the preeminence of the Air
Force over the Army and Navy by stating that "measures to gain
control of the air ... are a prerequisite to the commitment of
armies and navies to battle." Finally, the doctrine confirmed
the widely held view that warfare was now to be total in
nature. It stated that "the effect of the advent of this force
in the conduct of war is to make modern war more total--its
threat more imminent, its impact more sudden, its expanse more
extensive, and its destruction exceedingly more
devastating."*"*

The 1954 edition was very similar in nature to 1953.
However, it introduced for the first time the deterrent role of the military instrument, stating "its very existence is designed to deter the use of military force by nations endeavoring to impose their policies on others."50

The 1955 edition introduced the concept of massive retaliation. This edition plainly stated the "the military policy for the security of the United States recognizes that in the event of war air defense measures coupled with strong air counterblows against the sources of the enemy's strength will provide the best security." As far as allocating resources to the Air Force budget, the manual made it quite clear that it was Air Force policy that SAC would get the lion's share. It stated that "in the division of resources among forces of different types, the priorities must be established so as to insure allocations which provide the maximum return in military capabilities. The capabilities must be related to the forms of conflict and the threats projected by those forms of conflict, with emphasis in the allocation of resources being placed at all times on the provision of the means to meet the primary threat." Another mission was added to the Air Force in addition to the original three, that of air reconnaissance. It stated that "air reconnaissance is one of the major sources of information requisite to successful military operations." Finally, the 1955 edition posed that air power was the most important military power by stating that "of the various types of military forces, those which conduct
air operations are most capable of decisive results.\textsuperscript{31}

The 1959 edition brought in a new emphasis on space after the satellite launches. The term air was replaced with aerospace to include the space environment as a natural extension for the Air Force. To quote the text, it concluded that "the aerospace is a medium in which freedom to operate during war will be of vital military significance. That nation, or group of nations, which maintains predominance in the aerospace—not only in its military forces but also in its sciences and technologies—will have the means to prevail in conflict.\textsuperscript{32}

Since its beginnings, Air Force leaders have agreed that airpower should be "developed and controlled by airmen, independent of restraints by the older services."\textsuperscript{33}

Airlift Force Structure

Secretary of Defense Louis Johnson began slashing the Defense budget in the fall of 1949. As a result of his efforts, MATS utilization rate per aircraft was reduced to just 2.9 hours per day, with just one crew assigned per aircraft. In comparison, commercial airlines had an 8-to-12-hour utilization rate, and had a 3-to-1 ratio of crews per aircraft, which was obviously more efficient, reflecting the concern of the commercial airlines with profitability.\textsuperscript{34}

Shortly after the Korean conflict the Army began to build its
own fixed-wing tactical airlift aircraft because it claimed the Air Force was not devoting enough to the airlift mission. The Air Force protested and published a memorandum in 1958 entitled "Memorandum for Members of the Armed Forces Policy Council," which stated that the Air Force "presently provides adequate airborne lift in light of currently approved strategic concepts (i.e. massive retaliation)." The rationale was that an Army operating under that doctrine would have little need for a massive airlift capacity, since in the event of war, "the bomb would beat them to the action." The 1957 Department of Defense Directive #5160.22 prohibited the Army from procuring any fixed-wing aircraft which weighed more than 5000 pounds and specifically prevented them from developing their own airlift capability except within the combat zone.

General Tunner felt that the "big bang" theory of massive retaliation did not work in small "brush fire" engagements. He pointed to the post-World War II record of Berlin, Korea, Lebanon and Formosa where no nuclear weapons were ever employed. A proponent of the "Domino Theory," he emphasized that even though the United States had the capability of destroying the human race with nuclear weapons, due to its lack of conventional forces, the U.S. could not prevent "one small part of the free world after another [from being] whittled off with small wars." Because of the Eisenhower Administration’s strategic
doctrines of massive retaliation, "air transportation was relegated to the bottom of the priority list on the grounds of grand strategy and economy." The United States airlift capability, through normal wear and tear, was shrinking. Yet, there was no long-range program to develop and produce any modern follow-on airlift capability. So, as aging equipment was retired, there were no replacements and the number of aircraft kept dwindling. Following is the total number of aircraft in the MATS inventory on a year by year basis from 1955 until 1960, so that you can see the trend for yourself:

1955 - 1290, 1956 - 1165, 1957 - 1039, 1958 - 1016, 1959 - 986, 1960 - 824. In five years, MATS had lost over one third of its airframes due to attrition. General Tunner had been put in command of a sinking ship. To compound the problem, when he took charge, a plan had already been approved to assign half of the C-124 fleet (110 aircraft) to TAC and was just awaiting the signature of the Chief of Staff of the Air Force. This would have unnecessarily scattered a large portion of the national military airlift resources, which were already in dangerously short supply. As it turned out, the dual Lebanon and Taiwan crises prolonged General White's approval, and enabled General Tunner to convince him to reverse the earlier decision.
Airlift Organization

Because the Key West agreement had established that the Air Force was vested with the strategic airlift mission, Secretary of Defense Forrestal directed the Air Force and Navy to merge their air transport services to create a Military Air Transport Service (MATS). His rationale was to demonstrate that the Defense Department was concerned with Eisenhower’s call to strengthen the economy. Additionally, it demonstrated that rival services could indeed work together.

On 1 June 1948 the Department of Defense combined ATC and NATS to create MATS. This was the first time in the history of the United States that the military combined forces of two services under a single unified command structure. Although MATS was technically a unified command, the ratio of the force composition was overwhelmingly in favor of the Air Force, which contributed 90,000 personnel as compared to the Navy, with just 4000 personnel. Secretary Forrestal ordered that MATS be responsible to and its commander be appointed by the Chief of Staff of the Air Force. Major General Kuter was appointed as the first commander. The vice commander came from the Navy. So, rather than having a four-star general in command of the entire DOD strategic airlift force composition, the position was filled by a two-star general. In comparison, the Strategic Air Command (SAC) was commanded by a four-star general. This was indicative of the relative priority given to
airlift during this time frame.

According to General Turner, "MATS' mission, by direction of the JCS, is to provide airlift for the Department of Defense, both on a routine and emergency basis. In order to do this, its planes, crews and ground personnel must be in a constant state of readiness. In accordance with U.S. national strategy, MATS moves men, weapons and material within the United States and from one continent to another. It must be able to furnish immediate resupply of both bomber and missile bases of SAC."

By its very mission statement, it is evident that MATS was considered a support service for SAC.

In order to have impartial military advice on transport policy, Secretary Forrestal created a Military Air Transport Board, with representatives from all the services. Besides developing policy, the board would also meet and present its findings to the Secretary of Defense, in the event a military department complained about unsatisfactory transport services.

On 1 July 1958 Lieutenant General Turner was given command of MATS. The General had just assumed command when the Lebanon crisis erupted. He immediately deployed 36 C-124s and 48 Cargomasters to be in place on alert in Europe should they be called upon. The aircraft were in place before President Eisenhower decided to send the Marines into Beirut. General Turner emphasized that this was indicative of our new "air age," in that the air transport mission was now the forerunner
of all other missions, should an emergency arise. He pointed out, for example, that MATS aircraft had already set up a regular shuttle from Frankfurt to Beirut to Turkey and back, while the headquarters planned special missions directly to Beirut.

While these forces were committed to the Lebanese conflict, another incident erupted in Taiwan, where two small islands (Quemoy and Matsu) were being attacked by artillery shells from Mainland China. MATS was immediately called into action and set up a trans-Pacific airlift composed of hundreds of planes, to deliver needed supplies to both Taiwan and the Philippines. Among their shipments was a squadron of F-104s loaded on C-124s. Not only did they load the pilots and ground crews, but the fighter aircraft as well! This show of force prompted the Chinese to end their shelling without further incident.

Ironically, although MATS was the first command called upon in this new Cold War era, under the strategic doctrine of massive retaliation, it was hit the hardest with the conventional military cutbacks. From 1958 until 1960, General Tunner had to fight to save MATS as an entity within the U.S. Air Force. The two primary forces trying to squeeze MATS out of business were the civil airline industry and surprisingly, the military establishment. The military pressure was indirect in that it was more in favor of massive retaliation to the exclusion and neglect of MATS more than directly opposed to
MATS as a service. The actual assault against MATS was formed by the Air Transport Association (ATA) and some of the individual member airlines.⁷⁰

In 1958 the airline industry was making nearly one quarter of a billion dollars a year from revenues generated by individual U.S. Government passenger tickets and special charter flights contracted by MATS for service personnel. Yet, they felt they could still get an additional one half billion a year if they were able to secure the cargo and passenger routes flown by MATS cargo aircraft.⁷¹

In the interest of making additional profits, ATA launched a full-scale attack against the MATS peacetime mission, which was designed to keep the MATS forces ready to mobilize for war if necessary. They planned their attack on three fronts. First of all, they persuaded Congress to investigate the efficiency of MATS, with the hope of getting legislation to curtail their operations. Secondly, they elicited the support of the U.S. Chamber of Commerce and the American Legion to fight for their cause. Third, they recruited the press and had articles written supporting their proposition in such leading journals as Time, The New York Times and the Wall Street Journal, as well as all the leading aviation magazines.⁷²

ATA attacked on numerous grounds. They claimed that MATS was the largest airline in the world and that its aircraft were extravagantly plush and serviced by 480 beautiful
stewardesses. They claimed that MATS flew many of the same routes that the airlines flew. They even went so far to say, that because of their strategic support mission, MATS had been "riding on SAC’s coattails." The charges against MATS were voiced over and over again in newspaper columns, magazine articles, radio broadcasts, TV commentaries, speeches before community organizations, and testimony in Congressional hearings.

The ATA solutions were threefold. First, they suggested cutting the number of aircraft and personnel assigned to MATS. Second, they suggested that the forces assigned to MATS should drastically reduce their flying time and stay current in simulators instead. Third, they suggested that when MATS flew their aircraft, they should fly them empty.

These charges had two negative effects on MATS. First, because of the attacks, both the administration and DOD were reluctant to spend any money to purchase new equipment for a command which could very well be deactivated. In fact, during the latter half of the 1950s, MATS did not have a single aircraft in design or on order. Second, the nature of the attacks took a toll on the morale of the MATS personnel. General Red Forman, the Commander of McGuire AFS, told his troops "morale is one of our gravest problems." To boost their morale, General Tunner praised his men for the important role they played in national security and he boasted that their safety record was the envy of every airline.
To get to the heart of the problem, General Tunner asked Professor John Hohenbury, from Columbia University, to do a thorough study of the MATS operations. At the time, the professor was serving as a Special Assistant to the Secretary of the Air Force.\(^7\)*

Professor Hohenbury discovered that MATS had been "taking criticism lying down." The reason there had been no public support for MATS was because "a supply operation does not have the glamour that makes for intense local interest." In addition, he found that the people in MATS did not fully understand the mission of their organization. He finished with the following summary: "MATS has been the target of more abuse, misinformation and outright untruth than any other part of our armed forces. It has been difficult, if not impossible, for the truth to catch up with them in many cases."\(^7\)*

General Tunner felt that as the commander of what he considered to be an important military organization with a wartime strategic mission, it was his duty to fight back. He acknowledged that civilian pilots could perform many important functions, but felt that only military personnel, trained in the art of war, were capable of performing in a combat environment. Moreover, he pointed out the fact that during the Lebanese/Korean crisis there were ten separate incidents where MATS could not get enough civilian carriers to augment its routine missions. The airline rationale for noncompliance was that they were overloaded with summertime vacationers.
Additionally, many of the carriers made contract bids which were much too high to consider seriously. His point was that although the ATA was pushing to take over MATS' peacetime mission, many carriers had turned their backs on MATS in its moment of need.78

The military opposition to MATS conformed to the Eisenhower strategic doctrine of massive retaliation, which created a reluctance to allocate scarce resources to any component of the service not directly involved in strategic bombardment. President Eisenhower had pledged to keep taxes low, and his massive retaliation doctrine fit perfectly with his goal to strengthen the economy. His slogan was the "biggest bang for the buck." Since nuclear forces cost much less to build and keep than a balance between nuclear and conventional forces, "the economic ax fall hardest on the Army and the conventional commands of the Air Force."79 The Air Force leaders opposed to MATS were wholeheartedly convinced that U.S. national security relied entirely upon a strong nuclear deterrent, and that any allocation of scarce resources to airlift could potentially weaken America's deterrent capability in the Cold War.

With the Air Force opposition in mind, General Turner asked the Air Force Chief of Staff, General White, whether or not it would be permissible to state his viewpoint, even though it would be in direct contradiction to the official Air Force doctrine. General White told General Turner to assume
you think."²⁰ So, although the Air Force would not actually come to MATS' rescue, they were not going to prevent it from defending itself.

MATS fought back with a three-pronged attack. First, they took their story to the press to sway public opinion. Second, they launched a grass roots campaign at the American Legion and Chamber of Commerce. Third, they presented their story to a number of influential Congressmen such as Senators Goldwater, Thurmond and Cannon and Representatives Rivers, Baldwin and Price. Hearings were conducted between 2 March 1960 and 22 April 1960. Congressman Mendel Rivers was appointed as the Chairman of the Special Subcommittee by Congressman Carl Vinson, Chairman of the House Committee on Armed Services.²¹

General Turner transformed his defensive strategy, and went on the offensive. He called for procurement of new aircraft for the MATS fleet, charging that the backbone of the fleet, the C-124 which he had sold to Symington, had become obsolete. He projected that if MATS were given the new jet aircraft the airline industry had, it could increase its payload, increase its range and lower its operating costs. He argued that a replacement aircraft was already long overdue, but there was no replacement on order or in design. MATS wanted a workhorse plane, cheap to operate, relatively large and easy to load. "This (C-141) would become the backbone of the fleet."²² In addition, they requested a smaller fleet of
aircraft (C-5) capable of carrying oversize cargo.

He also explained the difference between the military airlift mission as compared to the civilian airline mission. MATS had to train 24 hours, 7 days a week to ensure that it would be ready for its "D-Day mission." He counterattacked that this training did not mean to go up and drill holes in the sky with empty airplanes. On the contrary, MATS had to constantly exercise every phase of its military airlift operation, with a minimum of a five hour daily utilization rate. He pointed out that the airline industry was already getting $70 million per year with contracted MATS flights and an additional $250 million per year from individual airline tickets from service members. He estimated that giving them the MATS peacetime airlift mission would cost the U.S. Government an additional $300 million per year, and to fly the MATS aircraft empty would cost another $750 million.

Concerning utilization of airlift by all services, General Tunner pointed out that the Army and Navy for the most part had stuck to their traditional methods of transport, such as surface and sealift. If DOD was more forceful about ensuring that all services utilized air transport resources to the maximum extent, it would promote efficiency and cost savings in operations.

Finally, although the General was vehemently opposed to relinquishing the peacetime airlift mission to the airlines, he did encourage an expansion of the Civil Reserve Air Fleet.
to help relieve the burden on the military forces, by flying
the regularly scheduled peacetime airlift missions during
times of crisis mobilization. This would ensure that in a
future crisis, CRAF would not refuse to fly missions to
augment the military airlift force, as happened in Lebanon and
Taiwan.

To make his case, General Tunner conducted the largest
peacetime airlift exercise every attempted. Operation "Big
Slam" went on for 15 days, beginning on 14 March 1960. The
press was invited, as was any interested Congressman. During
that 15 days, 1250 round-trip missions were flown, some over
4130 miles, which was a new airlift continuous distance
record. 50,496 accident free flight hours were logged. 21,095
troops were flown to Puerto Rico and then flown back home.
10,949 tons of cargo were also airlifted.

These statistics taught everyone concerned some important
lessons. First, it demonstrated the capabilities of the MATS
personnel to get the job done. Observers realized that these
capabilities would have been nonexistent had it not been for
their extensive prior experience. Experience which could only
be acquired through real live mission accomplishment, not
simulator training. Second, when the CRAF picked up the excess
airlift requirements, it proved the practical effects of
augmenting regularly scheduled transport missions with
commercial carriers. Third, with 50,496 accident free flight
hours, it validated the MATS safety program.
Although these important points were brought out by the exercise, the salient issue was described perfectly by observer Ray Towne who said "this operation was the most spectacularly successful failure in the history of military training." The fact of the matter was that the airlift provided by this largest exercise in history was less than a third of what would have been needed to equip a combat ready force. Although the tonnage seemed impressive, it only included one tank, a few vehicles and small artillery pieces. It was estimated that it would have taken a full month to airlift a fully equipped combat division.

Even though the press had no expertise in airlift, General Tunner was convinced that anyone observing would be able to discern the inadequacies of the MATS airlift fleet. So the press was invited and 352 correspondents came to Puerto Rico to witness the event for themselves. The following press observation sums up their impression in a nutshell: "If these men were being sent to fight a small and poorly equipped enemy not far from home base and if time were not too important, the lift would be a success. But, if the Army had to fight a substantial force a long distance away in a hurry, it would be in trouble."

After returning to the Congressional hearings, Senator Chavez, Chairman of the DOD Subcommittee of the Senate Appropriations Committee stated: "I do not believe we have sufficient modern military airlift aircraft for the needs of
today’s world. It’s a fact that both Congress and the Administrative branch must take prompt action in this area of national defense."

