TOWARD THE AIR MOBILITY COMMAND:

A CHRONOLOGY OF TANKER AND AIRLIFT EVENTS



AIR MOBILITY COMMAND OFFICE OF HISTORY

Toward the Air Mobility Command: A Chronology of Tanker and Airlift Events

Compiled by

Robert deV. Brunkow

Office of History Air Mobility Command Scott Air Force Base, Illinois

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Front cover illustration. Symbolizing the union of air refueling and airlift missions, a KC-10 Extender refueled a C-5 Galaxy during Federal Aviation Administration certification tests in 1980. The C-5 was the first Military Air Command transport airplane to be planned and produced with an air refueling capability. The KC-10 combination tanker-cargo aircraft was assigned to the Strategic Air Command with a primary air refueling mission but under specific circumstances was released to the Military Airlift Command as an airlifter.

Back cover illustration. The globe signifies the worldwide reach of the Air Mobility Command, which was made possible by melding the airlift and aerial refueling traditions of the Military Airlift Command and the Strategic Air Command.

FOREWORD

In its first year of existence, the Air Mobility Command has achieved a notable record of accomplishments. Its participation in humanitarian efforts, such as the deployment of forces to Somalia to ensure a secure environment for relief operations and the Hurricane Andrew recovery program in the United States, have received wide acclaim. The command's assets are also instruments of American resolve, as demonstrated by their involvement in the endeavor to enforce the terms of the United Nations ceasefire in Iraq.

The command is new, but its successes are grounded on eight decades of experience. It is building on the tradition of excellence exemplified by the Strategic Air Command and the Military Airlift Command, whose tanker and airlift resources form the core of the Air Mobility Command.

This new command is carrying out the same blend of mobility support to the nation that characterized its predecessor commands. The importance of the "nonlethal application of airpower" is an important part of our history and will dominate airpower operations of the future. While our operations are nonlethal, they repeatedly take our crews and support personnel into harm's way and demand the very highest performance by our troops, as evidenced by the 13 Mackay trophies awarded to air mobility crews over the years. This is a proud command with much aviation history to support its pride.

This chronology records events from the air mobility experience to illustrate the heritage of the Air Mobility Command through its activation date, 1 June 1992. The volume's entries document how the command's forerunners acquired the means to accomplish air refueling and airlift responsibilities, and how air mobility operations expanded to further national objectives, making Global Reach for America a reality.

RONALD R. FOGLEMAN

General, USAF Commander Air Mobility Command

PREFACE

This chronology presents a highly selective list of events representating the heritage of the Air Mobility Command. Its focus is the operations of the Strategic Air Command, the Military Airlift Command, and the direct antecedents of these commands.

The volume is built on the work of numerous historians. Two individuals merit special recognition. Following the evolution of aerial refueling proved to be a manageable task due to the research and writing of Lieutenant Colonel David W. Harvey, USAFR, who was a reserve augmentee in the Strategic Air Command's Office of History. In the Air Mobility Command Office of History, Betty R. Kennedy's knowledge of both the vast history archives and the intricacies of airlift history were key to the development of this chronology. Kathryn A. Wilcoxson ably provided editorial assistance. The errors remaining in the text, however, are those of the compiler.

Unless otherwise indicated, photographs are US Air Force photos.

R. deV. B.

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CHRONOLOGY

1908	
9 September	Lieutenant Frank P. Lahm briefly flew on a Flyer piloted by Orville Wright, becoming the first army officer to fly as a passenger. ¹ The event hinted at the possible military use of airlift.
1910	
26 January	Captain George H. R. Gosman, Army Medical Corps, and Lieutenant Albert L. Rhoades, Coast Artillery Corps, tested an airplane they built to transport patients. Technical problems and the failure to obtain funding forced the inventors to abandon the project. ²
1916	
27 March	Aircraft of the 1st Aero Squadron began carrying mail and dispatches for the Mexican Punitive Expedition in northern Mexico during the campaign against Pancho Villa. The expedition was a response to an attack on Columbus, New Mexico, directed by the Mexican revolutionary and guerrilla leader. ³
1918	
February	Major Nelson E. Driver, a medical officer, and Captain William C. Ocker, Commander of Flight Training at Gerstner Field, Louisiana, modified the rear cockpit seat of a JN-4 Jenny to accommodate a litter to transport patients. Based on this effort, the Director of the Army Air Service ordered on 23 July that every flying field in the United States have an air ambulance. ⁴
15 May	Signal Corps pilots inaugurated regular airmail service in the United States, flying between Washington, DC, and New York City. The 218-mile route was flown in two legs, with a change of planes and pilots in Philadelphia. ⁵
17-19 July	Naval Reserve Lieutenant Godfrey L. Cabot practiced "the art of picking up Burdens in Flight to make possible Trans- Atlantic Flight." Flying a seaplane, he hoisted 45- and 55- pound bags from floats by means of a grappling hook attached to a rope. He believed that once snagged, the loads could be lifted into the aircraft. Following additional flights during the year he estimated "that with practice two men, in one hour, [should be able] to wind up all the fuel that an airplane of the largest size requires for a full load." ⁶

- 7 September In the first recorded air transport of American troops, 18 enlisted personnel were airlifted from Chanute Field, Illinois, to nearby Champlain.⁷
- 5-6 October Aircraft on a very limited scale were involved in the airlift of materiel and other mobility functions during World War I. Planes from the 50th Aero Squadron dropped supplies and aided in determining the location of the "Lost Battalion," elements of the 77th Division cut off from the Allies and besieged by the Germans during the Argonne Forest offensive. This was the first sustained effort at aerial resupply of a ground unit. Lieutenants Erwin P. Bleckley and Harold E. Goettler lost their lives in this effort and were posthumously awarded Congressional Medals of Honor.⁸
- 17 October Brigadier General Billy Mitchell briefed General John J. Pershing, Commander of the American Expeditionary Forces, on airdropping the 12,000-member 1st American Infantry Division behind German lines. General Pershing gave tentative approval to this concept, which would employ 1,200 bombers in the airlift, but World War I ended before the plan could be developed.⁹

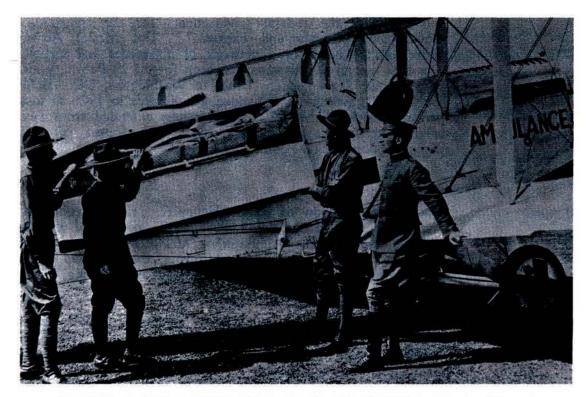
1919

The Glenn L. Martin Company produced the first T-1 cabin plane, which the Army acquired as the first officially designated transport aircraft. The Army procured only one airplane. The T-1 was a Martin Bomber MB-1 biplane modified by removing armaments, enlarging the fuselage to make headroom, and adding 10 passenger seats.¹⁰

16 September Flood conditons on the Texas border led to an early example of the use of military aircraft in humanitarian operations. A relief detachment of four JN-4Ds and eight JN-4Hs departed Kelly Field. After rendezvousing at Corpus Christi, the relief detachment airdropped food, including 30 pounds of yeast to make bread, to stranded victims.^{10A}

1920

Engineers at McCook Field, Dayton, Ohio, modified a De Havilland DH-4A Liberty Plane to serve as an air ambulance. The plane accommodated a pilot, a medical officer, and two patients. The patients lay in litters, one over the other. The aircraft was intended for crash rescue work. Elsewhere at McCook Field, technicians modified a Curtiss Eagle for use in air-route evacuation. A cabin provided space for a maximum of six patients. The crash of this airplane in 1921 stalled the effort to develop aeromedical transportation of patients.¹¹



In 1920, engineers modified the De Havilland DH-4A Liberty Plane to serve as an air ambulance. A medical officer rode in a semi-cockpit, while two patients were transported on litters in bunk-bed fashion.