Shortly after operation Big Slam, General Tunner testified that "limitations of the majority of present MATS aircraft seriously limit the size of U.S. Forces which can be deployed to distant overseas destinations." The River Committee had numerous findings and recommendations. The principle finding of the committee was that the U.S. strategic airlift capability was seriously inadequate. The primary recommendation was to appropriate $50 million for a new workhorse aircraft. For a quick fix, they recommended augmenting the airlift fleet with fifty KC-135s and fifty C-130s. A secondary finding was that airlift was spread out among various commands, making it impossible to take advantage of all the assets owned by the military in an integrated manner. The recommendation was to consolidate all the DOD airlift assets under one command. The committee found that crews were pushed too hard in the exercise, working 84 hour weeks. They recommended that the peacetime utilization rate be raised to a minimum of one half of the surge rate so that the crews would be better able to handle the increased demands. Hand in hand with that, the emphasis on airlift operations would be shifted to training rather than economy. It was found that CRAF had helped relieve the burden of flying regularly scheduled flights during the exercise. Therefore,
the committee recommended that the CAF fleet be upgraded with state-of-the-art equipment in order to better serve MATS."

To quote General Tunner: "Straws in the wind during that period indicated a turning point in our military planning, our entire strategic concept. Top Air Force brass (i.e. Lemay, Twining), though "big bang" adherents, began to realize that air transport did have some importance in the military establishment.""

Summary

In the aftermath of the establishment of an independent Air Force in 1947, Secretary of Defense Forrestal issued a directive on 3 March 1948 and the Military Air Transport Service (MATS) was officially established on 1 June 1948. MATS consolidated all the nation's strategic airlift resources into one command and was composed primarily of the former ATC and four NATS squadrons. The tactical airlift aircraft assigned to the Navy, TAC and the various overseas commands remained exclusively under their own jurisdictions. In addition, rather than being designated as a major combatant command, such as TAC, SAC and ADC, MATS was designated as a support service and was commanded by a two-star, rather than a four-star general. This was a direct result of the comparatively low priority the Air Force put on its airlift fleet and was commensurate with its budget standing.
Not surprisingly, when the Berlin Airlift was activated, US Air Forces Europe (USAFE) rather than MATS was called into action. Only at the urgent request of Army General Stilwell and others was an airlift task force formed under the command of General Tunner. Tunner's combined operation accomplished its mission more effectively than USAFE had done, and with less support. Probably the most important outcome of that airlift operation was the realization of the military importance of airlift, especially in the Cold War era. With this new importance came the impetus, lead by Secretary of the Air Force Symington, to develop the C-124 Globemaster, the first four-engine, long-range airlifter designed to specifications and able to deliver outsized cargo. It was to serve as the backbone of the strategic airlift fleet until the 1960s.

Yet, according to Paul Hammond, considering the magnitude of success the Air Force had achieved during the Berlin Airlift, it "failed to exploit this success to enhance its prestige, and the reasons for not capitalizing on the episode related to the top officer's view of the essence of the service." Hammond goes on to explain that "supporters of strategic air power, the predominant strategic doctrine of the Air Force, might have viewed the airlift as a potential threat to the primary mission of the Air Force, and feared that airlift publicity would only give substance to the charges which had often been voiced in Army circles that the Air Force was neglecting its duty to provide air transport for Army
troops."

It took six years for the Air Force to develop its own basic doctrine, independent of the Army. Air Force Manual 1-2, USAF Basic Doctrine was published for the first time in 1953. Reflecting earlier Army statements, the manual described just three primary functions of the Air Force; defense of the homeland, control of the air and the ability to attack the enemy's heartland. Just a year later, the Air Force revised AFM 1-2 and for the first time described the role the Air Force was to play in the mission of deterrence. Revised again in 1955, the manual defined the concept of massive retaliation. In that definition, it explained the planned degree of destruction upon the enemy, should deterrence fail. With the introduction of missiles in space, the 1959 edition Air Force was quick to lay claim to this new environment. The Air Force area of responsibility was now unlimited, encompassing "the total expanse beyond the Earth's surface."

Throughout the entire decade of the 1950s, not one mention was made of the airlift mission in the official Air Force doctrine. I contend that this was a direct result of the strategic doctrine of massive retaliation, which emphasized exclusively the role of strategic bombing as the deterrent and warfighting force. Based on the assumption that the entire arsenal of nuclear weapons would be employed in the event of a major war, there was no need to have a large airlift force.
since U.S. soldiers would not have to be deployed to fight. Edward Teller, a nuclear physicist, predicted that "forces on a nuclear battlefield would be measured not in battalions or in divisions, but in commando groups of five to fifty men (pentomic divisions)." Because of this nuclear warfighting strategy, there was "little incentive to exploit airlift's flexibility to support ground forces."\(^1\)

In late December of 1949 the Senior Officers Board of the Air Force met to decide the next year's procurement program, using the President's budget stance and the existing aircraft development status as guidance. The board decided to "concentrate the limited resources of the Air Force upon strategic bombing aircraft" in order to fulfill "what they regarded its first responsibility, retaliatory capability."\(^2\)

On 6 January the board recommended that the Secretary of the Air Force cut back procurement of troop transports, jet fighters and medium bombers and transfer the savings to heavy bombers.\(^3\)

With the exception of the C-124, and C-118, throughout the decade of the 1950s, the airlift fleet had to make do exclusively with its World War II vintage airlift fleet. Virtually all Air Force funding went toward strategic bombardment or support thereof. General Duane Cassidy, the current Commander in Chief of MAC, notes that "the airlift forces the United States had available in the late 1950s came as a result of the [strategic] doctrine established in the early years of the Eisenhower Administration ... airlift's
primary mission under massive retaliation was the support of
the nuclear strike forces. Tactical airlift forces stood by in
Europe and the Far East for the prestrike movements of weapons
and strike aircraft."\textsuperscript{104}
NOTES


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7 Endicott and Stafford, p. 57.

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9 Ibid., p. 203.

10 Endicott and Stafford, p. 56.

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16 Kahan, p. 17.


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19 Ibid., p. 160.

20 Ibid., p. 181.
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CHAPTER IV

1961 - 1968

Introduction

The Kennedy and Johnson Administrations resurrected the airlift community with their strategic doctrine of flexible response. Airlift was formally accepted in U.S. Air Force Basic Doctrine as a mission. MATS was commanded by a four-star general for the first time and was later changed to MAC, making it a major command rather than a support service. In conjunction, major steps were taken to modernize and expand the United States airlift fleet. Both the C-141 and C-5 were authorized by these administrations, bringing airlift into the jumbo jet age. By the end of 1968 the C-141 fleet peaked out at 277 aircraft.

U.S. Strategic Doctrine

While delivering his inaugural address, President John F. Kennedy proclaimed "we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure
the survival and success of liberty." From day one of his administration, the new President reaffirmed this nation's commitment to containment. He was determined to fix the "two fundamental flaws" in the U.S. military posture; "the inadequacy of both our strategic deterrent and our conventional capabilities." President Kennedy called for a reassessment of U.S. strategic doctrine in his first State of the Union address, proclaiming "we must strengthen our military tools ... in the past, lack of consistent, coherent military strategy ... [has] made it difficult to assess accurately how adequate or inadequate our defenses really are. I have, therefore, instructed the Secretary of Defense to reappraise our entire defense strategy." In January 1961 Kennedy appointed Secretary of Defense Robert McNamara to conduct a broad study and come up with an appraisal of our defense strategy and capabilities, to include U.S. strategic force requirements.

Earlier, in 1956, Army Chief of Staff Maxwell Taylor had tried to publish an article in *Foreign Affairs* about the necessity of strong conventional forces. But his article was never printed due to bureaucratic pressures from the Pentagon and Foggy Bottom. After retiring, he finally managed to get his point across in a book published in 1959, entitled *The Uncertain Trumpet*. This widely read book articulated the point that nuclear weapons may be good for preventing full scale wars, but they were of no use to counter guerrilla-type warfare.
especially in light of the Soviet's nuclear retaliatory capability. Because of massive retaliation's shortcomings, General Taylor called for a reassessment of U.S. strategic doctrine."

Henry Kissinger, the head of a nuclear strategy think tank at Harvard University, published a landmark book in 1957 entitled *Nuclear Weapons and Foreign Policy*. The book called for the need to develop a military force capable of fighting at any level of conflict from insurgency to general nuclear warfare. He stated that "limited war is thus not an alternative to massive retaliation, but its complement. It is the capability for massive retaliation which provides the sanction against expanding the war."*

Heeding the advice of the professional military and academic communities and a general government consensus, with the exception of the Air Force, President Kennedy's "New Frontier" would build military forces able to fight at all levels of conflict. The President proclaimed that "we are moving into a period of uncertain risk and great commitment ... thus we must be able to respond with discrimination and speed, to any problem at any spot on the globe at any moment's notice."* In order to achieve a flexible response, the forces were designed to fight a total thermonuclear war, limited nuclear war, conventional war in Europe or Asia, or unconventional warfare anywhere in the world. A strategic doctrine of "flexible response" would provide nonnuclear alternatives to
military force. Their argument was that an inadvertent nuclear war could best be avoided by relying more heavily on conventional forces, backed by strong, survivable nuclear forces. The primary objective of flexible response was to "maintain forces capable of meeting conventional threats so that the United States would not be faced with the choice of either using nuclear weapons or foregoing vital interests abroad because it lacked nonnuclear options." Although nuclear weapons would only be used as a last resort, the administration made it clear that under certain circumstances, the U.S. could be compelled to use nuclear weapons first.

Referring to strategic nuclear weapons, Secretary McNamara stated that "the first requirement for such a policy [flexible response] is clearly to maintain our nuclear strike power as a realistic, effective deterrent against Soviet initiation of major wars ... our weapons must be hardened, dispersed, and mobile so that they can survive an enemy attack, and they must be equipped with the most sophisticated devices necessary to penetrate enemy defenses." The Kennedy Administration considered tactical nuclear weapons to be "dangerous and ineffective military instruments," which could easily lead to an all-out nuclear war. Tactical nuclear arms were procured as a deterrent, so that the Soviets would not resort to their use for fear of U.S. reprisals. In fact, that was the justification given for the 60 percent increase in tactical nuclear weapons in the
European and Asian theaters; to deter the USSR from employing their tactical nuclear weapons.  

Concerning the conventional buildup, Secretary McNamara stated "our overall purpose here, as in our strategic buildup, is to augment our forces in a balanced fashion. We have increased the number of combat-ready divisions to meet the military contingencies with which we may have to deal. As we have increased manpower, we have modernized and expanded weapons procurement. We have increased our tactical airpower to match our ground forces, and we have launched a program to provide sea and airlift [emphasis added] tailored to the men and equipment." Theoretically, these forces would have the capability to fight 2 1/2 wars, one each in Europe and Asia and a limited conflict elsewhere.  

Kennedy called upon the NATO allies to build their conventional forces in response to the Warsaw Pact threat, yet they were reluctant to do so. Instead of making Europe the battlefield for a limited conventional war, they preferred the trip wire strategy that resorted to the early use of strategic nuclear weapons, a carry-over from the massive retaliation school of thought. Before the close of the Johnson Administration in 1968, the alliance endorsed the flexible response strategy with the condition that it maintained a nuclear first use option.  

Concerning force employment, Secretary McNamara stated "our new policy gives us the flexibility to choose among several
operational plans, but does not require that we make any advance commitment with respect to doctrine or targets. We shall be committed only to a system that gives us the ability to use our forces in a controlled and deliberate way."

The defense planning process was changed as well. Whereas the Eisenhower Administration had given each service wide latitude on weapons procurement decisions within the constraints of a budget ceiling, McNamara instituted a centralized system, Planning Programming and Budgeting System (PPBS), to evaluate defense requirements using cost-effectiveness and systems analysis. In order to assure maximum cost-effectiveness, each of the services had to compare how each of their programs contributed to the U.S. strategic doctrine. This requirement weakened the ties between the services and their traditional missions and actually increased interservice rivalry. PPBS "damaged the military sense of professionalism since computer wise technocrats replaced the military judgment of experienced officers." 

During the first ten months of the Kennedy Administration the defense budget rose by 6 billion. There was a 100 percent increase in Minuteman production, a 50 percent increase in Polaris submarines and a 50 percent increase of the number of bombers put on alert. In total, the Kennedy Administration had provided for a strategic arsenal with "well over 2000 nuclear carrying vehicles capable of reaching Russia." Throughout the Kennedy and Johnson years, strategic systems accounted for
approximately 30 percent of the defense budget (not including Vietnam).

The Kennedy Administration also stressed conventional forces in their "flexible response" strategy. As Kissinger had pointed out in the 1950s, this strategy "required superiority not only at the strategic level but at all levels of potential conflict." Kennedy requested and received supplemental defense money for more troops, conventional weapons and ammunition, and an expanded airlift and sealift capability. By 1962 the Army had grown from 11 to 16 combat divisions (200,000 new troops). Their troops were trained using conventional weapons and doctrine. The pentomic divisions trained for nuclear warfighting were converted to conventional units. The Air Force grew from 18 to 21 tactical fighter wings. Both the Air Force and Navy fighter units were included in the general purpose forces war planning. According to William Kaufman, President Kennedy "had pre-positioned in Europe the equipment for two divisions and was continuing to expand the airlift [emphasis added] and sealift to move the strategic reserve ... his conventional options were expanding steadily."
Evolution of Military Airlift

The Vietnam War

In December of 1961 Secretary McNamara labeled South Vietnam as the "number one priority" and stated that other than a U.S. troop commitment, it would receive whatever resources were needed. After careful investigation, the U.S. Air Force had found the primary cause of the French defeat at Dien Bien Phu to have been "inadequate logistics support caused by ... insufficient airlift." The French failure at Dien Bien Phu had a significant impact on the troop-carrier doctrines which were developed and upon the forces which were created to fight in Vietnam. The C-123 and C-130 were developed and deployed with the capability for short-field assault landings, increased range and heavy equipment airdrops.

Air Force Manual 1-9, the official Air Force Doctrine for Troop Carrier Aviation, was published in 1954 and reigned unchanged until 1966, half way through the Vietnam conflict. The only experiences the doctrinal planners had to draw from were Korea and World War II. Although the doctrine was a bit nebulous on certain points, one area was clear and that was that troop-carrier resources should be under centralized control. This view was in concurrence with Air Force Manual 1-2, Basic Air Force Doctrine, which stated that "because of
the inherent flexibility of the air weapon and its ability to concentrate effort, air forces should not be partitioned among different commands." Therefore, in Vietnam the troop-carrier forces reported directly to the theater air commanders, who were not responsible to either the ground force commander or the tactical air commander.2

The 315th Air Division Theater Airlift Headquarters was originally established in Japan during the Korean War.2 Separate from 5th Air Force (tactical fighters), the 315th reported directly to PACAF Headquarters, located at Hickam AB Hawaii, maintaining the concept of centralized theater airlift command and control. The normal day-to-day air transport priority and allocation decisions were made by the regional Joint Military Transportation Board, in Japan. In March of 1961 this board was replaced by the Western Pacific Transportation Office (WTO), located at Tachikawa AB in Tokyo Japan, and charged by the Commander in Chief of Pacific Command with the "responsibility for insuring the optimum utilization of airlift ... for tactical, training and logistical support of PACOM forces."2 The West Pac area stretched from Eniwetok to Calcutta, within which "the 315th provided intratheater lift to support the services provided by MATS."2

The United States took full advantage of its superior aviation technology in Vietnam. Tactical airlift was used to give the Army Infantry mobility and staying power in its offensive battles against the Viet Cong. Airlift played a key
role within this offensive strategy.\textsuperscript{27} Both the C-130 and C-123 airlifters were far superior to any transport aircraft utilized in the Korean conflict. They were able to sustain large search and destroy operations by hauling units, their equipment, and tons of supplies into airstrips located near the combat zone. Usually these airstrips were collocated with brigade headquarters, the supply transshipment point, artillery fire base and helicopter refueling and rearming point. Forward air controllers would operate from these airstrips, directing air strikes from fighter aircraft which were based in the rear. Army airmobile and infantry operations projected outward over a 30 mile radius. Using Air Force transport aircraft as the aerial line of communication for the forward mobile ground operations was the "foremost development of the war for airlift use."\textsuperscript{22}

The responsibility of transporting ground force units from the CONUS to Vietnam was entrusted to the strategic airlift units assigned to MATS. The tactical airlift troop-carriers would augment the theater airlift forces in their logistics or assault roles, while the MATS crews would return to the CONUS to pick up another load of soldiers. The division of tasks was not etched in granite, and roles for the different aircraft were often adjusted according to overriding needs. As a consequence, the differences between strategic and tactical airlift grew to become less distinct. According to Ray Bowers, using strategic transports for airlift operations within the theater of Vietnam and on the other hand, using tactical airlift aircraft for
overwater missions "showed that the distinction between strategic and tactical airlift arms, never absolute, remained vague."\textsuperscript{22}

Even though the MATS and PACAF aerial ports were combined at most bases, separate maintenance, command post and billeting operations still existed at most of these Pacific locations. Although "workable arrangements" had been worked out to coordinate the Southeast Asian War, the situation "fueled the long standing controversy over the organizational separation of United States military airlift activities."\textsuperscript{30}

Vietnam made a strong impact on Air Force basic doctrine, which expanded to include the new concept of limited warfare. The impact would influence the nature of future forces, missions and organizations of tactical airlift forces.\textsuperscript{31}

Air Force Doctrinal Treatment of Airlift


Chapter Four, Employment of Aerospace Forces in Tactical Nuclear Operations, describes the airlift mission as follows: "Performance of the airlift mission depends on the limits observed in the use of nuclear weapons. When opposed by a nuclear armed opponent, tactical airlift forces would require extensive dispersal and vertical or short takeoff and landing
capabilities. Strategic airlift could be operated from regular airfields with normal operating procedures as long as rear areas were not under attack. Under these conditions, required aircraft capabilities would be compatible with those of conventional warfare. However, in tactical nuclear operations without a nearby sanctuary, strategic airlift would require a large-scale increase in total aircraft to maintain an effective flow of supplies to dispersed locations. Centralized control of theater airlift under a theater airlift commander would provide most effective utilization of resources in support of joint operations."

Chapter Five, Employment of Aerospace Forces in Conventional Air Operations, describes the airlift mission as follows: "In conventional warfare, airlift contributes to rapid concentration of air and ground forces and supply of tactical units in the field. In addition, long-range or strategic airlift participates in the support of heavy theater logistical requirements. Air superiority is required before effective airlift, and close control is necessary for the efficient utilization of tactical airlift." 

Chapter Six, Employment of Aerospace Forces in Counterinsurgency, describes the role of airlift as follows: "Airlift provides quick reaction mobility and supply to ground forces, to enable them to rapidly achieve and maintain contact with insurgent units. Coordinated joint operations and centralized control are essential. In addition, leaflets,
loudspeakers, and other psychological measures can be used from the air to produce defections from insurgent forces and provide guidance for the civil population."

Although the 1964 edition of AFM 1-1 stated that "we must have forces with capabilities appropriate to different levels of conflict intensity," it emphasized that "of utmost importance, however, is that we maintain superior capabilities for the higher intensities of war." The higher intensities of war refer to the nuclear regime. It was no secret that the top Air Force priority since the last B-52 rolled off the line in 1962 had been the acquisition of a follow-on bomber. However, Secretary McNamara cancelled the XB-70 project because years earlier high-altitude jet aircraft had been proven vulnerable to Soviet air defenses when an American U-2 was shot down over Russian soil. That did not stop the Air Force from submitting plans in the late 1960s for a bomber capable of penetrating Soviet air defenses by flying supersonic at low level. For the next two decades, this B-1 bomber would prove to be the number one priority in Air Force acquisition.

Airlift Force Structure

During his Presidential campaign, Senator Kennedy addressed the inadequacy of U.S. military airlift. He stated that "our ability to meet our commitments to more than 50 countries around the globe has been critically impaired by our
failure to develop a jet airlift capacity," and he promised to do something about it if elected.\footnote{37}

Delivering his first State of the Union Address to Congress, held on 30 January 1961, President Kennedy kept his promise and announced "I have directed prompt action to increase our airlift capacity. Obtaining additional airlift mobility and obtaining it now, will better assure the ability of our conventional forces to respond, with discrimination and speed, to any problem at any spot on the globe at any moment's notice."\footnote{38}

Not long thereafter, the President revealed at his first news conference that he had approved a $1 billion program to build the aircraft General Tunner had proposed during the airlift hearings in the late fifties. In the General's words, "the C-141 is more than just a plane. It signifies the return of our entire military program from almost sole emphasis on all-out nuclear war to the more practical preparation, in addition, for the localized conflicts the free world constantly faces all over the globe."\footnote{39} Secretary of Defense McNamara stated "its the airlift aircraft we've been waiting for, and we intend to standardize on it for our heavy airlift requirement."\footnote{40}

During his 1962 Annual Defense Posture Statement to Congress, Secretary McNamara asserted that U.S. military airlift capabilities fell far short of its requirements and he criticized the Air Force for "failing to provide adequate airlift for the Army." He pledged that the Administration was
going to "remedy the situation." Both the President and the Secretary put pressure on the Air Force to double its airlift capacity by 1966, a requirement that ultimately lead to the production of the C-5A. Later, in 1966 before a House Armed Services Committee, Secretary McNamara reasserted the Johnson Administration's commitment to airlift when he said "an adequate airlift/sealift is essential to our global strategy."

Former Chief of Staff of the Army, General Maxwell Taylor, had complained during the Eisenhower Administration that his troops had inadequate airlift support. General Taylor wrote in his book *The Uncertain Trumpet*, that since its establishment as a separate service, the Air Force had "neglected its responsibilities to the Army." Moreover, he argued that "new weapons and equipment for ... airlift should be organic within the Army." General Taylor's influence grew substantially under the Kennedy Administration when the President asked him to come out of retirement to become his chief military advisor in his new role as Chairman of the Joint Chiefs of Staff. Along with General Taylor, other high ranking Army officers came to the forefront and advocated improvements in conventional Army forces and in strategic airlift capabilities needed to project those forces worldwide. They argued that major confrontations could best be avoided if the U.S. could intervene in the beginning stages of conflict, while it was just a "brush fire." As justification, they pointed to the continuing crises in Berlin, Taiwan, Southeast Asia and the Middle East.
General Taylor’s appointment as the President’s military advisor combined with his advocacy for an organic Army airlift fleet, meant the Air Force military airlift community once again would have to fight for its life. Having taken heed of Secretary McNamara’s emphasis on cost-effectiveness, the Air Force would decide to use the cost-effectiveness argument to justify the need to centralize airlift management under its control."

Vietnam was on the horizon, and McNamara began to push the air mobility mission, thereby getting the Army to carry its own troops via helicopter. Thus, helicopter technological improvements would enable the Army to reduce its dependence upon Air Force intratheater airlift."

Army Field Manual 55-4, published in December 1959, stated the official Army view concerning airlift until it was changed in 1967. This manual stated that "centralized theater airlift systems would consist of Air Force transport aircraft and operate under allocations established by a joint agency under the theater commander." This meant the Army airlift forces, consisting of the C-7 Caribou, would be separately controlled by priorities and allocations established by the Army ground commanders.

The Air Staff objected to the Army airlift forces for two main reasons. First, they felt the Army’s slow flying aircraft were vulnerable to enemy ground fire. Second, they felt it was much too difficult to relocate these short-range aircraft overseas in a contingency. The official statement read "because
of fear of losing central control of a separate Army air service, the Army is not capitalizing on the inherent flexibility of air power. It still wants to use aircraft as artillery pieces having them always on call at all levels of command. 48 Their argument was that the Army's decentralized control of airlift resources created larger forces than necessary, which put a higher demand on maintenance and lessened their flexibility. Air Force troop-carrier doctrine demanded that all airlift should be under its centralized control.49

In September of 1960 the Army had 5500 helicopters and airplanes in its inventory. At the time, acquisition plans called for expansion to 8800 aircraft, including 250 additional C-7s, by 1964.50 The Army leadership defended this organic aviation force because of its fast response time on the forward battlefield. The Air Force leadership felt this was an infringement on its territory, so it demanded that the Army relinquish control of its entire fixed-wing fleet and renounce any intentions to build fixed-wing tactical airlift aircraft in the future.51

On 6 April 1966 an agreement was reached between the Chiefs of Staff of the Army and Air Force concerning airlift.52 The Army Chief agreed to give up the entire inventory of CV-2 and CV-7 aircraft and any future fixed-wing aircraft designed for tactical airlift. Except for administrative support aircraft, the entire inventory was to be relinquished to the Air Force. The Army gave all of its fixed-wing airlift aircraft to the Air
Force in an eight month conversion process. On 1 January 1967 six Air Force C-7 Caribou squadrons were established, all under the command of the 483 Troop Carrier Wing, Vietnam.\textsuperscript{33} In their first year of operation, the Air Force pilots and support personnel surpassed the Army's prior performance, and most of the Army personnel were supportive of the change.

In return, the Air Force Chief agreed to give up the entire inventory of helicopters and any future helicopters for intratheater airlift, fire support, supply and resupply of the Armed Forces. The only helicopters the Air Force could keep were for search and rescue, mission support and special air warfare. In addition, both Service Chiefs agreed "to revise all service doctrinal statements, manuals, and other material in variance with the substance and spirit of this agreement."\textsuperscript{34}

On the strategic airlift side, the need to respond immediately to U.S. worldwide commitments made the development of a "modern, flexible, fast-reaction, jet-powered airlift force a matter of urgency."\textsuperscript{35} The first squadron of C-141s became operational in 1965 and more than 200 were slotted for operation by 1968. That total would provide a 70% increase in airlift capabilities in just three years.\textsuperscript{36} The stated objective of the Air Force was to provide fast reaction logistical support and mobility for the Army.

In 1964 and 1965 the Air Force examined its future airlift requirements, especially in the field of outsized cargo. A number of comprehensive studies concluded that there was a
definite requirement for a "large, efficient outsized cargo aircraft to add a higher degree of credibility to the United States contingency posture." An Air Force industry analysis settled on the C-5A. Secretary McNamara approved of the program in December 1964 and a $2 billion contract for fifty-eight C-5As was awarded in September 1965. Envisioning a mixed force of the C-5, C-141, and C-130, the Secretary stated "the ability of the U.S. Armed Forces to respond to aggression in a timely and appropriate manner requires the utmost in airlift flexibility and capacity, leading to revolutionary logistical concepts that will significantly increase the combat effectiveness of the U.S. military forces." According to Halperin, Clapp and Kanter, the Air Force accepted procurement of the C-5A "only because the move was forced on it by civilians. When given their own way, the priorities of the Air Force officers have always been clear."

Airlift Organization

General Tunner felt that the huge sum appropriated for the C-141 provided further justification for his call to consolidate all the military airlift resources into one command. He pointed out that at that time there were more transport aircraft assigned to various commands throughout the Navy, Marines and Air Force (TAC had over 350 troop-carriers) than there were to MATS. He claimed these other commands were usually commanded by "combat officers who do not understand airlift." The result was
that aircraft with great potential were sitting idle on flight lines all over the world. The General argued that MATS had developed a separate expertise within the military run by professionals dedicated solely to airlift and proposed that the solution to the problem would be to consolidate all the airlift functions under "one senior commander and an experienced staff whose whole thinking is devoted to the airlift mission, such as we find in MATS today."\(^1\)

Shortly after his retirement, General Tunner stated in his book, *Over The Hump*, "in order to achieve a stronger defense, and to reduce costs, I strongly recommend the consolidation of all transport aircraft into a single command."\(^2\) He recommended that the new command be called the Military Airlift Command and that it be given sole responsibility for all the transport aircraft within the Department of Defense. He realized that in order for the change to take place, it would need the approval of the Secretary of Defense and the Joint Chiefs of Staff. If established, he reasoned the command should be administered by the Joint Chiefs of Staff. They would be responsible for rank ordering the allocation of airlift resources among the various services according to their individual needs.\(^3\) Effective 1 January 1966, the Military Air Transport Service was designated the Military Airlift Command (MAC).\(^4\) Although the name was changed, the function of MAC was identical to MATS and airlift was not consolidated throughout the defense
establishment. It did mean that MAC was now a major command, commanded by a four-star general, which meant it had more pull in the allocation process. But, MAC was still classified as a support rather than a combatant command. So, although its stature was enhanced from a "service" to a "command," MAC was still on the second tier of the Air Force when compared to Tactical Air Command (TAC), Air Defense Command (ADC) and SAC.

Summary

The Kennedy Administration came into power in the early 1960s and was quickly confronted with the Berlin Crisis, the Bay of Pigs operation, the Cuban Missile Crisis and Soviet supported insurgencies in Africa, Latin America, and Southeast Asia. With so much tension in the world, it was evident that the massive retaliation doctrine was not working in these limited conflicts. The United States could not respond to such minor conflicts with nuclear weapons, and if it did, it now had to contend with Soviet retaliation, since they now had an intercontinental bomber force and ICBMs. In recognition of its limitations, the Kennedy/McNamara team embarked on a policy of flexible response. Their premise was that strategic nuclear deterrence was still the mainstay of deterrence, but if it should fail, the U.S. should have the ability to respond in one of four levels: general nuclear, tactical nuclear, conventional and counterinsurgency.
The 1964 edition of Air Force Manual 1-1 (changed from 1-2), incorporated this strategic doctrine of flexible response. The primary mission was still to deter aggression through U.S. strategic nuclear forces. But, should deterrence fail, the U.S. was now to respond with one of the four aforementioned levels of conflict. In a general nuclear war, the role of the Air Force was strictly strategic bombing. The lower three levels of conflict called upon the Air Force to execute the missions of air superiority, interdiction, close air support, airlift, and reconnaissance. This was the first time that official Air Force doctrine acknowledged that airlift was one of its primary missions.

To enable U.S. forces to respond in a timely manner to any crisis worldwide, it was imperative to develop a jet airlift fleet. Almost immediately upon taking office, the administration laid plans for the development of the C-141 Starlifter and a few years later, the mammoth C-5 Galaxy.

In 1967, the Military Air Transport Service was transformed to the Military Airlift Command. This meant that airlift was now a major command, technically on a par with TAC and SAC with a four-star general at the helm. This would help in the intraservice competition for procurement funding of new weapon systems.

Military airlift benefitted as a direct result of the strategic doctrine of flexible response. For the first time, airlift was acknowledged to be an Air Force mission in AFM 1-1.
The stature of the airlift organization was given a boost with the establishment of MAC, a major Air Force command. The airlift force structure was both modernized and expanded. The airlift fleet entered the jet age with the procurement of the C-141 Starlifter and C-5 Galaxy.
NOTES


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4Ibid., p. 251.

5Ibid., p. 252.

6Ibid., p. 288.

7Kahan, p. 76.


9Ibid., p. 76.

10Ibid.

11Ibid., p. 73.

12Ibid., p. 77.

13Ibid., p. 72.


15Nathan and Oliver, p. 304.

16Ibid.

17Kahan, p. 75.

18Nathan and Oliver, p. 305.

Ibid., p. 120.
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Ibid., p. 35.
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**Endicott and Stafford, p. 216.**

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**Ibid., p. 673.**

**Ibid., p. 353.**

**Ibid., p. 673.**


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**Ibid., p. 190.**

**Ibid.**

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**Tunner, p. 321.**

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CHAPTER V

1968 - 1976

Introduction

The Nixon and Ford Administrations made no commitment to develop new airlift capabilities. This was in line with their strategic doctrine of realistic deterrence which shifted the majority of the conventional defense burden on the allies. The lessons learned in Vietnam were applied to tactical airlift doctrine. Organizationally, all the DOD airlift resources were consolidated under MAC as the single manager of DOD airlift and MAC was recognized as a specified combatant command, rather than a support command. Throughout this entire period no initiatives were undertaken to expand the airlift force structure, although the C-5A production line stayed open until 1973. Even so, research and development flourished. The YC-14 and YC-15, advanced tactical airlifters developed after the Vietnam experience, were both tested as possible replacements for the C-130. In addition, a YC-141B prototype for the C-141 air refueling and stretch modification was tested.
Richard Nixon was the first President to enter office confronted with strategic parity and the possibility of eventual Soviet superiority in ICBMs. Yet, when he came into office, the American public was in favor of retrenchment because of Vietnam and there were calls to cut back on defense spending. As soon as the new President assumed office, he began an extensive review of U.S. defense programs and policies. DOD searched for weapon projects that could afford to be cut back or eliminated. An interagency task force was formed to look at the cost, feasibility and global impact of various force postures.¹

Six months after his inauguration, in June 1969, the President revealed the "Nixon [Strategic] Doctrine" of "realistic deterrence" based on the "three pillars of strength, partnership, and a willingness to negotiate" in order to achieve an enduring peace.² Because of the "domestic pressures to reduce defense spending and overseas commitments," according to Secretary of Defense Melvin Laird, "in deterring nuclear warfare, primary reliance will continue to be placed on American forces, but at the local warfare level the primary defense burden will have to fall on the country threatened."³

Secretary of Defense Laird laid out what he called the "three key elements" of the new strategic doctrine known as
realistic deterrence: "(1) The United States will keep all of its treaty commitments. (2) We shall provide a shield if a nuclear power threatens the freedom of a nation allied with us or of a nation whose survival we consider vital to our security. (3) In cases involving other types of aggression we shall furnish military and economic assistance when requested and as appropriate. But we shall look to the nation directly threatened to assume the primary responsibility of providing the manpower for its defense."

Using these elements, the administration established the following criteria for the U.S. military force structure: "(1) Preservation by the United States of an adequate strategic nuclear capability as the cornerstone of the Free World's nuclear deterrent. (2) Development and/or continued maintenance of Free World forces that are effective and that minimize the likelihood of requiring the employment of strategic nuclear forces should deterrence fail. (3) An international security assistance program that will enhance self-defense capabilities throughout the Free World, and, when coupled with diplomatic and other actions, will encourage regional cooperation and/or security agreements among our friends and allies."

The "most crucial criterion" as to the effectiveness of our strategic deterrent was whether or not we could maintain an "effective" nuclear retaliatory capability in the face of a Soviet nuclear attack. This criteria, modeled after the
McNamara approach, was used to design a U.S. strategic arsenal which was capable of "inflicting decisive damage on the USSR under all foreseeable conditions." As the previous administration, this one felt that a triad of ICBMs, SLBMs and bombers would provide "insurance" against any unforeseen Soviet technological breakthroughs, or unexpected failures to one of its systems and it provided a nightmare to the Soviet strategic target planners. Being that this triad force comprised the basis of the American nuclear deterrent, it was not surprising that this administration devoted huge sums of money to maintain sufficiency in this area. To strengthen the ICBM force, the administration pushed MIRV development into operational readiness. Secretary Laird fought to develop a follow on nuclear submarine called the Trident. Finally, the Nixon Administration put great emphasis on the strategic bomber force. It added new systems to the B-52 bomber fleet, such as advanced radar systems and advanced air-to-surface missiles. More importantly, they pushed for the development of a follow-on bomber to the B-52, designated as the B-1.