- 2 October Rudimentary flight refueling was demonstrated at Washington, DC, when Navy Reserve Lieutenant Godfrey L. Cabot at the controls of a Huff-Daland HD-4 aircraft and Navy Lieutenant Harris in the rear cockpit used a grappling hook to snatch a five-gallon can of gasoline from a float in the Potomac River.¹²
- 21 November Wesley May, a wing walker with a five-gallon can of gasoline strapped to his back, climbed from an airborne Lincoln Standard to a JN-4 and poured the gasoline into the tank of the second aircraft. This Long Beach, California, publicity stunt is considered the first "air-to-air" refueling on record.¹³

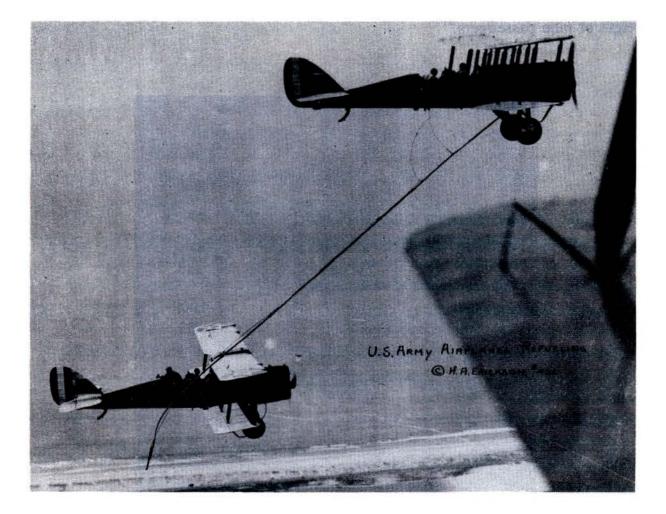
June The Army Air Service began scheduled passenger and cargo flights over the Model Airways, a nationwide air system sponsored by the federal government "for the transport of Government officials and express." The Model Airways addressed the need for a network of air routes and airfields. The first link of the airways had been forged 13 February 1921 with a route from Dayton, Ohio, to Washington, DC. Before the federal government disbanded the airways in 1926 to foster private enterprise, Model Airways routes extended from Texas to Massachusetts and made possible the transit of 1,200 passengers and 62,000 pounds of cargo.¹⁴

1923

- 20 April Under the direction of Major Henry H. "Hap" Arnold, two Army Air Service De Havilland DH-4Bs performed the first inflight hose contact. Although no fuel transferred during the 40-minute test at San Diego, California, the modified tankers demonstrated the feasibility of gravity-flow air refueling.¹⁵
- 2-3 May After extra fuel tanks were added, one of the two Fokker T-2 transport planes owned by the Army Air Service made the first nonstop transcontinental flight. Piloted by Lieutenant John MacReady and Lieutenant Oakley Kelly, the Army's first monoplane passenger carrier made the 2,700-mile trip from San Diego, California, to Roosevelt Field, New York, in 26 hours and 51 minutes.¹⁶

About the same time, the second T-2 was converted temporarily into an ambulance plane, demonstrating the viability of using transporters for aeromedical evacuation.¹⁷

- 27 June The Army Air Service conducted its first successful air refueling. Lieutenant Lowell Smith and Lieutenant John Richter flew the receiver DH-4B over San Diego, California, on a flight lasting 6 hours and 38 minutes. Their aircraft received two hose refuelings from a DH-4B flown by Lieutenant Virgil Hine and Lieutenant Frank Seifert.¹⁸
- 25 October In the first aerial-refueled flight between two points, an Army Air Service DH-4B flew nonstop from Lamas, Washington, to Tijuana, Mexico. Tankers positioned at Eugene, Oregon, and Sacramento, California, provided the three air-to-air refuelings required during the 1,280-mile mission.¹⁹



One De Havilland DH-4B refueled another DH-4B in 1923 in the first air-to-air refueling near San Diego, California. The refueler aircraft was manned by Lieutenants Virgil Hine and Frank Seifert, while Lieutenants Lowell Smith and John Richter flew the receiver plane.

18 November

The first aerial refueling-related fatality occurred during an air carnival at Kelly Field, Texas, when the fuel hose became entangled in the right wings of the refueler and the receiver aircraft. The Army Air Service pilot of the refueler, Lieutenant P. T. Wagner, was killed in the ensuing crash.²⁰

The Douglas C-1 was the Army's first designated cargo and personnel plane. It was a modified Douglas Observation Seaplane with an enlarged fuselage to accommodate eight or nine passengers.²¹



Refueling Airplane Number 1 (RP #1), a modified C-1, was one of two tankers providing fuel to the *Question Mark* in 1929, which remained aloft for over 150 hours in a flight that demonstrated the practical value of inflight refueling. February

Cox-Klemin Aircraft Corporation delivered the first of two XA-1 aircraft to McCook Field. The biplane carried a pilot in an exposed cockpit and a medical officer and two litter-borne patients in a cabin behind the cockpit. A new aircraft, rather than a modification, the XA-1 responded to an Army Air Service objective identified in 1921 to produce a crash rescue airplane. Despite later calls for the construction of special air ambulances, the XA-1 was the last built from scratch.²² Later medical planes were variants of commercial aircraft.

1926

Building on the success of the 1923 conversion of a Fokker to an airborne ambulance, the Army Air Service took delivery of nine Douglas C-1 planes, each of which had attachments on the floors and walls of the passenger compartment for ambulance stretchers. Aeromedical evacuation was becoming increasingly associated with transport aviation.²³

1928

During the 1920s and 1930s, the Army Air Service and successor Army Air Corps conducted a series of maneuvers, or exercises, that tested facets of air power. The first major conclusion of the 1925 maneuvers, for example, was that "air transports are essential for the movement of an Air Force." Following the 1927 maneuvers and the recommendation to demonstrate the practicality of supporting Army Air Corps troops by air, aerial operations tested the concept. During an exhibition in 1928, 14 bombers carried nearly 74,000 pounds of equipment and personnel between Virginia Beach and Langley Field, Virginia, validating the concept.²⁴

1929

1-7 January

In a test of both the practical value of inflight refueling and crew and aircraft endurance, a modified Atlantic (Fokker) C-2A, the Question Mark, commanded by Major Carl A. Spaatz, established a world duration record of 150 hours and 40 minutes. The Question Mark--so named because its capacity to remain airborne was unknown--was an Army Air Corps highwing, trimotor monoplane specially outfitted with a large capacity fuel tank in the cabin, a large hopper in the cabin for receiving fuel, and lines and hand-operated pumps for transferring the fuel to the wing tanks. The tankers, two modified Douglas C-1 biplanes, were each equipped with two 150-gallon cabin tanks and a 40-foot fueling hose. Shuttling in the airspace between Santa Monica and San Diego, California, the tankers made 43 contacts with the Question Mark, allowing it to remain airborne until engine problems forced it to land. A

total of 5,700 gallons of fuel plus oil, food, water, and other items were also passed during the refueling contacts. The total load transferred, including the fuel, came to about 40 tons. All officers on board the *Question Mark*--"Tooey" Spaatz, Ira Eaker, Harry Halverson, and Pete Quesada--became general officers, as did two officers on the refueling craft: Ross G, Hoyt and Joseph G. Hopkins. Master Sergeant Roy Hooe, the fifth crew member on the *Question Mark*, earned a reputation as the best crew chief in the Army Air Corps. The crewmembers of the *Question Mark* were each awarded the Distinguished Flying Cross for the mission, while the refuelers received letters of commendation.²⁵