Concerning the least crucial criteria, the conventional deterrent, Secretary Laird stated that "to serve as a reliable deterrent, our general purpose forces, together with those of our allies, must be such as to convince potential enemies that they have nothing to gain by launching conventional attacks." The Nixon Doctrine decreased its span of commitment by reducing the manpower levels from being able to handle 2 1/2
wars, one each in Europe and Asia plus a small "brush fire" somewhere else, to a force structure just able to handle 1 1/2 wars. The President based this new strategy on several assumptions. First of all, simultaneous attacks against both Europe and Asia were unlikely. Second, his long-term interest in Asia resided in the Northeast quadrant. Third, the Asian allies could and were willing to increase their indigenous conventional forces. Fourth, U.S. Air Force and Navy forces would remain in the Western Pacific region.

Nixon's redefinition of defense commitments combined with Congressional pressure to cut defense spending had a negative impact on U.S. conventional forces. The number of Army troops in Asia (not counting Vietnam) were cut below the level deployed during the Johnson Administration. Although this strategic doctrine of realistic deterrence translated to a reduction in U.S. conventional manpower, it simultaneously meant the U.S. needed to place a greater reliance on its technological superiority.

Realistic deterrence was responsible for potential technological advancements in the airlift force structure. The YC-14, YC-15 and YC-141B were all researched, developed and tested under Presidents Nixon and Ford. Yet, the reduction in U.S. conventional defense treaty commitments combined with cutbacks in conventional defense spending meant that none of these technological advances were ever applied to the airlift force structure while they were in office.
Evolution of Military Airlift

Vietnam

The following description tells of the many accomplishments of the Military Airlift Command during the Vietnam War.

Throughout the War in Vietnam, MATS/MAC airlifted 2 million tons of equipment and supplies and 2 million passengers between the United States and Southeast Asia. The Air Rescue Service was responsible for saving 4120 lives, of which 2781 were combat casualties.\(^1\)

After the signing of the cease-fire on 27 January 1973, MAC airlifted 566 POWs from Hanoi to Clark AFB, Philippines as a part of Operation Homecoming.\(^2\)

Just prior to the collapse of the South Vietnamese Government, MAC airlifted 50,493 refugees to freedom via one commercial charter and 201 C-141 and C-130 missions from Saigon. In addition, The Air Rescue Service helicopters airlifted 362 refugees to the USS Midway. MAC commercial contract carriers airlifted a grand total 121,560 refugees from the entire Southeast Asian theater to the United States.\(^3\)

Operation Babylift was responsible for airlifting 1794 Vietnamese and Cambodian orphans from South Vietnam and Thailand to their sponsors back in the United States.\(^4\)
Yom Kippur Middle East War

During a continuous thirty-day period MAC delivered 22,395 tons of munitions from the United States to Israel. The 6450 nautical mile airlift was accomplished with 567 C-141 and C-5 missions. To demonstrate the U.S. competitive edge versus the Soviet Union, over a forty-day period they were able to deliver just 15,000 tons of munitions over a distance of 1700 nautical miles on 935 airlift missions to their Arab clients.16

This was a watershed event in the demonstration of the military utility of strategic airlift. Because of America's ability to support the Israelis' in a superior manner, the war ended quickly on terms acceptable to the United States. Without the rapid response of strategic airlift, the war could have continued indefinitely, thus increasing the scope of involvement and perhaps escalating to a superpower confrontation.

Air Force Doctrinal Treatment of Airlift

Project Corona Harvest was initiated half way through the Vietnam War. The project was a systematic effort on the part of the Air Force to collect and diagnose data collected from the Vietnam War for the purpose of developing future Air Force doctrine.17 The lessons learned in Vietnam had a profound
impact on tactical airlift doctrine, as opposed to strategic airlift.

A Corona Harvest paper written in 1969 analyzed the role tactical airlift was playing in Vietnam. The conclusion was that there would be a continuation of the basic roles it had been playing. These were forward, lateral and rearward movements of ground combat units, high volume air resupply of mobile ground forces, routine distribution from strategic airheads or seaports, resupply to remote sites, logistics support of tactical air units and aeromedical evacuation.

Doctrinal statements of the final Corona Harvest report, published in January of 1973, verified that the Air Force appreciated the important role tactical airlift had played in Vietnam and could play in future conflicts. The new tactical airlift doctrine no longer emphasized parachute assault or the old mission of providing transoceanic transportation for ground and air strike forces. Instead, it emphasized the continuation of high altitude parachute drop methods and low altitude parachute extraction (LAFES). In addition, the report expressed the need to orient the reserve forces toward operational readiness. Statements of operational doctrine for employment of the C-130 and, in the future AMST, all reflected experience gained from Vietnam. All in all, "the formal expressions of doctrine ... all confirmed the Air Force remained committed to the tactical airlift concept."19

The Multi-Command Manual 3-4, published in 1974 defined
the mission of tactical airlift as follows: "the immediate and responsible air movement and delivery of combat troops and supplies directly into objective areas through air landing, extraction, airdrop, or other delivery techniques and the air logistical support of all theater forces."\textsuperscript{19}

The 1971 edition listed airlift as one of the basic operational tasks of aerospace forces. The list included counterair (offensive and defensive), close air support, air interdiction, air reconnaissance, airlift and strategic attack. \textsuperscript{21} Under the category describing tasks of aerospace forces, airlift was defined as: "the global mobility, responsiveness and versatility of strategic and tactical airlift forces permits rapid deployment of military forces to crises areas worldwide, and strategic and tactical airlift support of those forces once deployed.\textsuperscript{22}"

In the same edition, for the first time, the non-combat effects of aerospace forces were described as such: "Aerospace forces may be employed to influence the economic, psychological, political and social fabric of other nations and thus contribute to the attainment of national objectives. These objectives are well served by rendering assistance in the form of humanitarian missions, disaster assistance, search and rescue operations." The doctrine also states that "in times of crisis when armed conflict is threatened, national will and intentions may be communicated through increased alert, show of force, reserve mobilization options, force
deployment and reconnaissance flights."

Reflecting the combat experience gained in Vietnam, the individual strategic and tactical mission statements acknowledged that the two functions overlapped, since they could augment one another if need be. This realization would later be used as a major argument for the consolidation of all military airlift, both strategic and tactical, into a single command.

Strategic airlift was defined as follows: "Strategic airlift is the continuous or sustained air movements of units, personnel, and material in support of all DOD agencies; between area commands; between the CONUS and overseas areas; within an area command when directed. Strategic airlift resources possess a capability to airland or airdrop troops, supplies and equipment for augmentation of tactical airlift forces when required." The four specific tasks assigned to strategic airlift were as follows: (1) deployment and redeployment, (2) air logistics support, (3) aeromedical evacuation, and (4) augmentation of theater airlift [emphasis added]. Finally, it was specified that "the Air Force is assigned the responsibility and provided the resources to perform strategic airlift tasks."

Tactical airlift was defined as follows: "Tactical airlift is the immediate and responsive air movement and delivery of combat troops and supplies directly into objective areas through airlanding, extraction, airdrop, or other
delivery techniques, and the air logistic support of all theater forces, including those engaged in combat operations."
The specific tasks assigned to tactical airlift were as follows: "(1) deployment and redeployment, (2) air logistics support, (3) airlift employment operations, (4) aeromedical evacuation, and (5) augmentation of strategic airlift [emphasis added]." Finally, a distinct difference was noted between the organizations responsible for strategic as compared to tactical airlift: "Tactical airlift forces are assigned to and are under the control of the Air Force Component Commander of a Unified Command, Subordinate Unified Command or Joint Task Force."

Chapter 3, Aerospace Forces in Conventional Air Operations, described the airlift mission as essential. It stated: "The airlift mission in support of conventional military operations is characterized by requirements for rapid movement of large numbers of personnel and supplies from the CONUS to overseas areas; and between and within theaters of operation. In the forward area and combat zone, airlift increases the battlefield mobility of military forces by providing the means to rapidly mass friendly forces and to provide the means for sustained, selective, or emergency air delivery of personnel, supplies and equipment as far forward as necessary."

Concerning weapons acquisition, Air Force doctrine made it clear that conventional capabilities had to be continuously
improved with advancing technology. It stated: "Conventional weapon capabilities should not be considered as fixed or static. Since military capability is sensitive to new types of weapons and improved delivery system, efforts to upgrade conventional systems must proceed alongside comparable efforts in the field of nuclear warfare."\textsuperscript{27}

In 1975 an updated version of AFM 1-1 was published. In strict compliance with the strategic doctrine of realistic deterrence, this Air Force doctrine stated "although the rapid deployment capabilities of U.S. forces are substantial, the U.S. goal is to diminish the need for such deployments in the future by helping its allies build their own military capabilities against localized aggression."\textsuperscript{28} This served as an official acknowledgement on the part of the Air Force that it was going to deemphasize the strategic airlift force in the immediate future.

\textbf{Airlift Force Structure}

Because of the post-Vietnam cuts in the defense budget, the size of the active duty Air Force had to be scaled back. Various staff and special study groups analyzed the available evidence to project future tactical airlift requirements. The Air Staff recommended the acquisition of new aircraft in order to maintain a viable tactical airlift force. But officials from the Office of the Secretary of Defense either overruled
or scaled down most of the Air Staff recommendations.\textsuperscript{29}

Corona Harvest made recommendations concerning future weapons systems.\textsuperscript{30} The report called for the near-term development of two advanced tactical transport aircraft, one to replace the C-130 for larger requirements, and one to replace the C-123 and C-7 for feeder roles.

The C-130 replacement, referred to as the advanced medium STOL (short takeoff and landing) aircraft (AMST) was supposed to be a "low cost, medium payload, short field craft, powered by off-the-shelf engines."\textsuperscript{31} In 1972 two firms received contracts to construct and test their prototypes. Four years later the Boeing YC-14 and McDonnell Douglas YC-15 were flying test sorties at Edwards Air Force Base, in California.\textsuperscript{32}

The 1972 encounter with cheap, portable surface-to-air missiles in Vietnam gave credibility to the contention of the Commander in Chief of TAC (CINCTAC), General William Momyer, that either the C-130 or an AMST replacement would be too vulnerable to land forward of the division base in the next war.\textsuperscript{33} According to Bowers, "faced with budget cuts in the mid 1970s, the Air Force focused its priorities and powers of persuasion on behalf of the newer fighters and bombers, moving to assure the service's capabilities to perform its most basic missions."\textsuperscript{34} The rationale for the B-1 was that it was necessary to maintain a strong bomber deterrent force, in the face of an aging B-52 fleet. Additionally, production of a new advanced bomber could be used as leverage in the SALT
negotiations. Moreover, according to Jerome Kahan, "some studies suggest that the drive toward the B-1 and the lack of bomber alternatives might well have been influenced largely by the Air Force's bureaucratic desires to retain a manned bomber mission."

During the Nixon Administration, the C-5A was the only major acquisition of transport aircraft. The aircraft began to come on line in 1970 and was at its peak strength of 78 aircraft by 1974. Although this aircraft became operational during the Nixon era, it was a result of the McNamara era's initial funding for research and development. To its credit, the Nixon Administration made no effort to cancel its production in midstream. The C-130 tactical airlift fleet came under the control of MAC during the Nixon Administration. Even though the MAC inventory was strengthened nearly 50%, with 335 additional aircraft in 1974, this was due to reorganization rather than procurement. Although 335 C-130s may sound like a lot, it was not nearly enough to fulfill standing U.S. treaty commitments.

Airlift Organization

The long-standing division of U.S. strategic and tactical airlift resources among various, non-related commands had always made little sense and was a very controversial topic. In June of 1970 the Lindsay Committee made a unanimous
recommendation that "steps be taken to achieve a single airlift command as soon as possible." The primary rationale was to eliminate duplication of effort in control, aerial port and supply elements, specifically in the Southeast Asian theater. Major General Burl McLaughlin, Commander of the 834th, agreed and said the recommendation was "just great."

The idea for consolidation was put to a halt for the time being when CINCTAC strongly opposed the recommendation because he felt that removing the C-130 force from TAC would "diminish the tactical orientation of the force."

The 1976-1977 Cadet Handbook, "Contrails," listed MAC as a support command rather than a combat command. The combat commands were listed as Air Defense Command (ADCOM), Strategic Air Command (SAC), Tactical Air Command (TAC), U.S. Air Forces Europe (USAFE) and the Alaskan Air Command (AAC). MAC was listed with the support commands such as Air Force Logistics Command (AFLC), Air Force Systems Command (AFSC), Air Training Command (ATC), Air University (AU), Headquarters Command (HQ COMD USAF) and the U.S. Air Force Security Service (USAFSS). With a classification such as that, it is no wonder that CINCTAC felt the way he did.

The Corona Harvest report called for some organizational changes in airlift. The 1970 Lindsay and McLaughlin recommendations, calling for the establishment of "a single organization for airlift," were included in the final report. This recommendation lead to a sweeping reassessment
throughout the Air Staff in 1973. In the summer of 1974, Secretary of Defense Schlesinger directed "that the worldwide airlift mission, roles, resources and responsibilities be consolidated under the Military Airlift Command."\(^{43}\)

The Secretary’s decision had three major points of emphasis. First, it called upon the Air Force to consolidate the entire strategic (C-141, C-5) and tactical (C-130) airlift fleets into MAC, which would then be designated as a specified command, and report directly to the JCS. Second, all Navy and Marine Corps funds for airlift procurement were cancelled as of FY76. In addition, their entire airlift operation was to be phased out and taken over by MAC by the end of the 1977 Fiscal Year. Third, the Air Force was vested with the responsibility of providing airlift for the entire DOD, including the Navy and Marine Corps.\(^{44}\)

For the reader’s edification, according to the 1 December 1986 version of JCS PUB 2, entitled "Unified Action Armed Forces," the definition of a specified command is as follows: "A specified command is a command that has a broad continuing mission and that is established and so designated by the President through the Secretary of Defense with the advice and assistance of the Chairman, Joint Chiefs of Staff. It is normally composed of forces from but one Service."\(^{\text{45}}\)

On 1 December 1974 the Air Force directed the consolidation of TAC airlift resources with those of MAC. By 31 March 1975, the Air Force had complied with the first
stipulation by transferring its tactical airlift force to MAC. Besides TAC, these included airlift assets from Pacific Air Forces (PACAF), USAFE and AAC.\textsuperscript{49}

On 13 March 1975, the Secretary of the Air Force recommended that MAC be designated as a single manager operating agency, under his command, rather than becoming a specified command.\textsuperscript{49} He had three major reasons. First, the Air Force saw no advantage in having MAC becoming a specified command, since the consolidation of strategic and tactical airlift was done with minimal organizational changes. Second, making MAC a specified command would require extensive reorganization efforts, which would be additional work for the Joint Staff and cause additional command layering, which ultimately, would impede its responsiveness. Third, and most important, "since the Air Force did not consider the dominant mission of MAC to be combatant, the existing single manager concept appeared more consistent with past practice in the establishment of unified and specified commands.\textsuperscript{49}"

Every individual Service Chief for the Army, Navy, Air Force and Marines, agreed with the Secretary of the Air Force. However, the Chairman disagreed and recommended that MAC be designated as a specified command.\textsuperscript{49} He had four strong reasons. First, MAC would become more of a factor in planning for combat operations now that they had sole responsibility for DOD airlift. Therefore, he felt it was important that CINCMAC receive his directives from the JCS. Second, making
MAC a specified command would increase the stature of CINCMAC in relation to the other CINCs, since this would serve as an official acknowledgement that airlift was a combat mission. It would also further the unification principle. Third, designating MAC as a specified command would be a "logical and progressive action which would strengthen the unified command structure and enhance the management of airlift forces in support of the combatant forces of the United States." Fourth, he felt that in wartime airlift would be confronted with competing demands from not only different U.S. commands, but also with allied requests. These allocation decisions would be the responsibility of the JCS, and could "best be accomplished under a command arrangement with CINCMAC reporting directly to the JCS along with other unified and specified commanders."  

9 June 1976 Deputy Secretary of Defense Clements directed the JCS to make the necessary preparations to make MAC a specified command. These preparations included making an amendment to the United Command Plan, an implementation plan, and a message to notify Congress of the intended action.

Two main issues needed to be resolved before this directive was implemented. First, was whether or not making MAC a specified command would be an improvement. Deputy Secretary Clements, with concurring recommendations from the Chairman of the JCS and the Offices of the Secretary of Defense for P&E and I&L, agreed on 6 April 1976 that it would be an improvement. The second issue was whether or not MAC
qualified as a specified combatant command under the provisions set by the 1947 National Security Act. Specifically, the Department of the Navy and the OSD General Counsel questioned the legality of making MAC a specified command since the National Security Act had ruled that specified commands only be made for military missions, and prevented a specified command solely for training, logistical, and administrative functions. Therefore, the legal question concerned the definition of the MAC mission. In peacetime, there was no question that MAC's functions were more logistical than combatant. But, in wartime or times of crisis, when a specified command is activated, airlift would become an integral part of both the strategic and tactical combat forces. The Deputy Secretary testified that "the 1973 Israeli airlift operation or even the Berlin airlift operation are examples of airlift doing a logistical mission, that is clearly a military operation in support of national goals; and as such is well within the intent of Congress in passing the National Security Act."

Therefore, the mission statement for MAC as a specified command was written so as to differentiate the wartime/crisis mission from the peacetime logistical mission. The mission statement was as follows: "To accomplish military airlift missions during wartime, periods of crisis, JCS exercises and as necessary to insure operational support to other unified and specified commands. The service logistic functions of MAC
remain under the Secretary of the Air Force. With that mission statement, both the Navy and OSD General Counsel agreed with the legality of establishing MAC as a specified command.