- 21-22 May The Assistant Secretary of War for Aviation, Trubee Davison, directed the Army Air Corps to hold a public demonstration of the usefulness of air refueling in military operations. The demonstration was to be part of the maneuvers of 1929. What was planned as a round-trip, nonstop Dayton, Ohio, to New York City bomber mission failed to reach fruition when weather grounded the tanker. The Keystone bomber, however, continued on to New York and Washington, DC. On the return leg, the bomber and tanker successfully rendezvoused over New York City, an event broadcast over radio.²⁶
- The Army Air Corps and Boeing Airplane Company, in its first 27 August-4 September air-to-air refueling experiment, collaborated in the transcontinental flight of the Boeing Hornet Shuttle, a Model 95 mail plane modified by the addition of fuel tanks and other alterations. The airplane flew between Oakland, California, and New York City following what was then the longest mail route Captain Ira C. Eaker had proposed the in the world. experiment as a means to investigate the potential of crosscountry air refueling for military operations and flew the aircraft with Lieutenant Bernard Thompson. Air refueling was by two modified Boeing 40B-4s piloted by Boeing personnel and two modified Army Air Corps Douglas C-1 transports piloted by Captain St Clair Streett and Lieutenant Newton Longfellow. The flight east to New York took 28 hours and 25 minutes. On the return leg, a five-gallon oil can that was to be transferred to the Boeing Hornet Shuttle fell from the refueling aircraft onto the receiver. The resulting damage forced the airplane to land at Cleveland, Ohio, and return to New York City for repairs. Airborne once more, the Boeing Hornet Shuttle flew back to The aircraft attempted another flight east, but Oakland. problems with the fuel line led to a forced landing near Salt Lake City, Utah, that damaged the aircraft and ended the experiment.²⁷

1929	
27-29 November	In their effort to establish the flying endurance record, Bobbi Trout and Elinor Smith became the first women pilots to be refueled in the air. Engine trouble on the refueling aircraft brought an early end to the mission. ²⁸
1932	
11 January	Regular air cargo transport service began for the Army Air Corps with assignment of cargo planes to four geographical air depots. Among other aircraft, C-14s were flown by the squadrons. This rudimentary transport system resulted from proposals articulated by Major Hugh J. Knerr, Chief of the Field Service Section of the Materiel Division. Previously, Martin bombers, De Havilland DH-4s, and other aircraft had been tasked to move equipment and passengers on an as-needed basis. ²⁹
1933	
10 February	Four provisional air transport squadrons were established. One squadron was located at each of the air depots. They hauled equipment to airfields in their areas of jurisdiction and returned materiel to depots as well as transported troops on maneuvers. The concept evolved from recommendations made by Major Hugh J. Knerr. The concept had received official sanction on 19 November 1932 when General Benjamin D. Foulois, Chief of the Army Air Corps, authorized formation of a provisional transport group and four provisional squadrons. ³⁰
1934	
9 February- 1 June	President Franklin D. Roosevelt directed the Army Air Corps to provide airmail delivery service, but the operation was short-lived. The Army Air Corps terminated airmail service following a series of fatal accidents in bad weather. ³¹
1935	
28 June-15 July	Provisional transport squadrons attained the status of regular Army units. C-27s and the newly procured Douglas C-32 commercial transport aircraft were among the aircraft flown. ³²
1936	

The Army Air Corps acquired C-33 and C-34 aircraft--variants of the Douglas C-32--for the transport squadrons.³³

The Army Air Corps procured C-39 transporters and C-40 passenger planes.³⁴

5 August Imperial Airways of the United Kingdom successfully accomplished the first non-experimental commercial application of aerial refueling. On its first weekly mail service between Southampton, England, and New York City, with an intermediate stop at Montreal, Canada, Imperial Airways' two Short "C" class flying boats were refueled shortly after departure from the United Kingdom. Fifteen air refueled transatlantic crossings were made before the outbreak of World War II.³⁵

1941

1939

The newly-organized Army Air Forces acquired the C-47 Skytrain, which became the mainstay of the airlift fleet. Often referred to as the Gooney Bird, it was a military version of the Douglas DC-3. It was used for air logistics, troop transport, airdrop, rescue, and other missions. The C-47 had a range of over 2,000 miles, could fly up to 230 miles per hour, and could haul 10,000 pounds or 27 passengers.³⁶

- 29 May The Air Corps Ferrying Command was organized to transport American airplanes made available by the Lend-Lease program to the United Kingdom. The new organization was also to maintain a special air ferry service to meet War Department requirements.³⁷
- 1-3 July The new ferrying command began the first transatlantic shuttle when a B-24 Liberator departed Bolling Field, Washington, DC, for Ayr, Scotland, by way of Montreal, Quebec, and Gander Lake, Newfoundland. Shortly after midnight on 3 July, its passengers arrived at the destination.³⁸
- 13 December President Franklin D. Roosevelt signed an executive order directing the Secretary of War to take possession of any portion of any civilian airline needed for the war effort. Depending on the circumstances, contracts with the airlines could provide for the purchase of aircraft and airline services.³⁹

1942

January-February **Project X** was the Air Corps Ferrying Command's first overseas movement of tactical units and the first major foreign ferrying operation of World War II. The plan to move 80 heavy bombers to the Philippines from MacDill Air Force Base, Florida, was modified by circumstances so that ultimately 54 LB-30s and B-17s were delivered to Australia, the Netherlands East Indies, and India.⁴⁰ 10 January The Materiel Center of the Army Air Forces began a program to investigate ways of employing aerial refueling in the war against Japan. Plans were drawn up to launch B-17 bombers from Midway Island to attack Tokyo, refueling them with B-24 bombers modified as tankers. Planners also considered the use of B-24s launched from Hawaii, with refueling provided by US Navy seaplanes. A third option under study was the feasibility of fuel-filled gliders, towed by B-17s, which would serve as tankers for the bombers. None of the proposals were implemented.⁴¹

23 February Based on an analysis of the flight of the Question Mark, the Materiel Division recommended the British looped-hose refueling system for American military inflight fuel transfers. Using this method, the receiver aircraft trailed a 300-foot line, with an attached three-pronged grapnel, and positioned itself near the tanker, which trailed a 100-foot weighted line. When the lines crossed, the receiver hauled in the lines and the attached hose pipe from the tanker. A variant of the looped-hose method was for the refueler to fire a line with hose attached, using a harpoon-type gun. The receiver snared the tanker's line and reeled in the line and hose. With both variations, fuel transferred through gravity flow.⁴²

April 1942-November 1945 The Army Air Forces began operation of the *Hump Airlift* to China on a route pioneered by the China National Aviation Corporation.⁴³ Flying over the Himalaya Mountains from India, airlift aircraft carried fuel, ordnance, and other materiel to assist the Chinese government in resisting the Japanese invasion. The Hump operation became "the main artery of supply to the Allied Forces in China."⁴⁴ Largely due to the direction of Brigadier General William H. Tunner in the latter phase of the operation, the Hump Airlift operated with business-like precision. From December 1942, when the airlift became an Air Transport Command responsibility, through the close of the operation in November 1945, the airlift delivered nearly 740,000 tons of cargo. Over half of this total was transported during the last eight months of the war.⁴⁵

> The Air Corps Ferrying Command was redesignated the Air Transport Command, with responsibilities for ferrying aircraft and transporting personnel, materiel, and mail for War Department agencies, with the exception of troop carrier units. From July 1942 through December 1945, the new command and civilian contractors flew over 8.5 billion passenger miles and 2.7 billion ton-miles.⁴⁶ Ferrying operations delivered 282,537 airplanes.⁴⁷

1942

20 June





During World War II, the Hump Airlift over the Himalayas became the primary means of supplying the Chinese in the war against Japan. The C-46 Commando played an important role in the supply mission.

July	The Curtiss-Wright Corporation delivered the first C-46 Commando to the Army Air Forces. The C-46 was the largest and heaviest twin-engine plane used by the Army Air Forces. Due to its load capacity and performance at high altitude, it was assigned primarily to the Pacific and was an important factor in the Hump Airlift over the Himalayas. It could carry 50 troops or 10,000 pounds of cargo. The Commando had an altitude ceiling of 27,600 feet. ⁴⁸
August	The Douglas C-54 Skymaster began military service in the Air Transport Command. The four-engine transport was a DC-4A built to commercial specifications. The C-54A was the military version structurally redesigned for heavy cargo by strengthening the floor and installing a large door and a boom hoist and winch. Seats could be added to carry passengers. With a range of 3,900 miles, it had transoceanic reach. ⁴⁹

1942	
28 August	The War Department directed the Air Transport Command to evacuate sick and wounded American military personnel from North America, Greenland, and other theaters where practicable. ⁵⁰
October	Women pilots began to fly aircraft from production sites to airfields in the United States under the auspices of the Women's Auxiliary Ferrying Squadron. This first women's military flying group had been organized by the Ferrying Division of the Air Transport Command. As early as 1940, women pilots had ferried airplanes to Canada for use by the Allies. ⁵¹
1943	
Spring	Pennsylvania Central Airlines installed equipment developed by Flight Refuelling Limited on a B-17E and a B-24D for aerial fueling tests at Eglin Field, Florida. Although the B-17 fueling trials were successful, the advent of the more capable B-29 Superfortress, which was being flight tested at the same time, resulted in the cancellation of plans to refuel the B-17. ⁵²
1944	
2 February	Joseph Stalin approved the American plan for Operation <i>Frantic</i> , an early example of a war plan with provisions for air transport included in the original document. The plan demonstrated the appreciation military leaders were gaining for logistical airlift in an operational mission. Operation Frantic directed Allied bombers based in the West to attack German targets beyond the point of safe return. They were to recover in the Soviet Union. To support operations in the Soviet Union, airlift aircraft were to fly 42 round-trip missions between Teheran, Iran, and the area around Kiev, Ukraine, to initiate support, and then to provide two support flights weekly. ⁵³
5-7 June	The IX Troop Carrier Command assembled a fleet of 900 aircraft on 5 June and airlifted 13,000 Allied paratroopers to Normandy, France, during Operation <i>Overlord</i> on 6 June. One hundred gliders carried primarily artillery. Airdrops of 356 tons of supplies on 7 June supported the Allied force. ⁵⁴
1945	
March	The Army Air Forces concluded tests to refuel a P-38 fighter with a B-24 modified as a tanker. The tanker carried an external fuel tank, which was lowered by cable to the airspace forward of the P-38. No contacts were completed. ⁵⁵

- May-September During *Projects Green*, for personnel, and *White*, for aircraft, the Air Transport Command returned over 250,000 people and over 5,900 aircraft mainly from the European and Mediterranean theaters to the United States following the defeat of Germany in World War II.⁵⁶
- 30 August-12 September Special Mission 75 ferried 39,928 occupation troops along with 8,202 tons of supplies from a staging area in Okinawa to Japan aboard 259 C-54s, 360 B-24 bombers used as cargo planes, and associated aircraft.⁵⁷

1946

21 March The Strategic Air Command was activated "to conduct longrange offensive operations." By late 1947, planners perceived the need for aerial refueling to achieve the objective of longrange warfare.⁵⁸

1947

- 1 July The first C-118 Liftmaster entered the Air Transport Command inventory as the presidential airplane when the 503d Army Air Base Unit received the *Independence* at Washington National Airport. A military version of the Douglas DC-6, the fourengine Liftmaster had a capacity to carry 20,200 pounds over 2,000 miles, and it could carry up to 76 troops. Cargo hauling, passenger transport, and air evacuation were its functions.⁵⁹
- 11 October The Boeing C-97 Stratofreighter, a transport variant of the B-29 Superfortress, began service in the Air Transport Command. It could be configured to transport materiel, troops, or casualties. A service test model of the C-97A flew for the first time on 28 January 1949, and during the Berlin Airlift one of this series carried over a million pounds of cargo in 27 flights during May 1949. The production model C-97A, which was delivered to the Air Force 15 October 1949, had a payload of 53,000 pounds or 134 troops.⁶⁰

1948

28 March Boeing and the Air Force's Air Materiel Command conducted Operation *Drip*, a feasibility study of the British hose method for refueling B-29s. Two modified B-29s transferred 400 gallons of water from one bomber to another. The test built confidence in a Headquarters United States Air Force decision reached shortly before the test to modify 80 B-29s for inflight refueling, 40 as tankers and 40 as receivers.⁶¹

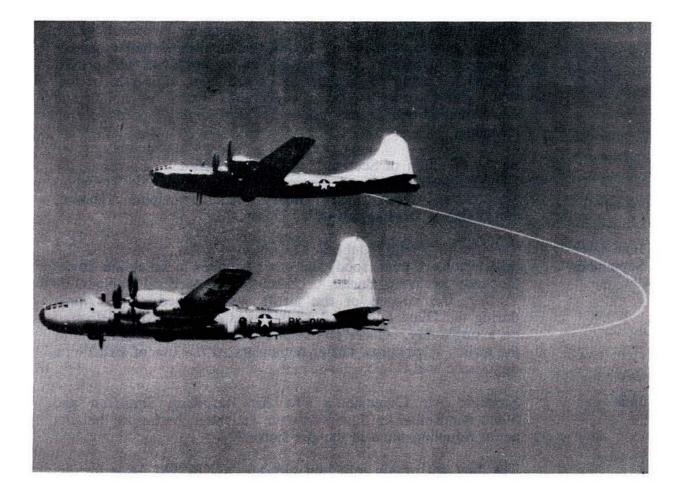
5 May Boeing conducted its first flight tests of B-29s modified for aerial refueling. Modifications included removal of all armaments and most armor and installation of a hose reel, hauling line, additional fuel lines, and nylon-lined aluminum fuel tanks in the forward and aft bomb bays. Receiver aircraft modification necessitated removal of some oxygen equipment and the addition of fueling lines. In the flight tests, the basic British hose system functioned adequately, and, ultimately, the Air Force converted 92 B-29s, redesignated as KB-29Ms, to hose-method tankers. Seventy-four B-29s were equipped to receive aerial refuelings by hose.⁶² 15 May The Air Materiel Command asked Boeing to proceed immediately with development of a uniquely American aerial fueling system, the flying boom, which would better service American aircraft. Refueling B-29s by hose had not proved optimal. Among the deficiencies noted were slow rate of fuel flow, time-consuming contact procedures, excessive weight and space requirements, and relatively slow flying speeds during refueling.° 1 June At the direction of Secretary of Defense James V. Forrestal, the Air Transport Command merged with the Naval Air Transport Service to form the Military Air Transport Service. consolidating strategic airlift.⁶⁴ 26 June 1948-The Berlin Airlift, dubbed Operation Vittles, transported 2.3 30 September million tons of coal, food, and other supplies to break the Soviet 1949 blockade of West Berlin. Under Major General William H. Tunner, the apogee of the airlift was reached on 16 April: during the "Easter Parade," 12,941 tons of cargo were delivered on a single day. C-47s and later C-54s formed the backbone of the airlift. Operation Vittles demonstrated the use of airlift as a diplomatic tool.65 30 June Strategic Air Command's 43d Air Refueling Squadron and

1948

50 June Strategic Air Command's 43d Air Refueling Squadron and 509th Air Refueling Squadron were activated, becoming the first aerial refueling units in the Air Force.⁶⁶

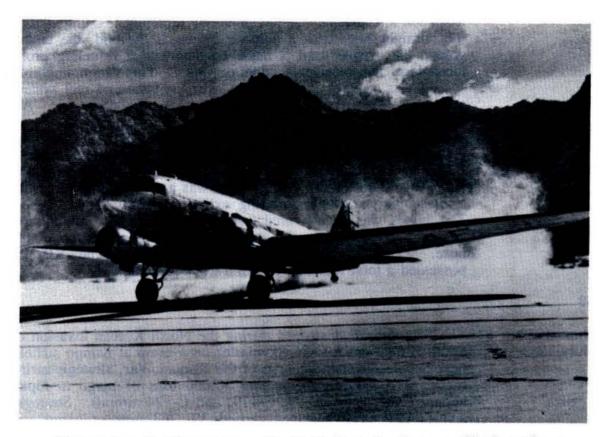
July The first set of air refueling aircraft, a KB-29M Superfortress tanker and a modified B-29 Superfortress bomber, were delivered to the Air Force. With the addition of the two bomb bay gas tanks, the tanker had a total fuel capacity of 12,031 gallons. Linking the tanker's 240-foot hose to the receiver required intertwining hauling and contact lines between the tanker and the receiver and then reeling the hose to the receiver.⁶⁷

26 February-2 March The world's first nonstop around-the-world flight was made by Lucky Lady II, a B-50A commanded by Captain James Gallagher. The mission covered 23,452 miles in 94 hours and 1 minute and was refueled in flight 4 times by KB-29Ms. For the record-setting flight, the National Aeronautic Association awarded its Mackay Trophy, signifying the outstanding Air Force flight of the year, to the crew of the Lucky Lady II.