1 February 1977 DOD designated MAC as a specified command. The Commander of MAC was given the title Commander in Chief and during times of crisis or war, he was made directly responsible to the JCS Chairman.

Summary

The Nixon-Ford era was dominated primarily with the Vietnam War, particularly during Nixon's first term. Since most of the defense dollars were devoted to the war effort, there was no money in the pipeline for the development of new airlift aircraft. By the time the war had ended, the mood of the country was such that defense funding had to be cut. The administration began to stress reliance upon the allies to defend their own borders with indigenous conventional forces, which would ultimately be under the protection of the U.S. nuclear umbrella. Translated into strategic doctrine, this meant there was not as much of a perceived need to be able to deploy a large number of U.S. conventional forces rapidly, should an invasion occur. The repercussions for the airlift force structure was that it was to remain static.

The 1975 edition of AFM 1-1 described the strategic triad
as the "highest national defense priority." In addition, reflecting U.S. reduction of commitments and reduced defense spending in the post Vietnam era, this manual introduced the new DOD Total Force Policy, which included the active duty, reserve and allied forces. From now on, DOD war planning and force structuring was going to take all of these elements into account in a combined doctrine, rather than relying totally on the active duty forces. With the increased burden of conventional defense shifted to the indigenous forces of the allies, there was no more justification for a massive strategic airlift fleet. One increased role for airlift was to conduct peacetime humanitarian missions as a way to enhance the American worldwide image in the aftermath of Vietnam.

Although there were no funds to bolster the airlift force structure, there were several organizational changes which strengthened military airlift. In 1975 all the airlift assets throughout the Department of Defense, with the exclusion of certain naval support aircraft, were consolidated under MAC. This meant that all the C-130 tactical airlifters from TAC, USAFE, PACAF and AAC were added to the MAC inventory. In just one year, the MAC inventory grew from 709 to 1,044 aircraft. Furthermore, as part of the same initiative, MAC was designated as a specified combatant command in 1977. This meant that in time of war or crisis, CINCMAC reported directly to the National Command Authorities to provide DOD airlift requirements according to their priorities. This was the first
time in its history that airlift had been recognized as a combat mission. Up to this time, it had always been designated as a combat support mission.
NOTES


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7Ibid., p. 156.

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11Ibid.


13Ibid., p. 10.

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17Bowers, p. 649.

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7 Ibid.


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10 Ibid., p. 650.

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16 Burkard, p. 100.

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CHAPTER VI

1977 - 1980

Introduction

The Carter Doctrine prompted the beginning of a second revival for airlift. Air Force doctrine placed increased emphasis on rapid deployment, officially acknowledging its airlift responsibility to the newly formed Rapid Deployment Joint Task Force. This new responsibility revealed the shortcomings of the United States airlift force structure and provided an impetus for the modification to stretch and add an air refueling receptacle to the existing C-141 fleet. Exercise Nifty Nugget exposed the organizational problems which had been lying dormant in MAC. The Joint Deployment Agency (JDA) was established as part of an effort to deal with these problems.

U.S. Strategic Doctrine

When Jimmy Carter entered office in January 1977 the
country wanted "no more Vietnams." The failure in Vietnam had lead to a doubt about the utility of armed force in international relations. Although the President had promised to decrease defense spending, the fact of the matter was that by the time he entered office the military imbalance prompted him to increase defense expenditures. Discarding Vietnam, throughout the Nixon era, the level of defense spending had decreased each year, although President Ford reversed the trend during the last few years of the Republican Administration. During this entire time span, the Soviets had steadily increased their annual defense expenditures.

Presidential Decision 18 (PD-18) articulated the Carter Administration's strategic doctrine in the summer of 1977. As before, the triad's role of strategic nuclear deterrence was given overriding priority. In addition, this new strategic doctrine endorsed the 1 1/2 war strategy, which would enable the United States to fight a major war in Europe and a minor conflict elsewhere. Moreover, to deal with minor conflicts, the President called for the creation of a rapid deployment force, able to deploy a variety of forces worldwide on short notice. The inability of the airlift fleet to live up to its rapid deployment commitments later provided the impetus to modernize and expand the airlift force structure.

In a separate announcement made shortly after PD-18, President Carter cancelled production of the B-1 bomber. His justification was that the weapon system was too expensive and
that cruise missiles could do the same job for less money. Furthermore, it was not known how long the B-1 would be able to penetrate Soviet radar defenses. To demonstrate his commitment to the manned bomber mission, the President announced that emerging "stealth" technology would be developed for future application on a bomber more advanced than the B-1.

Of particular concern to the Carter Administration was the decline in the balance of forces in the European theater, which had been allowed to stagnate throughout the Vietnam War. The buildup of the Warsaw Pact had shrunk the NATO warning time in the event of an invasion, and threatened the defense of the southern flank, which was grossly outnumbered by Soviet forces. A NATO Long Term Defense Program was established to rectify the problem. Collectively, the NATO members agreed to a 3% increase in defense spending to improve their readiness, air defense, electronic warfare, and reinforcement. For its part, the United States agreed to take steps to reduce its response time, should a conflict erupt in Europe. A reduction in response time required an improvement in airlift.*

After ousting the Shah, Iranian revolutionaries took 44 American Embassy members hostage in the fall of 1979. In December of the same year, the Soviets invaded Afghanistan. In response to these events, President Carter announced that "the Soviet effort to dominate Afghanistan has brought Soviet military forces to within 300 miles of the Indian Ocean and
close to the straits of Hormuz, a waterway through which most
of the world’s oil must flow. The Soviet Union is now
attempting to consolidate a strategic position, therefore,
that poses a grave threat to free movement of Middle East oil.
Let our position be absolutely clear: An attempt by any
outside force to gain control of the Persian Gulf will be
regarded as an assault on the vital interests of the United
States of America, and such an assault will be repelled by any
means necessary, including military force."

Faced with regional instability in Southwest Asia and
with no capability to shape events, the President pressed for
the United States to develop a rapid deployment force.
Although he had called for such a force two and a half years
earlier, due to military bureaucratic intransigence, no steps
had been taken to follow through. Now that the U.S. faced a
potential crisis, the Rapid Deployment Joint Task Force
(RDJTF) was established in March of 1980, as a subordinate
command of the United States Readiness Command with a mission
to deploy joint forces worldwide. RDJTF had no standing
forces assigned, but various forces were listed as possible
components should a crisis erupt. The intention was that
actual force composition would be determined on a case by case
basis.
Evolution of Military Airlift

Nifty Nugget

Nifty Nugget, a paper exercise designed to test the U.S. deployment capabilities, was conducted in the fall of 1978. The scenario for the exercise was a surprise Warsaw Pact attack on the NATO forces. The exercise went on for over a month, with daily meetings of participants. Among other things, the exercise demonstrated the gross inadequacies in U.S. airlift resources and management. A lack of coordination and a shortage in airlift assets resulted in the JCS over committing 300% of the airlift fleet because they had approved each CINC’s transportation request. This airlift shortage continued even after MAC was augmented by its reserve forces and by commercial airliners activated from the Civil Reserve Air Fleet (CRAF). Besides the airlift shortfall, there were not enough spare engines and other critical parts needed to maintain the MAC fleet at such a high utilization rate. Not only that, but there were vast shortages of aircraft loading equipment. Besides the resource shortage, the exercise exposed a greater managerial need to coordinate among each of the three service’s transportation operating agencies (TOAs), the Military Airlift Command, the Military Sealift Command (MSC) and the Military Traffic Management Command (MTMC). This coordination was paramount because the MTMC schedule for the
movement of forces and supplies to aerial and sea ports had to match the MAC and MSC schedules for airlift and sealift departures.\textsuperscript{10}

In response to the failure of Nifty Nugget, the JCS established the Joint Deployment Agency (JDA) in 1979, under the command of USCINCREDO, with the express purpose of "coordinating war planning between the services and maintaining a data base of all the available equipment for a joint deployment."\textsuperscript{11} Army General Frederick Mahaffey, Commander in Chief of the U.S. Readiness Command (USCINCREDO) and Director of JDA, testified before the Senate Committee on Armed Services for FY87 appropriations. In his testimony, the General outlined the following mission responsibilities for USREDCOM: "(1) Provide combat-ready conventional forces as a strategic reserve for rapid reinforcement of other unified and specified commands worldwide. (2) Provide for the development of joint tactics, techniques, and procedures (JTTP) for the joint employment of forces assigned. (3) Provide for the joint training of forces assigned. (4) Provide contingency planning, a joint task force headquarters (JTF HQ), and forces for contingency operations worldwide; and (5) Provide contingency planning and forces to assist civil authorities in protecting key assets, facilities, and functions within the continental United States (CONUS) that are essential to mobilize, deploy, and sustain U.S. military forces."\textsuperscript{12}

The JDA official mission statement, as extracted from a
JCS memorandum entitled "Terms of Reference for the Joint Deployment Agency," (SM-735-81) is as follows: "The JDA supports the Joint Chiefs of Staff and supported commanders in planning for and executing deployments. As directed by the Joint Chiefs of Staff, the JDA is responsible for coordination of deployment planning and execution in accordance with these guidelines and will act as the focal point for deployment associated decision making information. Deployment planning and execution entail the use of authorized systems and measures for planning, coordinating, and monitoring deployments, redeployments and movements of mobilized forces and material necessary to meet military objectives." In his concluding remarks, General Mahaffey articulated the relationship between these two organizations as follows: "In support of our strategy of forward defense, USREDCOM’s over-arching mission requirement is to maintain and be prepared to provide, on short notice, combat-ready conventional forces for rapid reinforcement of the other unified and specified commands worldwide. The JDA’s role in providing a single focal point for deployment planning, coordination, and execution is essential to the successful accomplishment of the USREDCOM mission. Our worldwide responsibilities to provide and deploy the CONUS based central reserve, coupled with our mission to develop joint tactics, techniques, and procedures to ensure interoperability of our forces in joint operations, are in the broadest sense, also crucial to the nation’s overall strategic
deterrent and warfighting capabilities."14

While serving as USCIN.CRED, Army General Volney Warner, gave his assessment of the USREDCOM, JDA, and RDJTF abilities to conduct their airlift missions at a hearing before the House Appropriations Subcommittee on Defense, held on 6 March 1980.15 Analysis indicated that one airborne or air assault brigade could be airlifted to the Persian Gulf within four to five days. An airborne division would take approximately twelve to fifteen days. He estimated that land based aircraft could reach the area in a matter of hours and within three days an entire combat wing could be deployed.

In his testimony, the General addressed the current status of military airlift capabilities. He testified that the "ongoing initiatives (KC-10, C-141 stretch, C-5 service life extension) to improve deployment capabilities are welcomed and will further enhance our airlift capability." But, he warned that "our contingency responses will remain constrained by limited strategic airlift ... assets." Making a sales pitch for the CX, the General argued that the United States was lacking a "strategically deployable, tactically employable outsize cargo aircraft such as the CX." As proof, he pointed out that the C-141 could only operate into 43% of the Middle East airfields, whereas the CX would be able to operate into 70% of the airfields with the same cargo capacity as a C-141. Besides the limited airfield use, because of the Army and Marine Corps acquisition of heavier battle equipment, he
projected that the "requirement for airlift of outsize equipment will grow during the next decade." The crux of the matter was that "the ability to rapidly reposition outsize equipment to forward areas within a theater to maintain the initiative or tactical advantage is not normally available with the C-141 or C-5 aircraft." \(^{14}\)

After addressing the inadequacies of the current airlift force, the General listed his criteria to enable the CX to "meet the requirements of the airlift users:" (1) Be able to airland outsize cargo directly into the area of battle operations. (2) Air refuelable. (3) Airdrop capable. (4) All weather and night capable. \(^{17}\)

The airlift shortfall experienced by Nifty Nugget provided an impetus to enhance the force structure. The Department of Transportation allocated more 747 airframes to the CRAF fleet. Congress appropriated funds to modify some of these airliners to enable them to transport heavy cargo as well as passengers. The Department of Defense requested that Congress make appropriations to develop a new outsize airlifter, designated as the CX. The existing airlift was also to be upgraded. The C-141 was to get a fuselage stretch to increase its cargo capacity by 33%, and was also to be modified with an air refueling receptacle to increase its effective range. The C-5 fleet was to undergo a wing modification to extend its service life from 8,000 to 30,000 hours. Procurement of the KC-10 tanker/cargo aircraft was also
accelerated. In addition, the budget request included spare aircraft parts and material handling equipment to optimize maximum utilization of the airlift fleet.18

A post-evaluation study conducted by OSD determined most of the smaller deficiencies could be handled by DOD through administrative action and a reallocation of budgeted resources. OSD determined that the big problems would need the backing of the "administration, Congress, and ultimately the public at large because new Executive Branch authorities and additional resources may well be needed." The major problem confronting OSD was that "historically, the American public and the Congress have not fully appreciated the implications of mobilization."19

Air Force Doctrinal Treatment of Airlift

The 1979 edition of Air Force Manual 1-1 placed a greater emphasis on airlift than had ever been done in the past. The primary operational Air Force missions were classified as either strategic, mobility or tactical.60 This was a far cry from the 1950s, when airlift was not even acknowledged as being an Air Force function and the three major operations were heartland, periphery and defense. Airlift was now formally recognized as having the same stature as bombers and fighters. No longer a support service, it was officially recognized as a combat command. In fact, to emphasize this, a
quote from General Hap Arnold was inserted in the airlift section which says "we have learned and must not forget that, from now on, air transport is an essential of airpower, in fact, of all national power."\(^1\)

The airlift mission statement was as follows: "Through our strategic and tactical military airlift, we can deploy our forces to any part of the world and support them there. Airlift embodies a key facet of a fundamental Air Force capability: rapid, long-range mobility. Airlift can be used to support joint and combined operations, as well as military assistance and civilian relief programs. Our ability to resupply allies in a timely manner builds confidence and stability. We must be able to insert our forces directly into a combat area and then resupply them. This capability can also be used for evacuation. The airlift force, which is made up of both military and civil contract aircraft, performs four primary tasks: (1) Employment operations. (2) Strategic and tactical deployment of combat forces and equipment. (3) Logistics support. (4) Aeromedical evacuation."\(^2\)

**Airlift Force Structure**

General William Moore, while serving as CINCMAC, testified before the House Armed Services Committee in September of 1977.\(^3\) In his testimony, he pointed out that the Soviet military spanned "the spectrum of war" and with the
nuclear balance at "rough equivalence" the ability of U.S. conventional forces had become critical. Concerning MAC's role, he stated that "readiness to respond immediately and adequately to a confrontation with Warsaw Pact forces imposes stringent training, planning, and capability improvement demands on the Military Airlift Command." He stressed that conventional deterrence in Europe rested on the ability to rapidly reinforce the NATO alliance. He described conventional deterrence as such: "ideally, to reinforce quickly to a degree that will cause the Soviets to perceive a strong probability that an attack on NATO will not succeed." Ultimately, he stated "if our capability to reinforce is inadequate to deter, then reinforcements must be timely enough to prevent an overrun of Western Europe." Pointing out the situation on the European Continent, the General emphasized that the Warsaw Pact was poised to launch a surprise attack with forces that had NATO "outgunned and outmanned." In this situation U.S. forces would be compelled to fight with what they have and with the reinforcements that MAC could provide. Ultimately, the General predicted that "the airlift capability of the United States could influence the outcome decisively."

At the same hearings, Brigadier General Charles Irions testified on the results of a JCS airlift study, which stressed three major programs: modification of the C-5 wing, stretch the C-141 fleet and boosting the CRAF capabilities.

Structural deficiencies with the C-5 wing became evident
in 1969. In 1972 an Independent Structural Review Team concluded the wing would be unable to fulfill its 30,000 hour projected service life. On 24 December 1975 a contract was signed to modify the wing so that it could fulfill its 30,000 hour lifetime projection. The last airplane was just recently completed in 1987.

According to General Moore, a study had shown that the C-141 was limited by its cargo carrying capacity and not its gross weight. As a result, the study recommended that the C-141 be stretched to realize its potential. The first prototype had its fuselage plugs installed on 8 January 1977. Flight testing began on 25 March 1977. The Air Force pushed for, and got an agreement which stretched the fleet by 1982. In addition to the plugs, the Air Force had an air refueling receptacle installed on the aircraft to extend its effective range.

These programs were designed to minimize the overlap between C-141 and C-5 conversions, thus minimizing the total number of strategic airlifters out of commission at any given time. In addition to these modifications, the surge capabilities for both of these weapon systems was improved by stocking more spare parts in the European Theater. The General described the surge period as "the critical days of a NATO war."