Refuelings by KB-29Ms made possible the first non-stop flight around the world by Lucky Lady II in 1949.

1949	
April	In the United Kingdom, Flight Refuelling Limited demonstrated its probe and drogue method of aerial refueling. Using a 100- foot straight hose with a conical drogue at the end, the tanker guided the drogue until it made contact with a refueling probe located on the receiver's wing or nose. This "hummingbird" system was a major improvement over the hose and reel system and was frequently employed outside the Strategic Air Command. ⁶⁹
May	Headquarters United States Air Force ordered conversion of 40 B-29s to flying boom-type tankers. They were redesignated KB-29Ps. The Boeing flying boom was a tubular structure with a telescoping section permitting extension from 25 to 45 feet. The boom was maneuvered into a position where the nozzle could be extended into the receiver receptacle at the top of the nose. Fuel was pumped under pressure. The KB-29P possessed a total fuel capacity of 12,056 gallons. ⁷⁰
1950	
13 June 1950- 27 July 1953	The first aircraft destroyed during the North Korean invasion of South Korea was a C-54 Skymaster on a ramp at Kimpo airfield near Seoul. Over the course of the Korean War, strategic airlift moved 214,000 passengers and 80,000 tons of cargo to Japan aboard C-47, C-54, C-97, C-119, and C-124 aircraft. Strategic and theater airlift together carried 391,763 tons of cargo and over 2.6 million passengers. Fifteen tons of supplies and equipment were airdropped. Over 310,000 patients were airlifted. Air refuelings played an important role in the conflict. ⁷¹
1 September	The first KB-29P entered the Strategic Air Command inventory when it was assigned to the 97th Air Refueling Squadron, Biggs Air Force Base, Texas. ⁷²
22 September	In <i>Fox Able Four</i> , a joint American-British test of probe and drogue refueling to increase the range of fighters, tankers supported the first nonstop transatlantic flight by jet aircraft. The KB-29 selected to refuel the two F-84s on one segment of the England-to-Maine flight had been modified with the probe and drogue system. One of the fighters successfully rendezvoused with the KB-29 and completed the 3,800-mile journey in 10 hours and 1 minute. ⁷³



For over a quarter century, the C-47 Skytrain, known affectionately as the Gooney Bird, flew air mobility missions. In 1950, it saw service in Korea during the conflict on that peninsula.

December The Boeing Airplane Company unveiled the KC-97A Stratofreighter, the first C-97 model converted to a tankertransport. The KC-97A, a propeller-driven, four-engine aircraft, was equipped with a flying boom and four added fuselage tanks. Its total fuel capacity was 14,990 gallons. The fuselage tanks were removable so the aircraft could be reconfigured as a C-97A.⁷⁴

5 December The first two Douglas C-124 Globemaster II aircraft were received at McChord Air Force Base, Washington. The Globemaster soon became the mainstay of the strategic airlift fleet. The clam-shell loading doors in the nose of the aircraft and built-in ramp made possible easy loading of large cargo. The C model built in 1951 could transport up to 200 passengers or 68,500 pounds of cargo.⁷⁵

1951	
6 July	A KB-29M conducted history's first aerial refueling under combat conditions. Operating out of Japan, the tanker refueled RF-80s flying a reconnaissance mission over North Korea. This mission was a culmination of <i>Project Collins</i> , an effort directed by Harold E. "Tom" Collins to install inflight refueling equipment on RF-80s and F-84s. ⁷⁶
14 July	The first KB-29P flying boom refueling took place over enemy territory when a RB-45C was refueled over North Korea. ⁷⁷
14 July	The first KC-97 Stratofreighter, an E model, was delivered to the 306th Air Refueling Squadron, MacDill Air Force Base, Florida. As in the A model, the refueling equipment consisted of a telescopic flying boom and four fuselage tanks. Total fuel capacity was 14,990 gallons. Removal of the fuselage tanks converted the aircraft to a cargo, troop, or casualty transporter. ⁷⁸
15 December	The Air Force Chief of Staff directed the commander of the Military Air Transport Service to develop the Civil Reserve Air Fleet program. This decision grew out of the "Report of the Ad Hoc Staff Group on First and Second Line Reserve Civil Fleet," completed on 27 June 1951. ⁷⁹
1952	
March	The Strategic Air Command accepted delivery of the first KC-97F tanker, which was similar to the E model except for an upgraded engine. ⁸⁰
20 March	Publication of the "Department of Defense Plan for the Civil Reserve Air Fleet" informed the airlines of the concept and all unclassified provisions of the Civil Reserve Air Fleet plan. The Secretaries of Commerce and the Air Force sponsored a meeting with major airline executives to brief this concept. The fleet did not have to be called up until Operation Desert Shield in 1990. ⁸¹
4-17 July	Operation Fox Peter One was the first mass flight of jet fighters to be supported by aerial refueling, as well as the first flight by large numbers of jet fighters from the United States to Japan. KB-29Ps provided 118 air refuelings to the 59 F-84G Thunderjets that composed the 31st Fighter-Escort Wing of Turner Air Force Base, Georgia. Air refuelings occurred over the continental United States and over the Pacific before the aircraft reached Hawaii. The airplanes over the western Pacific island-hopped before reaching their destinations of Misawa and

- Chitose Air Bases. Military Air Transport Service aircraft carried wing support members to Japan. In a second mass flight called *Fox Peter Two*, air refueling was extended over the western Pacific. From 1 through 14 October 1952, 75 G-84Gs of the 27th Fighter Wing transited the Pacific with two air refuelings, the first between California and Hawaii and the second between Midway Island and Japan. Wing support personnel and equipment traveled on Military Air Transport Service airplanes. The Fox Peter operations demonstrated the practicality of moving fighters to the Orient quickly by air, avoiding the corrosion potential of water transport.⁸²
- 29 July An RB-45C aided by two inflight KB-29 refuelings made the first nonstop transpacific crossing, a flight from Elmendorf Air Force Base, Alaska, to Yokota Air Base, Japan. The Mackay Trophy went to the reconnaissance crew for the best flight of the year in the Air Force.⁸³
- 13 August The Under Secretary of the Air Force approved designating the probe and drogue system as the tentative standard for Air Force receiver aircraft and the required equipment for convertible bomber-tankers and cargo-tankers. The decision resulted from a Headquarters Air Research and Development Command recommendation based on initial costs, which were lower than those for the flying boom, shorter training time, and ease of use for receiver pilots.⁸⁴
- 25-29 August During Operation *Hajji Baba*, or *Magic Carpet*, 13 C-154 aircraft airlifted 3,763 Muslim pilgrims stranded in Beirut, Lebanon, to Jeddah, Saudi Arabia, when the number of pilgrims swamped the local airport's ability to handle the crowd. The operation demonstrated the use of airlift to further national objectives.⁸⁵

- 29 May The Air Command received the KC-97G Strategic Stratofreighter. The airplane was a flying boom-type tanker capable of dispensing 8,513 gallons of aviation gasoline. The plane was a convertible tanker-transport. Unlike previous models, it could haul cargo without reconfiguration, being able to carry 96 troops or heavy equipment without modification. For the next 12 years, the KC-97G performed both aerial refueling and transport duties.⁸⁶
- 20 August KC-97s made possible the first nonstop transatlantic mass fighter flight. Thunderjets during Operation *Longstride* flew from Turner Air Force Base, Georgia, to French Morocco. The Mackay Trophy for the most significant Air Force flight during the year went to the 40th Air Division for the achievement.⁸⁷

1953	
1 September	Headquarters United States Air Force announced the first aerial refueling of a jet aircraft by a jet tanker. In 1951 and 1952, Boeing had converted two B-47Bs for probe and drogue fueling trials. Upon completion of the tests, the redesignated KB-47B tanker and receiver aircraft were converted to normal configuration. ⁸⁸
1954	
5 May	Headquarters United States Air Force announced the requirement for a turbo-jet tanker to meet the air refueling needs of jet aircraft. ⁸⁹
26 June-17 July	Airlift aircraft from the Far East Air Forces and Military Air Transport Service carried 509 French Foreign Legion veterans of the French campaign in Indochina from Saigon, Vietnam, to Paris, France, and Oran, Algeria, by way of Tokyo and Westover Air Force Base, Massachusetts, in Operation <i>Wounded Warrior</i> . The 14,000-mile airlift followed an eastern route due to political considerations and the locations of suitable air bases. ⁹⁰
1956	
9 November- December	During the Suez Crisis, C-121s, C-124s, and other aircraft transported over 1,500 Colombian, Indian, and Indonesian members of the Suez Canal United Nations peacekeeping force along with some 170 tons of cargo to staging areas in the Middle East. A final contingent of 50 Brazilians arrived in the Middle East early in 1957. The airlift followed Egyptian nationalization of the canal and the subsequent conflict involving Egypt, Israel, France, and the United Kingdom. ⁹¹
7 December	The Department of Defense issued Directive 5160.2 making the Military Airlift Transportation System the single manager for airlift for all transport aircraft engaged in scheduled point-to-point service within the Department of Defense. ⁹²
11 December 1956-30 June 1957	Airlifters evacuated 10,184 Hungarians to the United States in Operation Safe Haven. They also oversaw the airlift of 4,170 refugees by commercial carriers. The refugees had fled to Germany following the failure of the Hungarian uprising against Soviet domination. ³³
1957	
31 January	The 93d Air Refueling Squadron, Castle Air Force Base, California, received the first KC-135A Stratotanker, a flying boom-type refueler capable of transferring nearly a thousand

gallons of fuel per minute. It was powered by four turbojets capable of keeping up with the jet aircraft it had to refuel. The tanker had a fuel capacity of 31,200 gallons, which was available for transfer or for its own use. It could also be used to airlift cargo without modification. The tanker was a modification of Boeing's prototype, referred to as 367-80, or "Dash Eighty," which with a different configuration became the commercial 707.⁹⁴

- 28 August The first Douglas C-133A Cargomaster was delivered to the 1607th Air Transport Wing, Dover Air Force Base, Delaware. It addressed an Air Force policy promulgated in 1952 to adopt the turboprop engine for future transporters. Four 6,500 horsepower Pratt & Whitney T-34P-7WA engines powered the aircraft at speeds up to 331 miles per hour. Rear-loading, clam-shell doors made possible the transport of large cargo including operational intercontinental ballistic missiles. The aircraft could accommodate freight volume of 13,000 cubic feet or 200 passengers. For many years the largest airlifter, the Cargomaster set numerous weight records for cargo carried.⁹⁵
- 1 October In response to the growing strength of the Soviet Union and the possibility that a surprise attack might destroy strategic forces, tankers and bombers went on ground alert. A portion of the aircraft were parked on the runway ready to take off within 15 minutes. Initially, 11 percent of the nuclear strike force and supporting tankers was on alert. By 1960, the objective of having one-third of the aircraft on alert had been achieved.⁹⁶
- 3 October A C-124 made the first delivery by the Military Air Transport Service to McMurdo Sound, Antarctica, in Operation *Deep Freeze*, a continuing, annual mission to supply camps supporting American scientists conducting Antarctic studies.⁹⁷

- July-8 September At the request of the Lebanese government, the United States deployed Marines to provide security following political instability in the Middle East in general and political disunity in Lebanon in particular. During Operation *Blue Bat*, airlifters flew 314 missions in support of the Marines, transporting 5,500 passengers and 5,500 tons of cargo.⁹⁸
- 1 July The Airlift Service Industrial Fund became operational after a six-month test period, requiring users to allocate money from their own budgets to pay for airlift in accordance with Department of Defense Directive 5160.2.⁹⁹

1958	
14 July	After years of experimentation and consternation over the best method of aerial refueling, Headquarters United States Air Force determined that the flying boom system would be the standard for its aircraft. Combat aircraft without boom-fuelable capabilities that were already in service or in production were to retain their installed or programmed refueling systems, and boom-to-drogue adapters would be employed by tankers to fuel probe-equipped aircraft on an interim basis. ¹⁰⁰
29 August- 11 September	C-118s, C-121s, and C-124s airlifted a Tactical Composite Air Strike Force and an Air Defense Command squadron of F-104 Starfighters to Taiwan to strengthen the position of the Nationalist Chinese against the threat of a Chinese Communist invasion of the offshore islands of Quemoy and Matsu and, possibly, of Taiwan itself. ¹⁰¹
1959	
24 February	General Curtis E. LeMay, Air Force Vice Chief of Staff, articulated the Air Force's desire to establish "a single tanker force equipped to provide support to all combat operations requiring air refueling." ¹⁰²
September	C-124s airlifted over 200 tons of food, clothing, and other supplies to aid victims of Typhoon Vera, which devastated Nagoya, Japan. ¹⁰³
November	Department of Defense Instruction 5160.12 proposed designating the Strategic Air Command as the tanker single manager for the Air Force in order to eliminate duplication of effort and to improve efficiency. ¹⁰⁴
1960	
2-7 March	Following a massive earthquake at Agadir, Morocco, C-118s airlifted 185 tons of emergency equipment. Medical crews, equipment, water, and relief supplies were airlifted to the area, while 505 refugees were evacuated. ¹⁰⁵
31 March- 30 April	In response to flooding in Brazil, C-124s transported 30 tons of disaster relief equipment, medical supplies, life rafts, and 2 helicopters along with their crews to that country. The helicopters then carried 130 tons of relief supplies within Brazil. ¹⁰⁶

- 3 May The Air Force Vice Chief of Staff, General Curtis E. LeMay, announced that "the objective of a single tanker force, SAC managed and KC-135 equipped," to support both training and combat needs was approved for immediate programming, with full implementation by the end of fiscal year 1963.¹⁰⁷
- 25 May-21 June Aircrews flew C-118s and C-124s to Chile following earthquakes and a resultant tidal wave. They carried 851 tons of cargo and 1,020 passengers. Included in the relief airlift were two 400-bed field hospitals.¹⁰⁸
- 7 July Public Law 86-601 specifically designated \$311 million for airlift modernization. Among the projects funded by this initiative was the C-141 Starlifter.¹⁰⁹
- 9 July 1960-January 1964 The United Nations intervened in the civil war in Zaire (the Congo) following that nation's independence by airlifting troops, supplies, and materiel and by evacuating refugees. Airlift support for the effort, dubbed Operation *New Tape*, included 2,128 missions that transported 63,798 passengers and 18,593 tons of cargo.¹¹⁰
- August The airlift of donated iron lungs to Hokkaido, Japan, where over 600 cases of polio were reported, demonstrated the humanitarian face of military airlift.¹¹¹

- 18 January The Strategic Air Command publicly announced that B-52 bombers were flying continuous airborne alert missions, officially described as airborne indoctrination training. KC-135s refueled the bombers. The airborne alert mission, later dubbed *Chrome Dome*, was first tested in 1958 and had been flown in succeeding years. Chrome Dome came to an end in 1968 following the crash of a second bomber on airborne alert, concerns about the escalating cost of the operation, and the emergence of a robust intercontinental ballistic missile force.¹¹²
- 8 June The 1611th Air Transport Wing, McGuire Air Force Base, New Jersey, received the first C-135A Stratolifter, the first jet aircraft in the Military Air Transport Service. It was related to the Boeing 707 commercial jet as well as the KC-135. Powered by turbojet engines, it was capable of a cruise true airspeed of 464 knots. It had a range of over 5,000 miles and could accommodate up to 126 troops. The C-135A had an operating weight of 85,000 pounds.¹¹³