The Carter Doctrine suffered from one serious deficiency. The United States did not have the military capability to
fulfill this new commitment.27 The closest base was over 2000 miles away on the island of Diego Garcia in the middle of the Indian Ocean. The prevalent anti-American mood throughout the Middle East region made the possibility of stationing troops in the region virtually impossible. The fact of the matter was that the majority of troops sent to defend the region would have to be airlifted over 10,000 miles from the United States. The overriding problem was that the U.S. did not have the requisite airlift forces necessary to execute a rapid deployment. The existing airlift capability would be over utilized just trying to take care of its European commitments, even though over 300,000 troops were already stationed there and equipment and supplies for many more were pre-positioned. The Persian Gulf suffered from a massive transportation shortfall. It was estimated at the time that it would take thirty days to deploy one lightly armed Army Division and its supplies to the Persian Gulf region. In addition, three Marine Amphibious Brigades were capable of reaching the Gulf without airlift. Under any circumstances, it would be impossible to transport a heavily armored division to the region during the early stage of the conflict. The estimated deployment time for a large, heavily equipped force, was months. By that time the war could be over.28

The reason for this drastic shortfall was that airlift had been neglected throughout the decade of the 1970s.29 The one airlift system that had been produced in the early 1970s,
the C-5, had problems with a $2 billion cost overrun. Moreover, its wings were weak and subject to metal fatigue, which restricted the aircraft’s gross weight. This being the case, production was cut from a planned 120 to just 80 aircraft. The one program that had been initiated in the 1970s, the AMST, was cancelled by the Carter Administration in January of 1978, at the recommendation of OMB. Because of this neglect during the 1970s, it now appeared the United States would be committed to spending over $15 billion in the 1980s, and still be short of the minimum deployment requirements. Even with the realization of the transportation shortfall, little assistance was provided in 1980. Just $1 billion out of a $200 billion defense budget went toward airlift and sealift improvements combined.30

According to Richard Stubbing, airlift "has long been under-emphasized in the U.S. military. The vital interest in the Persian Gulf only exacerbated the problem." His explanation is that "airlift is provided by the Air Force in support of the Army. These services assign top priority to forces and programs which support their own combat missions (bombers and fighters) rather than spend money on what they view as secondary missions to support the Army."31 Stubbing hypothesizes that one of the reasons the Air Force accepted the airlift mission was to increase the service’s prestige and budget allocations to justify a greater number of aircraft in its inventory.
DOD had its hands full. It had to ascertain precisely what its new transportation requirements were. New airplanes had to be designed, budgeted and purchased. In addition, new logistical arrangements had to be developed.

In March of 1980 President Carter approved a list of things to improve U.S. mobility capabilities. He formed the Rapid Deployment Joint Task Force; stated his intention to buy a new CX strategic airlifter; committed to purchase eight new sealift ships; and established a six ship flotilla, anchored at Diego Garcia, loaded with thirty days worth of supplies and equipment for a Marine Brigade. In the event of an emergency, the Marines would be airlifted in, matched up with their equipment, and sent off to fight.

These steps the President took only spelled the beginning. The design specifications still had to be worked out for a new airlifter. A price still needed to be negotiated for the eight sealift ships. Logistics for the pre-positioned amphibious equipment had to be solved. Perhaps most important, the required mix of airlifters versus sealift ships versus pre-positioned equipment had to be determined. Of all these requirements, only the amphibious pre-positioning was accomplished during his Administration.

After the shock of Afghanistan had worn off, the airlift problem was no longer an immediate concern of the Carter Administration. The specific implementation decisions were given to the military bureaucracy to deal with. As a result,
the outcome would be determined by "the military service interests, the defense contracting environment, and all the other peculiarities of the defense budget process." According to Stubbing, the airlift enhancement program "suffered from the start as a result of the low priority it received in the Air Force."\footnote{35}

Congress cut all funds for CX development in the spring of 1980. Their reason given, and DOD agreed, was that the "Air Force had done less than an adequate job at justifying CX."\footnote{36} A McDonnell Douglas representative, whose company had drawn up a prototype, was quoted as saying "basically, DOD has been sitting on its hands as far as CX is concerned."\footnote{37} The Air Force Congressional Liaison Office admitted that the Douglas representative was correct, and said "to tell the truth, we've gone over there [Congress] a few times and seen a couple of members, but that's about it. We really haven't been overselling, as we sometimes do."\footnote{38}

**Airlift Organization**

General Moore testified at the 1977 House Armed Services Committee hearings on the recent designation of MAC as a specified command. He stated that specified command status "means that we have a dual reporting structure: During wartime or conditions that approximate war, strategic guidance comes from the National Command Authority and the JCS. During
peacetime, our lines of direction for airlift service come through the Secretary of the Air Force. This arrangement streamlines the wartime chain of command, makes MAC directly responsive to the authority that decides airlift priorities, and gives MAC a seat at high level conferences that plan and coordinate activities in which MAC is a participant."

Summary

President Carter was confronted with a military force which was on the decline due to the fact the Vietnam War had used up so many resources and there was not enough money to provide for an aggressive modernization program. In the immediate postwar years, military spending was cut back quite a bit, which also killed any extensive modernization efforts, especially in the airlift community. The AMST program was cancelled by President Carter after two prototypes to replace the C-130 had been built and flown.

While U.S. defense spending had been on the decline, the Soviet Union had undergone a massive military buildup throughout the decade. To counteract this trend, President Carter, though professed to being against excessive military spending, sought a 3% defense spending increase.

During the second half of President Carter's term, the Shah was expelled from Iran and not too long thereafter the Soviets invaded Afghanistan. These two incidents combined with
the fact that many free nations depend on Persian Gulf oil for their energy needs prompted the President to declare this region strategically vital to the interests of the United States, to be defended by the use of force if necessary.

In order to back up his new Persian Gulf doctrine, the President ordered the establishment of the Rapid Deployment Joint Task Force, which would be able to fight in any major trouble spot on short notice. Creation of such a force was necessary because it was not politically feasible to secure military basing rights in this region of the world. With the declaration of this new policy, it soon became apparent that the United States did not have the requisite airlift forces to carry out such a bold plan.

This realization prompted the administration to expand U.S. airlift capabilities. Some quick fix measures included the decision to stretch the C-141 fleet by 23 feet, thus increasing its cargo capacity by 30%. Moreover, the addition of an air refueling receptacle gave it virtually unlimited range. The C-5 fleet was also to be strengthened and its service life increased by some 22,000 hours with a wing modification. Funding was also requested for the development of a design concept for a follow on strategic airlifter, designated the CX, to augment and eventually replace the C-141 fleet.

The 1979 version of AFM 1-1 reduced the primary operational tasks of the Air Force to just three: strategic,
mobility and tactical. There was definitely a greater emphasis on the mobility mission and the ability to "deploy our forces and the forces of friendly nations," which fit in well with President Carter's newly established doctrine to defend the Persian Gulf. Once the forces were deployed, the Air Force was also responsible for "resupplying deployed forces in a timely manner." To support his new Rapid Deployment Joint Task Force, the Air Force was now vested with the responsibility of "conducting operations anywhere in the world to protect international lines of communication, and trade routes." Finally, in its peacetime role or during times of increased international tension, the Air Force was tasked with the role of conveying our national resolve, by "showing the flag," a traditional airlift mission. This edition of AFM 1-1 definitely emphasized airlift functions more so than any prior edition, thus foretelling the renewed emphasis on strategic airlift in the decade of the 1980s.
NOTES


2Ibid., p. 137.

3Ibid., p. 139.


7Reichart and Sturm, p. 140.


10Ibid., p. 18.

11Russell, p. 40.


14Senate Hearings on FY87 DOD Appropriations, p. 561.
House Statement of General Warner on REDCOM, p. 4.

Ibid., p. 5.

Ibid., p. 6.

OSD Report on Nifty Nugget, p. 18.

Ibid., p. 22.


Ibid., p. 2-11.

Ibid.


Ibid.

Ibid., p. 20.

Ibid., p. 22.


Ibid., p. 33.

Ibid., p. 32.

Ibid., p. 31.

Ibid., p. 32.

Ibid.

Ibid., p. 33.

Ibid.

Ibid., p. 34.

Ibid.
House Hearings on Posture of Military Airlift, p. 7.
CHAPTER VII

1981 - 1987

Introduction

President Reagan came into office with a campaign promise to bolster U.S. defense spending in the face of an unprecedented Soviet arms buildup. His premise was that the only way to get the Soviets to agree to arms reductions was to bargain with them from a position of strength, since that was the only thing the Soviets would respect.

Reaffirming the Carter Doctrine to defend the Persian Gulf, the President set out to rebuild the airlift fleet. Since his inauguration, the entire C-141 fleet has been stretched, the entire C-5A fleet has had its wings strengthened, and at the present time 50 new C-5Bs and 44 new KC-10s are being produced. In addition, a C-17 prototype is being produced by McDonnell Douglas and if all goes as planned, the first C-17 squadron will become operational in 1992.

Airlift organizational shortcomings became apparent in
the Grenada Urgent Fury rescue operation. Although the Joint Deployment Agency had been established for missions just like this, it was found to be ineffective and was actually cut out of the decision making process. The problem was that it was designed to coordinate all DOD transportation assets, yet it was not given any power to either collect needed data from the constituent services and even if it got the data it needed, it could not enforce any decisions it made. As a result, a new unified combatant command, the United States Transportation Command (USTRANSCOM) was established. USTRANSCOM, commanded by CINCMAC, will have command authority over all the DOD transportation assets so that its decisions will be implemented. The fact that USTRANSCOM is collocated with MAC at Scott Air Force Base and is commanded by CINCMAC, is official acknowledgement of the strategic importance of military airlift in the modern defense establishment.

U.S. Strategic Doctrine

As soon as Ronald Reagan took office in 1981 he instituted what will amount to more than a one trillion dollar defense program. His program includes the Trident submarine program, the cruise missile, the Pershing II IRBM, the MX ICBM, the B-1 and stealth bombers and the strategic defense initiative.¹

Justification for the massive defense buildup has been
based on four major arguments. First and foremost, was the argument that the Soviets had surpassed the U.S. in strategic nuclear weapons. The administration claimed that America was in a "window of vulnerability," whereby the Soviets could launch a small fraction of their ICBMs to totally annihilate the U.S. missiles. Therefore, it was imperative that the U.S. moved rapidly to bolster its strategic strength or "suffer the political and security costs of inferiority." Second, was the argument that this strategic inferiority threatened not only U.S. strategic interests but world peace as well. Third, to quell the fears of those who feared an arms race, it was argued that the arms race by itself was not dangerous, but the outcome of the arms race was. The fourth and final argument was that the U.S. strategic buildup would most likely not lead to an arms race. On the contrary, it would provide an impetus for an arms control agreement. The rationale was that a U.S. strategic arms buildup would "encourage Soviet concessions in arms control talks and induce them to limit the augmentation of their own arsenal." On the other hand, if America did not proceed with a strategic buildup, the Soviets would neither agree to a balanced arms control agreement nor stop their own continued buildup.²

The Reagan defense budget called for an 8.1% annual increase from 1981 until 1987, for a total net increase of 59%. This equated to a rise from 5.6% of the GNP in 1981 to 7.4% of the GNP in 1987.³
The closest articulation of the Reagan defense policy came in a speech delivered by Secretary of Defense Caspar Weinberger to the National Defense University in July of 1981. In this speech, he defined U.S. military strategy for the decade of the 1980s. First of all, he stated that the national strategy was to protect the basic national interests such as "sovereignty, global power, and to defend and support a stable, peaceful international system." Specifically, the military component of strategy was to "protect the national interest by recognizing and countering threats."

Taking Soviet capabilities into account, the Secretary defined U.S. national security objectives as follows: "(1) Prevent coercion of the United States, its allies and friends. (2) Protect United States interests and citizens abroad. (3) Maintain access to critical resources around the globe, including petroleum. (4) Oppose Soviet global expansion and political control, military presence, especially those which threaten the American geostrategic position. (5) Encourage long term political and military changes within the Soviet empire to facilitate building a more peaceful and secure world order."
Evolution of Military Airlift

Grenada Operation Urgent Fury

Admiral Wesley McDonald, Commander in Chief of the U.S. Atlantic Command (USCINCLANT), testified before the Senate Armed Services Committee on 3 November 1983 and gave the following explanation for the U.S. involvement in Grenada:

"We went into Grenada having planned to protect and/or evacuate American citizens, to provide stability for the area, and at the invitation of the Organization of Eastern Caribbean States, to help establish a government which would be more democratic in nature than the existing government which had taken over rather rigorously and had placed the country into complete isolation for a period of four days."

The Senate Armed Services Committee Staff Study entitled "Defense Organization: The Need For Change," made some observations about "serious problems in the ability of the services to operate jointly." According to the report, the forces involved came under the command of a Joint Task Force headed by Admiral Joseph Metcalf, who was the Commander of the Second Fleet. One Army general officer and two majors were assigned to his staff as an emergency measure during the exercise. A matter which caused some problems was the lack of a unified commander on the island. In addition, many of the airlift aircraft remained under control of MAC."
Point Salinas, the main airfield in Grenada, had a parking ramp large enough to accommodate only one C-130. Since the ramp was too small to accommodate C-141s, they had to be flown in one at a time and off-loaded on the runway. As General Duane Cassidy pointed out, Point Salinas "is typical of airfields in many regions of the world; there are few airfields with parking ramps large enough to accommodate a heavy flow of large, limited maneuverability transports." Once the airstrip was secured at Point Salinas, there was a huge backup in the air because of the absence of a parking ramp. The airlift flow was a mess. Many aircraft spent more time in holding overhead the island than they did in transit. Sometimes after holding, they had to divert to Puerto Rico to refuel. One commander remarked that "aircraft were stacked up to the ionosphere" and added that "lift operations might have been aborted had the enemy had longer range anti-aircraft capability."

Dormant organizational problems surfaced during the Grenada operation. A MAC liaison assigned to the Task Force Commander handled all requests for supplies and access to the island. Regardless of the pecking order he established, units located in Grenada and the United States tried to get direct flights to the island, overstepping his authority. According to the report, "the conflicting systems kept a lot of people in the air and probably delayed the arrival of needed equipment."
The Joint Deployment Agency, which had been established for situations just like this, was totally excluded. According to official reports, this was because the agency had inadequate communications equipment needed to process classified communications. At the time of this Senate report, DOD reported that all these shortcomings had been alleviated. The Senate report stated "it is distressing that a joint organization established to coordinate operations like Grenada was not employed. It is also clear that whatever the JDA had been doing for four years, it had not solved the fundamental problems of the inability of the services to work together jointly." Former USCINCRE, Retired Army General Warner remarked "the JDA's major purpose in life is planning that kind of situation. To rule them out is unconscionable."

In response to a question on this topic, General Mahaffey, USCINCRE and Director of JDA, replied that the computerized Joint Deployment System (JDS) was not yet operational and that "the role of the Readiness Command in Grenada was peripheral in the sense that the principal planning responsibility for the Grenada operation devolved upon the Atlantic Command." He did make the point that the Army forces assigned to the operation came from forces assigned to USPACOM.

Logistics problems abounded. The forces which levied the first assault, the Marines, Rangers and 82nd Airborne, landed with what they could carry on their planes. The 82nd Airborne
Division deployed with just their backpacks. There was no room on the transport aircraft to deploy their vehicles. Their radios were installed on their vehicles, which now meant they had no communications gear. In addition, they could not bring a teletype machine to relay intelligence findings and they also were without their TOW anti-armor missiles. This all happened because these items had been given low priority on the aircraft loading lists, due to the lack of planning caused by the hurried pace of events.

The after-action report concluded that "Urgent Fury revealed many shortcomings in the logistical support for the rapid deployment of joint forces." Vice Admiral William Cowhill, JCS Director of Logistics during the operation noted "you've got to get the logistics in early. You get different forces from different services and it causes overlaps and shortages. Unless you get the staffs together early, you can't do the proper coordinating."

Granted, the Grenada operation was a resounding success. MAC managed to fly 750 sorties in the first twelve days of the conflict, airlifting 3,800 tons of equipment and supplies and transporting over 18,000 U.S. soldiers and citizens. But, some of the glaring problems which were apparent began to make policy makers ask important questions. For example: "What would happen if a large number of U.S. troops had to be deployed? If the United States had to reinforce the European front or send Central Command forces to the Persian Gulf, for
example, would deployment machinery function as intended? Or would grit in the gears bring things to a screeching halt?"

Air Force Doctrinal Treatment of Airlift

The current Air Force Doctrine, published on 16 March 1984, also lists airlift as a distinct Air Force mission. But this issue goes further than any in the past by making a distinction between the airlift combat mission and the airlift combat support mission. The airlift mission is quoted as follows: "Airlift objectives are to deploy, employ, and sustain military forces through the medium of aerospace. The airlift mission is performed under varying conditions, ranging from peace to war. As a combat mission [emphasis added], airlift projects power through airdrop, extraction, and airlanding of ground forces and supplies into combat. Through mobility operations, the joint or combined force commander can maneuver fighting forces to exploit an enemy's weaknesses. As a combat support mission [emphasis added], airlift provides logistics support through the transportation of personnel and equipment. In peacetime, airlift provides the opportunity to enhance national objectives by providing military assistance and civilian relief programs. Airlift, therefore, accomplishes the timely movement, delivery, and recovery of personnel, equipment, and supplies, furthering military and national goals. Airlift may be performed from a strategic or tactical
perspective. Strategic (intertheater) airlift transcends the boundary of any one theater and is executed under the central direction of higher authority, normally in support of a more pervasive or overall effort. In contrast, tactical (intratheater) airlift is performed within a theater of operations and supports theater objectives through the rapid and responsive movement of personnel and supplies."\textsuperscript{21}

Airlift Force Structure

In January of 1981 the Air Force received three proposals from Lockheed, Boeing and McDonnell Douglas for the new strategic airlifter.\textsuperscript{22} Lockheed submitted a bid to construct an upgraded version of the C-5, but the Air Force dropped them out of the competition because their performance specifications had stipulated that the aircraft had to have a STOL capability. Boeing lost out because its design was too controversial with the jet engines being located above rather than below the wings, like a conventional aircraft design. The Douglas C-17 won the design competition on 26 August 1981. Lockheed submitted a rebuttal which was overruled by the JCS, who stood behind the Air Force decision. On 9 January 1982 Secretary of the Air Force Orr briefed Deputy Secretary of Defense Carlucci on the Air Force decision.\textsuperscript{23}

Not to be outdone, Lockheed submitted their rebuttal directly to Secretary of Defense Weinberger. The company
pleaded that it was in financial difficulty because of a $2
billion loss on the L-1011 Tristar jumbo passenger jet.
Company officials promised the Secretary that Lockheed could
deliver fifty new improved C-5Bs at a fixed cost of $8.2
billion as compared to $12 billion for 200 C-17s (not
including inflation and cost overruns), and they promised
delivery well before the C-17 would be ready. The Secretary
went along with the Lockheed proposal and announced on 25
January 1982 that DOD would purchase fifty new C-5Bs. To
appease McDonnell Douglas, the Secretary also agreed to
purchase 44 KC-10 tankers. As soon as Weinberger’s surprise
announcement was made, the Air Force was quick to endorse it,
reversing their earlier C-17 decision. Their purported reason
was because of its earlier deployment, the C-5 would be better
able to combat any near term "war threat."^4

Boeing took its case to Congress and pressed for a
cheaper alternative: convert 48 commercial 747s into military
transports. They had the backing of Senators Jackson and
Gorton and Representative Dicks, who were all from the State
of Washington, where the Boeing plant is located. On 13 May
1982 the Senate voted 60 - 39 to purchase the Boeing 747.^5
Opposition soon emerged from the Pentagon/Lockheed coalition,
with the political backing of Atlanta Mayor Andrew Young (the
Lockheed plant is in Georgia). During the confrontation, Under
Secretary of Defense Delauer was able to quiet Boeing by
threatening to cancel their CRAF modification and ALCM
programs. Five weeks later the original vote was overturned and on 18 August 1982 the House of Representatives voted 269 - 127 for fifty C-5Bs.

As of 1986 the United States had made a substantial effort to back the Carter Doctrine with a powerful airlift fleet. The combined airlift and sealift program grew from 1.5% to 2.4% of the defense budget. The exact numbers (in billions) from 1980 until 1985 are as follows: (air & sealift)/total defense budget, 1980 - (2.1)/142.1, 1982 - (3.9)/211.3, 1983 - (4.3)/238.7, 1984 - (5.6)/259.1, 1985 - (7.3)/305.7. Even with these improvements, if a major war broke out in the Persian Gulf today, the U.S. would still face a major airlift shortage. New C-5Bs are being built, but their selection was more of a political compromise than recognition of superior technology. Defense analyst William Kaufmann estimates that if the U.S. were confronted with a two front war, airlift would be tasked to fly 800,000 tons of men and equipment during the first month of conflict. Yet, even after the last C-5B is operational, the U.S. will only be capable of delivering 270,000 tons; far short of the requirement.

In 1981 DOD submitted the Congressionally Mandated Mobility Study (CMMS) which came up with some verifiable numbers as evidence of inadequate U.S. strategic airlift capabilities. The verdict was that the United States needed, at a minimum, the capability to fly 66 million ton-miles per day (MTM/D). This figure would allow MAC to uphold its
commitments to move 60 tactical fighter squadrons, one Marine Amphibious Brigade, and six Army divisions all to Europe within a ten day period. Even with the 66 MTM/D capability, MAC would be unable to deploy those commitments without massive pre-positioning of equipment as well. As of early 1985, MAC had less than 50% of the assets needed to fly the 66 MTM/D figure.\textsuperscript{30} For the reader's edification, a ton-mile is a unit of work measurement used by airlift forces. It is derived from the basic work equation of force multiplied by distance. In this case, tons multiplied by miles.

Another DOD study was conducted in 1984 entitled "Improvements in U.S. Warfighting Capability FY 1980-84."\textsuperscript{31} According to the study, strategic airlift capacity had gone up 28% since 1980. It was calculated that U.S. intratheater capabilities had gone up some 67% as well. The increase was attributed to stretching the C-141 fleet 23 feet and adding an air refueling receptacle, extending the life of the C-5A by 22,000 hours by modifying its fragile wing, adding two squadrons of KC-10s, and by increasing the number of aircrews, maintenance crews and spare parts. In addition, five Reserve and Guard squadrons converted from the C-7 and C-123 to the C-130. The study projected that before the end of the decade, airlift would be further enhanced by the addition of fifty new C-5Bs, forty-four KC-10s and CRAF enhancements. But, even with all these improvements, MAC would still be 17.5 MTM/D short of the needed 66 MTM/D.\textsuperscript{32}
As a guide for future procurement, MAC developed what is called the Airlift Master Plan, which was submitted to Congress in 1983. In this plan, airlift officers emphasize that procurement of both the C-5B and C-17 will be necessary to meet its 66 MTM/D goal. According to General Thomas Ryan while he was serving as CINCMAC, "it is the C-5B and then the C-17; an either/or approach is not satisfactory. We need both. The C-5B is available sooner, and the limited buy of fifty aircraft will permit an orderly transition to production of the C-17 to meet the long-term requirement." The Air Force has planned a slow paced R&D program, so that delivery of the first C-17 will come shortly after the last C-5B. The Airlift Master Plan calls for a total of 210 C-17s through the year 1998. The first aircraft is scheduled to be built in FY88, with its first test flight in FY90. The first operational unit should be activated in FY92.

Concerning airlift, Army General Mahaffey, who serves as USCINCRED and Director of JDA, acknowledged that improvements were on the way with the construction of new C-5Bs and SAC KC-10s. Yet, he stressed that "despite such improvements, significant shortfalls remain in our strategic deployment posture and will persist into the next century." He emphasized that "the C-17 is the key to reducing our strategic lift shortfalls by the end of the century, and maintaining our strategic lift baseline capability, as provided for in the U.S. Air Force Airlift Master Plan." He finished by stating
"the importance of maintaining the C-17 acquisition program, even in an increasingly austere fiscal environment, cannot be overemphasized from my perspective."\textsuperscript{36}

Army General Crist, USCINCCENT, endorsed the strategic airlift requirement of 66 million ton-miles per day at the Senate Armed Services Committee's FY87 Appropriations Hearings.\textsuperscript{37} He acknowledged that the five enhancement programs currently underway would help to solve the shortfall problem. The C-5A wing modification extends the aircraft frame time from 8,000 to 30,000 hours, well into the 21st century. The procurement of fifty C-5Bs will add 7.5 million ton-miles per day of jumbo airlift capability. Although not assigned to MAC, the fleet of 44 KC-10 adds to the national air refueling and cargo handling capabilities. The CRAF enhancement modified 19 wide-bodied aircraft to be convertible to handle heavy cargo if necessary, adding 1 million ton-miles per day to U.S. airlift capabilities. Improvements to the the intratheater fleet included repairing C-130 corrosion damage and stress problems, scheduled to be completed by FY89. These improvements are supposed to extend the life of the A models to the mid 1990s and the later models into the 21st century.\textsuperscript{38}

Even with these improvements, General Crist testified there was still a shortfall in cargo capability, which would have to be met with the C-17. The FY87 budget request included money to continue research and development of the C-17 with a target for initial production in FY88. He pointed out that
besides increasing the overall airlift tonnage capability, the C-17 would add a new measure of flexibility to the C-141 and C-5 fleets. He stated: "though smaller than the C-5, the C-17 will be able to carry the full range of military equipment, including all armored vehicles and most other outsized cargo. Unlike other intertheater transports, the air refuelable C-17 has outstanding ground maneuverability and takeoff and landing profiles designed to allow routine operations at small, austere airfields (i.e. the Middle East)." The C-17 would also be able to help reduce the burden on intratheater airlift because it would be capable of going directly to the objective area.

The USCENTCOM airlift plan, which covers 7000 miles and 15 hours of flying time from the East Coast, calls for the following breakdown of sorties: C-5/273, C-141/8205, CRAF/1003. The combined airlifted tonnage would be 205,650. Although this sounds like a lot, it is still 20 million ton-miles per day short of the the 66 million ton-miles per day required for the worst case scenario. Addressing the shortfall of strategic airlift, General Crist held that the strategic airlift shortage was "not new, ... [and] has faced all U.S. forces for some time but is a more glaring deficiency in the USCENTCOM area because of our limited access, the lack of forward deployed forces, long distances and the time critical requirement for credible forces once the decision is made to deploy."
General Crist summed up the situation as thus: "with ... enhancements, we get about 50 million ton-miles per day. What gets me from 50 to the 66 million ton-miles goal is going to be a new transport of some type, ... in my mind, I need an aircraft which operates like a C-130 and has the capacity of a C-141. If I can get something like that, I've got it made."

**Airlift Organization**

In 1981, having already formed the Joint Deployment Agency, the Department of Defense directed the Joint Chiefs of Staff to look into the feasibility of creating a command which would centralize all the DOD transportation assets. This notion had been entertained since 1955, though nothing had ever become of it. In a study submitted in July of 1981, Chairman of the JCS General David Jones reported that "more integrated management is required to efficiently operate a transportation movement system capable of smoothly transitioning to war ... [and that] ... the current system grew through a series of compromises designed to preserve the best parts of existing systems. While well intentioned, the result has been a disjointed system that cannot adequately perform the function for which it was intended." The Chairman's Special Study Group on the Organization and Functions of the JCS concluded in April of 1982 that "the military organizations given the responsibility for the
planning and execution of joint activities ... notably ... the Joint Deployment Agency ... simply do[es] not have the authority, stature, trained personnel or support needed to carry their [its] job[s] effectively."

Shortly after the study, the JCS recommended that the Military Sealift Command and the Military Traffic Management Command merge the dock activities under MTMC and leave strictly the shipping operations to MSC. Secretary of Defense Weinberger and the Chief of Naval Operations, Admiral Hayward both concurred. But, Secretary of the Navy Lehman was adamantly opposed to such a merger, fearing that the Navy would relinquish some of its power. To support his case, Secretary Lehman had a study done by the Department of Decision Sciences at the Wharton School, University of Pennsylvania. The study entitled "Systems Design Procedures For Improved Effectiveness of Military Sea Transportation Service Operations," was headed by Professor Paul Kleindorfer and was published on 31 July 1983. This report gave validity to the Secretary’s claim that he intended to make improvements in the current system so that consolidation with MTMC would not be necessary. The Secretary took his case to the Hill and won. The 1983 DOD Authorization Bill legislated against such a merger then or in the future.

Bypassing the legislature, Secretary of Defense Weinberger unilaterally directed that effective 1 January 1983 the Rapid Deployment Joint Task Force be upgraded to unified
command status and renamed the United States Central Command (USCENTCOM), reporting directly to the National Command Authorities through the Joint Chiefs of Staff. The original USCENTCOM mission, as articulated by Army General Kingston before the Senate Appropriations Committee Subcommittee on Defense on 12 May 1982 was as follows: "(1) Conduct planning for possible Southwest Asia contingencies that would affect the vital interests of the United States. (2) To conduct the training that is required to assure the operational readiness to respond to those plans. (3) To be prepared to deploy those forces no-notice to the Southwest Asia Region, on order." Besides the chain of command, the major change was that USCENTCOM would have designated forces assigned, whereas the RDJTF had not. This would enable the new organization to logically access its essential mission requirements and request funding from the different service budgets.

The subject of defense organization problems, although discussed for years, received official endorsement from the Chairman of the Joint Chiefs of Staff, General Jones, who wrote an article entitled "Why The Joint Chiefs of Staff Must Change" in the Winter 1982 edition of Boards and Directors. General Meyer, the Chief of Staff of the Army, wholeheartedly endorsed the Chairman's recommendations. The public revelation of these two incumbent military leaders rekindled efforts to reform the JCS and provided the impetus for a sweeping investigation of DOD organizational and procedural problems.
In response to General Jones' and General Meyer's criticisms, the Investigations Subcommittee of the House Committee on Armed Services began to conduct hearings on this subject in April of 1982. The Senate did not address the issue before 16 December 1982. By then it was too late for the 97th Congress to enact any corrective legislation.\(^1\)

In June of 1983, Senators Jackson and Tower began what would prove to be an extensive examination of the organizational relationships and decision making procedures within the Department of Defense. They both decided that rather than focus exclusively on the JCS, this examination should include all major organizational elements of DOD and the process of Congressional review and oversight. They came to this decision based on a "recognition of the substantial interrelationships among major DOD organizations which preclude examination of one organization in isolation."\(^2\) The review consisted of 12 hearings in the summer and fall of 1983 from 31 witnesses. Moreover, the Senators directed the staff of the Committee on Armed Services to conduct a thorough investigation of the organization and decision making procedures of DOD and Congress. This study was to last for the next two years. Near its completion, a nine-member Task Force on Defense Organization was formed and co-chaired by Senators Goldwater and Nunn. They reviewed the rough drafts of the study and gave inputs for the finishing touches for its completion. In October of 1985 the study was finally published.
as "Defense Organization: The Need For Change." In the following months ten hearings were conducted with 27 witnesses. This same year the House Investigations Subcommittee held a third round of hearings.253

After the Grenada operation, problems with the Joint Deployment Agency (JDA) and its Joint Deployment System (JDS) had become apparent. The problems stemmed from the fact that the JDA was vested with the responsibility of coordinating, rather than commanding transport operations. Without any command authority, each of the individual TOAs did their own thing. The individual TOAs each executed their individual responsibilities in an outstanding manner, the problem was in coordinating their efforts into a single, unified operation.254

Another problem appeared with the computerized JDS, which was supposed to "link peacetime and crisis planning, giving planners in the JCS information on such things as unit readiness, movement priorities, lift requirements and the status of needed equipment."255 JDS never worked as planned, primarily because it lacked the requisite authority to get vital information from each member of the joint deployment community (JDC). According to a 1986 GAO report, "JDS has not obtained community agreement on what information should be included in the JDS, or how JDS will interface with or obtain information from the other services." Besides the authority problem, there was extreme difficulty in linking the computer data base systems together between the different services.
transportation commands and JDA. This data is imperative for the very decisions that need to be made concerning "which units go where and determining the availability of equipment, spare parts and transportation assets."

In the summer of 1985 the President appointed David Packard to chair the Blue Ribbon Commission on Defense Management, to make findings and recommendations on matters such as this. Both the interim report, published on 28 February 1986, and the final report, published on 30 June 1986, recommended "the Secretary of Defense should establish a single unified command to integrate global air, land, and sea transportation, and should have flexibility to structure this organization as he sees fit. Legislation prohibiting such a command should be repealed."

On March 6 and 11 1986 the Senate and House respectively released their own versions of the Department of Defense Reorganization Act of 1986. Just two weeks prior, on 28 February 1986 an "Interim Report to the President" had been submitted to the Congress by the Packard Commission. During its deliberations, the Senate Committee on Armed Services found the recommendations to be consistent with their proposed legislation.

In a message to Congress transmitted on 28 April 1986, the President stated that he "endorsed the recommendations of the bipartisan President's Blue Ribbon Commission on Defense Management, chaired by David Packard, for improving overall
defense management including the crucial areas of national security planning, organization and command."

The DOD Reorganization Act was signed into law on 31 October 1986. It was the byproduct of over three years of "deliberate and comprehensive research and study by the Senate Committee on Armed Services. The Committee has also benefitted from an equally vigorous effort by the House Committee on Armed Services."*1

The Senate Committee on Armed Services Staff Study entitled, "Defense Organization: The Need For Change," posed the question "should a Military Transportation Command be created as a unified command?"*2 Given the concern expressed in their own staff study and armed with a Presidential endorsement, when the Goldwater-Nichols DOD Reorganization Act of 1986 was signed into law on 31 October 1986, it repealed the prohibitive 1983 legislation which had been urged by Secretary Lehman and it tasked the JCS to study the viability of a unified transportation command. The statement read:

"Sec. 212. INITIAL REVIEW OF COMBATANT COMMANDS (a) Matters To Be Considered: The first review of the missions, responsibilities, and force structure of the unified and specified combatant commands ... shall include consideration of the following: ... (2) Creation of a unified combatant command for transportation missions which would combine the transportation missions of the Military Traffic Management Command, the Military Sealift Command, and the Military
Airlift Command. (b) Deadline: The first report to the President under such section shall be made no later than one year after the date of the enactment of this Act. Sec. 213.

REPEAL OF CERTAIN LIMITATIONS ON COMMAND STRUCTURE (a)

In May of 1986, two months after the Packard Commission's interim report, National Security Decision Directive - 219 (NSDD-219) was issued by the Deputy Secretary of Defense, William H. Taft IV. This "directed the establishment of a Unified Transportation Command (UTC) to provide global air, land, and sea transportation." The Chairman of the JCS (CJCS) then established a UTC task force, under the direction of the Office of the JCS (OJCS) Logistics Directorate to come up with their own findings and recommendations on the subject. The task force was composed of representatives from each TOA, the JDA, USREDCOM and the various JCS Directorates. Working seven straight months, the task force came up with a recommendation for the CJCS. They believed the UTC could best be achieved through a single command concept. The decision was supported by the Army and the Air Force, but not the Navy or Marine Corps. The Navy proposed the establishment of an independent command which would be setup on an "evolutionary basis, using JDA resources to improve strategic mobility"
planning and integrate the deployment related ADP [automatic data processing] systems of all services." The Marine Corps was in favor of an independent command, but recommended that beforehand "commissioning an independent management consultant to conduct a comprehensive analysis before any changes were implemented." Both the Navy and Marine Corps were against assigning forces to the command during peacetime, allowing CINCMAC to be in charge of the new command, and locating the command at Scott AFB, Illinois. Secretary of the Navy Lehman told the Senate Armed Services Committee on 19 April 1987 that he saw no sense in USTRANSCOM and felt that it would only serve to add yet another layer to an already inefficient bureaucracy. He said "to take MSC and put it out in Illinois under an Air Force commander has to be taking the process of reorganization for its own sake to an absurd extreme."