4 September-27 November 27 November 50 Following the erection of the Berlin Wall, airlifters contributed to the show of force against the Soviet Bloc by supporting the deployment of a Composite Air Strike Force from 4 to 7 September in *Project Tackhammer* and the build-up of forces by airlifting nearly 10,000 troops and some 2,380 tons of cargo from 31 October to 27 November during Operation *Stair Step*. Also in November, airlifters moved Tactical Air Command F-104 fighters and personnel in Operation *Brass Ring*.¹¹⁴

Prior to the massive build-up of US ground forces in Southeast November 1961-15 August 1973 Asia, air mobility forces flew in support of American interests. The Military Air Transport Service and its successor, the Military Airlift Command, provided strategic airlift for forces in During November 1961, Military Air Transport the region. Service airlifted T-38s and their crews to Clark Air Base, Philippines, in preparation for the departure of the Farm Gate counterinsurgency force that would deploy to South Vietnam to train South Vietnamese forces and develop tactics. In December 1961, the Military Air Transport Service moved equipment to the Far East for Project Mule Train, a deployment of C-123s that was to provide tactical airlift support for the South Vietnamese armed forces. Strategic airlift support for the war in Southeast Asia accommodated the expanding involvement of the United States. Strategic airlift grew from 700 million ton-miles of passengers and materiel carried to and from Southeast Asia in 1965, the year ground troops were committed to the conflict, to 5.7 billion ton-miles by 1968. Tactical--intratheater--airlift, which was primarily the responsibility of the Pacific Air Forces but also involved the Military Air Transport Service and the Military Airlift Command, carried 7 million tons of passengers and cargo during 1962-1972. A lesson of the war led to the merger of tactical and strategic airlift under one command. From 9 June 1964 through the end of tanker involvement in Southeast Asia on 15 August 1973, KC-135s flew 194,687 sorties, supplying 8,964 million pounds of fuel during 813,878 refuelings. They routinely airlifted people, equipment, and aircraft parts between the United States and forward bases as well as among bases in the Far East and Southeast Asia.¹¹⁵

- 3-14 November A C-124 carried communications personnel and equipment to Belize following the devastation of Hurricane Hattie in order to restore operations at Stanley Field, the airport of Belize's capital city. C-124s later transported fuel for helicopters used to evacuate the injured and homeless or to deliver relief supplies.¹¹⁶
- 17 November Secretary of Defense Robert S. McNamara approved the Air Force plan to designate the Strategic Air Command as the single manager for all KC-135 air refueling operations.¹¹⁷

- 11 February The 1405th Air Base Wing, Scott Air Force Base, Illinois, acquired the Military Air Transport Service's first T-39 (later designated the CT-39) Sabreliner. It was procured to serve as a command and support aircraft.¹¹⁸
- 28 February The 1501st Air Transport Wing, Travis Air Force Base, California, received the first C-135 B model Stratolifter. Unlike the A model, the newer version was powered by turbofan engines, increasing take-off thrust by about 25 percent.¹¹⁹
- 11 August The first C-130E Hercules for the Military Air Transport Service was delivered to the 1608th Transport Wing, Charleston Air Force Base, South Carolina. Originally designed for the Tactical Air Command as a short-range assault transport, it could serve as a medium transport aircraft. It could cruise at 280 knots true airspeed and had an operating weight of 83,000 pounds and a maximum cargo weight of 45,700 pounds. Its speed, short-field landing, rear-loading, and other capabilities made it useful for theater operations.¹²⁰
- October-12 November Following a severe earthquake in Iran, C-124s, C-133s, and a C-118 carried 480 tons of relief cargo, including a complete hospital unit, to Teheran.¹²¹
- 22 October-Before the United States placed a guarantine on offensive 2 November military equipment being shipped to Cuba on 22 October--the official beginning of the Cuban Missile Crisis--troops and materiel were airlifted to the southern United States and Guantanamo Naval Air Station, Cuba, in preparation for the American response to the delivery of Soviet missiles to the The Military Air Transport Service started Caribbean island. transporting personnel 17 October. and equipment on Redeployment continued past the resolution of the crisis on 2 November into the middle of the month. The Military Air Transport Service and Tactical Air Command together delivered about 10,500 passengers and 7,500 tons of equipment.¹²²
- 2-16 November In the wake of Typhoon Karen, aircrews airlifted 1,180 tons of emergency supplies to Guam and evacuated about 650 people.¹²³
- November At the request of the government of India, C-135s flew 45 missions to deliver nearly 10,000 tons of equipment, small arms, and ammunition to Calcutta to counter the Chinese invasion of the Assam Valley and Ladakh District. The aircraft also carried 39 members of the international press corps.¹²⁴

- 28 March-17 April Operation *Helping Hand* was the response to what was at the time the largest earthquake to hit the Northern Hemisphere in the twentieth century. After the Good Friday earthquake leveled sections of Anchorage and Seward, Alaska, airlifters carried water purifiers and 1,375 tons of supplies to the disaster area. Additional support included the evacuation of the injured and homeless.¹²⁵
- 22 May-5 June To combat the effects of the volcanic eruptions of Mount Irazu in Costa Rica, eight C-133s and five C-124s airlifted flood control equipment and personnel.¹²⁶
- 9 June Tankers supported combat operations in Southeast Asia for the first time on 9 June 1964: four KC-135s refueled eight F-100s of the Yankee Task Force on a mission to strike Pathet Lao antiaircraft emplacements in northern Laos.¹²⁷



KC-135 Stratotanker involvement in the Vietnam War began in June 1964 and continued until August 1973. In 1965, KC-135s fueled experimental F-5Cs, which were F-5As modified to combat configuration with the addition of armor plate and other enhancements, on their way to Southeast Asia. (Northrop Corporation photo)

- 26 June-24 July C-130 sorties delivered over 950 tons of food to Pakistan in response to food shortages in remote areas caused by flooding. Airdrops as well as delivery to airfields were necessary to bring relief to the isolated areas.¹²⁸
- 1 July The first jet-augmented KC-97L became operational.¹²⁹
- October The Air Force assigned responsibility for all aerial refueling in the Far East and Southeast Asia to the Strategic Air Command. The action followed the grounding of Pacific Air Forces' KB-50 tanker fleet because of severe corrosion.¹³⁰
- 19 October The first C-141A Starlifter was delivered to the 1707th Air Transport Wing, a transitional training unit at Tinker Air Force Base, Oklahoma. The Starlifter built by Lockheed Aircraft Corporation, Marietta, Georgia, was not as fast as, nor did it have the range or cargo capacity of, some contemporary aircraft, but it could quickly convey oversized cargo and proved its worth during the Vietnam War. The C-141A flew at a cruise true airspeed of 425 knots, had a range of 3,923 nautical miles, and had an operating weight of up to 140,500 pounds of cargo or 144,000 pounds of passengers. It was equipped with the 463L material handling equipment system.¹³¹
- 22 December Secretary of Defense Robert S. McNamara announced approval of plans to develop a new aircraft capable of hauling outsized cargo. Then known as the CX-HLS, the airplane was to be designated the C-5 Galaxy.¹³²

- 12 February Following the Presidential decision to send B-52 bombers to Southeast Asia to conduct Arc Light conventional bombing missions, KC-135s began to arrive in large numbers at Andersen Air Force Base, Guam, to support the bombers.¹³³
- 2 April During US intervention in a civil war in the Dominican Republic, C-124s and C-130s flew almost 700 missions, transporting 4,500 troops and carrying 7,000 tons of cargo.¹³⁴
- 23 April The first operational C-141A Starlifter was delivered to the 1501st Air Transport Wing at Travis Air Force Base, California.¹³⁵