Provisions contained in the 1986 DOD Reorganization Act enabled the JCS Chairman to forward an opinion to the SecDef which was contrary to the dissenting opinions/concerns of the Navy and Marine Corps. Before the new legislation, this matter would have ended with a "service veto," which, in effect would have been the result of the Navy/Marine disagreement. Once the SecDef decided in favor of USTRANSCOM, both the Navy and Marines were supportive of his decision and cooperated in drawing up an implementation plan.

On 1 December 1986, the JCS Chairman submitted the Air Force and Army recommendation to the Secretary of Defense for
approval. On 31 December 1986, the Deputy Secretary of Defense approved the command concept and requested that the task force develop an implementation plan for the new command. The implementation plan was submitted by the JCS Chairman to the Secretary of Defense on 12 March 1987. By Presidential Directive, effective 15 April 1987, the United States Transportation Command (USTRANSCOM) was established as a unified combatant command.6

According to JCS Pub 2, dated 1 December 1986, and entitled "Unified Action Armed Forces (UNAAF)," the definition of a unified command is as follows: "A unified command is a command with a broad continuing mission under a single commander and composed of significant assigned components of two or more Services, and which is established and so designated by the President, through the SecDef with the advice and assistance of the Chairman, Joint Chiefs of Staff, ... criteria for the establishment of a unified command are as follows: (a) A broad continuing mission exists requiring execution by significant forces of two or more Services and necessitating single strategic direction. (b) Any combination exists and significant forces of two or more Services are involved: (1) A large scale operation requiring positive control of tactical execution by a large and complex force. (2) A large geographic area requiring single responsibility for effective coordination of the operations therein. (3) Necessity for common utilization of limited logistic means."7
According to the Implementation Plan, the mission of USTRANSCOM is "to provide global air, land and sea transportation to meet national security needs." MAC, MSC and MTMC have all been assigned as operational components of this new command. The Joint Deployment Agency will gradually transfer its assets to USTRANSCOM over the course of a two year transition period, whereupon it will be completely deactivated.

In order to fulfill its broad encompassing mission, USTRANSCOM will be held responsible for a myriad of tasks. In planning for deployments, USTRANSCOM will coordinate the mobilization of the theater commanders to ensure their requirements do not overlap and surpass U.S. transport capabilities. While executing deployments, USTRANSCOM will continually keep all the forces abreast as to what resources are available for use. In addition, it will keep tabs on the amount of fuel, ammunition and equipment available in the different combat zones. Once in the midst of the conflict, USTRANSCOM will direct the resupply function. USTRANSCOM will be the primary player in the worldwide military command and control system (WWMCCS). It will be responsible for a computerized data base system designed to track the use of all the U.S. military transportation assets.

The Commander in Chief of MAC will also serve as the Commander in Chief of USTRANSCOM (USCINCTRANS). At the end of the two year transition period, MAC will no longer be a
specified command, and will instead be the airlift component of this new unified command. USCINTRANS will have command over all the ships, aircraft, rail cars and port management facilities used in a joint deployment operation. 73

MAC, the airlift component of USTRANSCOM, will be able to contribute 234 C-141s, 77 C-5s, and 500 C-130s from the active duty forces. During periods of conflict, MAC will also have some 238 aircraft at its disposal from the Civil Reserve Air Fleet (CRAF).74 According to the JCS Publication 15, dated 15 September 1983, entitled "Mobility System Policies, Procedures and Considerations," the function of CRAF is as follows: "(a) DOD provides for utilization of aircraft committed to CRAF by contractual arrangement with U.S. certified civil air carriers that own or otherwise control such aircraft. (b) DOD uses the contractually committed capability of the air carriers to augment the organic airlift capability of MAC in a declared defense-related national emergency or in defense-related situations short of a declared national emergency and to satisfy DOD airlift requirements based on plans approved by OJCS." 75

MSC, the sealift component of USTRANSCOM, has 150 ships which are in constant use to support the fleet during peacetime operations. In addition, MSC has 51 ships set aside in case of a joint deployment operation. These 51 ships consist of 9 empty cargo ships, 22 oil tankers, 8 "fast" sealift ships and 12 pre-positioned maritime ships located at
various strategic locations worldwide. Much like MAC's CRAF, MSC has a Ready Reserve Fleet of 116 ships available on short notice during periods of crisis.\textsuperscript{74}

MTMC, the Army's component of USTRANSCOM, plans and executes the U.S. transportation routes, whether it be truck or rail, to the nearest ports to load their equipment and supplies aboard the MSC ships. MTMC personnel are in charge of all loading and unloading operations at home and abroad. The MTMC assets are a fleet of rail cars which were specifically designed to carry tanks and other heavy equipment.\textsuperscript{75}

These three TOAs will continue to be organized, trained and equipped by their parent services. During normal peacetime operations they will also be directed by their individual service. But, during joint deployment operations, either exercise or real, they will be answerable directly to USCINTRANS.\textsuperscript{76}

Besides the USTRANSCOM establishment, effective 15 April 1987 the United States Readiness Command was to be disestablished and, in its place, the United States Special Operations Command (USSOC) and Forces Command were to be established.\textsuperscript{77} According to an OSD news release, the "principal function of the USSOC will be to prepare Special Operations Forces to carry out assigned missions and will include development of special operations strategy, doctrine and tactics, and developing and/or acquiring special operations-peculiar
equipment, material, supplies and services." The U.S. Army Forces Command will be "designated as Forces Command (a specified command) later this year and will assume the majority of the Readiness Command missions." Finally, USREDCOM will be "disestablished later this year and its missions will be transferred to other commands and the Joint Staff, Organization of the Joint Chiefs of Staff." 80

Summary

The Reagan Administration ran on a platform of increased defense spending, across-the-board. The major result for airlift was the acquisition of fifty new C-5Bs to augment the fleet of 77 newly modified C-5As. Allocations were also made to develop a prototype of an advanced strategic airlifter, the C-17. If all goes as planned, the first Air Force squadron will go operational with this new strategic airlifter in 1992. The revolutionary design of this aircraft will allow it to depart the United States and go directly to the objective area, a task formerly relegated to the C-130. This is because it will be able to land on short, unimproved airstrips and will be highly maneuverable once on the ground.

The lessons learned from the Grenada Urgent Fury operation prompted this administration to look for ways to improve the combat effectiveness of unified operations. One of those improvements, which was just recently implemented, was
the establishment of the United States Transportation Command, which will consolidate all the transportation resources of MAC, MSC and MTMC during periods of crisis or war. CINCMAC will be dual-hatted in his role as USCINCTRANS. This action officially certifies the strategic importance of transportation systems in U.S. wartime operations. Moreover, with the new legislation in the DOD Reorganization Act, commanders of unified commands are to have a greater input to the budget allocation process. This should mean that the days of airlift neglect are numbered.
NOTES


2Ibid., p. 21.


5Ibid.


7Ibid.


9Ibid.


12Ibid.

13Ibid.

14Ibid.

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2. Ibid., p. 370.
3. Ibid., p. 369.
4. Ibid., p. 370.
5. Ibid., p. 369.
7. Ibid., p. 45.
8. Ibid., p. 46.
10. Ibid., p. 49.
12. Ibid., p. 567.
13. Ibid.

15. Ibid., p. 46.
16. Ibid., p. 48.
17. Ibid., p. 49.
19. Ibid., p. 567.
20. Ibid.
Ibid., p. 668.
Ibid., p. 665.
Ibid., p. 743.
Ibid.
Russell, p. 45.
Ibid.
Russell, p. 45.
Ibid.
Ibid.
Ibid., p. 5.
Ibid.
Russell, p. 43.
Ibid.
Ibid., p. 44.
8Ibid., p. 38.


The Joint Chiefs of Staff, Memorandum for the Secretary of Defense, Implementation Plan to Establish the U.S. Transportation Command, 12 March 1987, p. 1.

Ibid.

Russell, p. 44.

Interview with Captain David Easton, Joint Chiefs of Staff, Logistics Directorate (J-4), Arlington, Virginia (Pentagon), 15 July 1987.

USTRANSCOM Implementation Plan, appendix.

Ibid., p. 2.

The Joint Chiefs of Staff, Unified Action Armed Forces, JCS Pub 2 (1 December 1986), p. 3-21.

USTRANSCOM Implementation Plan, p. ES-1.

Russell, p. 40.

"General Cassidy is First CINC for Transportation," Airtides, 3 July 1987, p. 1.

Russell, p. 40.


Russell, p. 40.

Ibid.

Ibid.

Ibid.
CHAPTER VIII

CONCLUSIONS AND PROJECTIONS

Having examined both the historical development of post World War II strategic doctrine and the evolution of military airlift, I will now draw some general conclusions concerning the relationship between U.S. strategic doctrine and the evolution of military airlift. I will close with projections for the future of military airlift.

Conclusions

It is my thesis that Air Force doctrinal treatment of the airlift mission, the airlift force structure and airlift organization have all evolved in response to U.S. strategic doctrine and the strong backing of a Presidential Administration. As I explained in the introduction, for the purposes of this study, strategic doctrine was considered the independent variable. The dependent variable was military airlift policy, which continually adapted to accommodate new strategic doctrine through the changing Presidential Administrations. These adaptations were examined in terms of
Air Force doctrinal treatment of airlift, airlift force structure and airlift organization. It is my contention that because airlift is a mission which is not central to the Air Force's primary mission of strategic deterrence, but rather, is perceived as a support function for the Army deployment mission, it has not developed principally as a result of internal Air Force advocacy. On the contrary, airlift has evolved primarily in response to external strategic doctrine articulated by the President and implemented by his Secretary of Defense.

According to Halperin, Claff and Kanter, the reason the Air Force has treated the airlift mission the way it has through the years is because the Air Force has always tried to enhance its organizational essence. Organizational essence is "the view held by the dominant group in the organization of what the missions and capabilities should be." These three experts believe that organizational concern with essence is manifest in five ways.

First, "an organization favors policies and strategies which its members believe will make the organization as they define it more important." As an example, they point out that "the Air Force some years ago favored the new look strategy which called for reliance on weapons of massive destruction, while the Army favored the strategy of flexible response which implied reliance on conventional ground forces." It is interesting that as an Army support mission,
military airlift prospered under flexible response, while the Air Force as a whole did not. This would lead one to believe that the airlift mission was at variance with the organizational essence of the Air Force during the McNamara era.

Second, "an organization struggles hardest for the capabilities which it views as necessary to the essence of the organization." As their example, they point to the Air Force's never ending struggle to "preserve the manned strategic bomber." Ever since the last B-52 rolled off the line, the Air Force has spent a tremendous amount of money toward the research and development of the XB-70, B-1 and now the stealth bomber. Moreover, it has spent huge sums to modify the B-52 for the low level bombing mission as opposed to the high altitude bombing mission for which it was originally designed.

Third, "an organization resists efforts to take away from it those functions viewed as part of its essence. It will seek to protect these functions by taking on additional functions if it believes that foregoing these added functions may ultimately jeopardize its sole control over the essence of its activities." For instance, "the Air Force insists on performing the troop transport role for the Army." Even though the Air Force does not view airlift as the essence of the service, it would rather maintain that mission than relinquish it to the Army. A failure to do so could damage its
stature as the preeminent airpower service.

Fourth, "an organization is often indifferent to functions not seen as part of its essence or necessary to protect its essence. It tends not to initiate new activities or seek new capabilities even when technology makes them feasible." The authors point out that "if assigned such functions, organizations will devote as few resources as they can to them. For example, the Air Force has devoted limited resources to airlift, ... while insisting on performing the transport function." Any program devoted to airlift "had to be forced on it from the outside." A recent example would be the Air Force treatment of the C-17 program in 1980. Congress cut off all C-17 funding that year because the Air Force had not presented a strong case in its behalf.

Fifth, "sometimes an organization attempts to push a growing function out of its domain entirely. It begrudges expenditures on anything but its chosen activity. It is chary of new personnel with new skills and interests who may seek to dilute or change the organization's essence." This was clearly the case for MATS in 1958 when General Tunner had to testify before Congress just to keep it afloat. The Air Force would only devote funds to the strategic bombardment mission and was willing to feed MATS to the wolves.

In short, Halperin, Clapp and Kanter conclude that "an organization will accept new functions only if it believes that to refuse to do so would be to jeopardize its position
with senior officials or if it believes that the new function will bring in more funds and give the organization greater scope to pursue its own activities."18

Airlift has flourished in just two eras. The genesis of MAC was under the McNamara era of flexible response. During this period Air Force doctrine first acknowledged that airlift existed as a service mission. Both the C-141 and C-5 aircraft were researched, developed and deployed during this era. MAC came into being as a major Air Force command during this period. After the McNamara era, airlift doctrine, force structure and organization stayed relatively constant for a decade, from 1968 until 1978. The renaissance of MAC began with the declaration of the Carter Doctrine and took off with the across-the-board military buildup of the Reagan Administration. Air Force doctrine has come to acknowledge the combat role of airlift and the importance of rapid deployment in the unified concept of force employment. Since 1980, the total military airlift capacity has been expanded by over 35%. This is a result of the C-141 modification, and the procurement of new C-5Bs and KC-10s. Finally, the airlift organization has just recently joined the ranks at the pinnacle of combatant commands, by becoming the primary force of the new unified United States Transportation Command, to be commanded by General Duane Cassidy, who also serves as CINCMAC.

General Cassidy recently argued that the airlift requirements for the flexible response strategic doctrine are
more demanding today than ever before. He stated: "Soviet proxies on the prowl in many regions in the world, make it possible for the USSR to threaten friendly nations both directly and indirectly. The Soviets have improved their ability to project military power in the Middle East, Africa, the Persian Gulf, and the Pacific. The situation is aggravated because these areas are geographically distant from the United States, in places where we have no shield of land based forward deployment."13

Airlift capacity has grown dramatically under the Reagan Administration. After the purchase of 50 C-5Bs and 44 KC-1Os in 1991, that increase will be nearly 75%. But, even with a 75% increase, General Cassidy estimates MAC will only be capable of handling slightly less than 50% of the 66 million ton-miles per day "needed to sustain our military strategy."14 The figure of 66 million ton-miles per day was calculated in response to the Congressionally Mandated Mobility Study, which specified the need to support four individual wartime scenarios. These were: (1) Invasion of Saudi Arabia, (2) Invasion of Iran, (3) Invasion of NATO, and (4) An Invasion of Saudi Arabia followed by an invasion of NATO.15

The General estimates that only by adding the C-17 to the airlift inventory "will we be able to provide the necessary additional intertheater airlift capability to build toward our 66 MTM/D goal and ensure a modern airlift force for the 1990s and beyond."16 While serving as the Army DCS/Operations and
Plans, Lt. General Carl Vuono gave the following testimony before Congress: "Military strategy, doctrine, and tactics go down simply to this. The winner on the battlefield is the one who has superior forces at a decisive time and place. For ground forces to be able to achieve this in many places around the world, we must have the support of the C-17."17

Projections

Samuel Huntington emphasizes the importance of time management in future military conflicts: "U.S. wars in the future may or may not be limited in goals, geographic scope, or material resources. They will inevitably be limited in time. This means that when the U.S. applies force, it must be able to apply it expeditiously. Hence, high priority should be given to creating the transport capacity and support which will enable the U.S. to deploy substantial numbers of troops to Third World trouble spots in very short periods of time. If we are going to win, we are going to have to win quickly."18

Along the same lines, General Cassidy points out two reasons why time management will be so important in the future. First, "possession of an airlift force capable of deploying substantial numbers of troops quickly is an essential step in lengthening the nuclear fuse." Second, to take advantage of "the window of opportunity, that time frame in which the combat commander can act with a strong force to prevent or
defeat a potential threat."

Michael Howard, the noted military historian, suggests that "in the future, land warfare between the nuclear powers may become more a matter of posturing and maneuvering than of actual fighting." He likens this to the age before Napoleon when "men who had much to lose and little to gain from war ... fearfully committed their forces to battle and maneuvered them cautiously." Concerning the implications for MAC, General Cassidy states "in this type of world then, where maneuvering becomes a substitute for fighting, a capable and believable airlift force serves as unambiguous evidence of our ability to project military power. The Military Airlift Command will provide our country the ability to react very quickly and stabilize some very unstable places. In a world where wars are limited in time, airlift can be the stabilizing factor in preventing small crises from escalating into large conflicts."

General Cassidy recently shared six "lessons from the past as we meet the uncertainties of the future: (1) Since the beginning of World War II, airlift has become increasingly critical to battlefield success in every conflict. (2) The requirements for airlift have almost always been greater than was expected at the beginning of the conflict, and the variety of missions performed by airlift increased immeasurably as the conflict developed. (3) Airlift has been capable of sustaining large forces, sometimes for considerable periods of time. Even
with the small airplanes of World War II, significant quantities of PCL (petroleum, oil, and lubricants) and other supplies were moved by airlift. (4) Airlift was the only means of sustainment for ground units whose whole lines of communication were temporarily cut. (5) We're most likely going to fight where and when we least likely expect to fight. (6) The final imperative is that when the time comes to fight, there will be lots and lots of customers for airlift.
NOTES


2 Ibid., p. 212.

3 Ibid.

4 Ibid., p. 213.

5 Ibid.

6 Ibid.

7 Ibid.

8 Ibid.

9 Ibid.

10 Ibid.

11 Ibid.

12 Ibid.


14 Ibid.

15 Ibid.

16 Ibid.

17 Ibid., p. 124.

18 Ibid.

19 Ibid., p. 131.

20 Ibid.

21 Ibid.

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Ibid., p. 124.
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