1965	
18 June	In the first Arc Light mission, 30 KC-135s refueled 27 bombers on their way to Viet Cong targets. ¹³⁶
15-21 September	When warfare erupted between Pakistan and India, C-130s evacuated over 600 American nationals from Pakistan. In the final phase of emergency exercise <i>Nice Way</i> , C-130s carried to Turkey nearly 375 nationals who had previously fled to Afghanistan from Pakistan. ¹³⁷
23 December 1965-23 January 1966	Operation <i>Blue Light</i> was the first large-scale airlift of an Army unit during the war in Southeast Asia. The Military Air Transport Service transported the 3d Brigade, 25th Infantry Division, from Hawaii to Pleiku, South Vietnam, to counter a Communist build up. C-141s, C-133s, C-130s, and C-124s flew 243 sorties to move some 3,000 troops and 4,700 tons of equipment. ¹³⁸
1966	
1 January	The Military Air Transport Service was redesignated the Military Airlift Command. ¹³⁹
20 March	The first KC-135Q was delivered to the 43d Bombardment Wing, Davis-Monthan Air Force Base, Arizona. The airplane was an A model modified to hold the special fuel required by the SR-71 Blackbird reconnaissance aircraft. ¹⁴⁰
11-12 November	Transport aircraft moved 205 tons of emergency supplies as well as 93 Dutch troops to Pisa, Italy, following flooding of the Arno River. The cargo included water purification equipment and generators. ¹⁴¹
18 November	Lockheed-Georgia Company delivered the first HC-130P to the Aerospace Rescue and Recovery Service. The P model C-130 had been modified with a drogue system to permit aerial refueling of modified HH-3 helicopters used by the rescue service. ¹⁴²
1967	
31 May	Major John H. Casteel and his KC-135 crew received the Mackay Trophy for 1967, awarded for the most meritorious Air Force flight of the year. While fueling two F-104s from his KC-135 over the Gulf of Tonkin during the Vietnam War, Major Casteel received instructions to intercept two US Navy

A-3 tankers dangerously short of fuel. While periodically two F-104s. fueling the the Stratotanker successfully rendezvoused with the A-3 tankers. As the second A-3 was refueling, two Navy F-8s, also low on fuel, entered the area. One F-8 was too close to empty to wait for the Navy tanker to complete its refueling. It hooked up to the A-3, which continued to draw fuel from the KC-135. While the unprecedented trilevel refueling was taking place, the first A-3 fueled the second F-8, then returned to the KC-135 for additional fuel. Immediately following the dramatic save and another refueling of the F-104s, the KC-135 successfully refueled two Navy F-4s, both of which could not reach their aircraft carrier because of a lack of fuel. After a final refueling of the two F-104s, the KC-135 was itself almost out of fuel and was forced to land at an alternate base in South Vietnam.¹⁴³

- 6-11 June With the outbreak of the Seven-Day War between Israel and neighboring Arab states, aircraft and aircrews from the Military Airlift Command, Tactical Air Command, and United States Air Forces in Europe under the operational control of the 322d Air Division evacuated nearly 7,000 people from Libya to Europe in Operation *Creek Haven* during 6-10 June. Of the total evacuated, 2,556 were airlifted to the United States. In an almost simultaneous operation called *Creek Dipper*, aircraft from the same commands moved 816 evacuees from Jordan to Iran during 10-11 June.¹⁴⁴
- 17 November-29 December Operation *Eagle Thrust* was the longest airlift of combat troops from the United States to a war zone up to that time. Aircrews flew 369 C-141 and 22 C-133 missions to transport 10,356 paratroopers and over 5,100 tons of their equipment from Fort Campbell, Kentucky, to Bien Hoa, South Vietnam.¹⁴⁵

- 29 January-17 February After North Korea seized the USS *Pueblo*, airlifters transported Air Force and Army units from the United States, the Pacific, and Southeast Asia to South Korea and Japan in Operation *Combat Fox*. During the first weeks of the crisis, over 800 missions moved 7,996 passengers and almost 13,683 tons of cargo to the region.¹⁴⁶
- 10 August The first McDonnell Douglas C-9A Nightingale was delivered to the 375th Aeromedical Airlift Wing, Scott Air Force Base, Illinois, to serve as an airborne hospital ward. The modified version of a commercial DC-9 was the first military aeromedical evacuation aircraft to be jet powered. It could carry up to 40

1968	
	ambulatory patients or 30 litter-borne patients at a cruising speed of 500 miles per hour for distances of over 2,000 miles. All aircraft systems functioned equally well aloft or on the ground, eliminating the need for ground support. ¹⁴⁷
24 September	The crash of a KC-135 on an emergency landing at Wake Island resulted in the first tanker casualties of the war in Southeast Asia. Eleven Arc Light support personnel redeploying from U-Tapao Air Base, Thailand, died in the accident. ¹⁴⁸
1969	
17 December	The first C-5A Galaxy was delivered to the 443d Military Airlift Wing, Altus Air Force Base, Oklahoma. Built by the Lockheed-Georgia Company, the C-5 addressed several requirements, especially the need for an aircraft that could accommodate the outsized material that the Army increasingly came to use. With nose-loading of the full cargo area, the Galaxy could carry most types of large equipment, including the 102,000-pound M-60 tank. With a length of 242.8 feet, a height of 63.1 feet, and a wing span of 222.7 feet, the C-5 was then the largest operational aircraft in the world. Carrying a payload of over 100,000 pounds, it could fly at a maximum cruise speed of 470 knots over a distance of 5,500 nautical miles without refueling. With refueling, the range was unlimited. It had a maximum useful load capacity of 265,000 pounds. ¹⁴⁹
1970	
17 January- 10 February	During the Nigerian civil war, C-141s flew 21 missions from Charleston Air Force Base, South Carolina, to Lagos, carrying 436.5 tons of supplies to aid Biafran refugees. The aircraft were repainted to obscure their origin in accordance with Nigerian wishes. ¹⁵⁰
6 June	The first C-5A Galaxy was delivered to an operational wing, the 437th Military Airlift Wing at Charleston Air Force Base, South Carolina. ¹⁵¹
1972	
18-29 December	The intensified bombing of strategic sites in North Vietnam during <i>Linebacker II</i> required KC-135s to fly more than 1,300 sorties to support both bombers and fighters. ¹⁵²

- 29 January-29 March Following signing of Vietnam peace pacts, Air Force and commercial aircraft airlifted American and Allied forces and equipment from South Vietnam in Operation *Countdown*.¹⁵³
- 12 February-4 April Operation *Homecoming* returned 591 American prisoners of war incarcerated in Indochina to the United States. C-141s, supported by UH-1 helicopters and a C-9 aeromedical aircraft in Vietnam, airlifted the former prisoners to the United States, where C-9s transferred them to military hospitals. An HC-130 and a C-130 also supported the effort. For their role in the operation, aircrews received the Mackay Trophy awarded by the National Aeronautic Association for the most meritorious flying operation by an Air Force organization during the year.¹⁵⁴
- 13 October-13 November American support to Israel during the Yom Kippur War included aerial resupply. C-5s and C-141s flew 567 sorties from the United States to deliver 22,318 tons of war materiel in Operation *Nickel Grass*. The operation demonstrated the desirability of aerial refueling for airlift--political sensitivities led many allies to refuse aircraft clearances and limited the availability of basing facilities. Aerial refueling would assure the capacity to project military forces in future, controversial crises. The operation also identified the need for more airlift capability.¹⁵⁵
- 1974
- 1 May A KC-135 refueled a C-5 for the first time in an operational setting.¹⁵⁶
- 29 July Secretary of Defense James R. Schlesinger directed the Air Force to consolidate all military airlift under a single manager. The Air Force would be the single manager for all armed services. The directive, in part, grew out of experiences in the war in Southeast Asia and in *Nickel Grass* that identified the need to consolidate assets, eliminate redundant operations, and reduce coordination problems.¹⁵⁷
- 30 August A C-5 completed the first long-range, air refueled mission over water. The aircraft flew from Dover Air Force Base, Delaware, to Clark Air Base, Philippines, covering 10,060 statute miles in 21 hours and 30 minutes in a mission nicknamed *Cold Juice I*. KC-135s transferred 289,000 pounds of fuel. A total of eight Cold Juice demonstration flights would be flown. The last of these flights in January 1975 led to the development of cell air refueling procedures and techniques for strategic airlift.¹⁵⁸

1 December 1974-7 July 1975 In stages, the Military Airlift Command acquired the tactical airlift units of the Tactical Air Command and overseas commands to implement the 1974 decision to have a single manager for airlift. The process was completed in July 1975 with the transfer of the last CT-39 administrative aircraft to the Military Airlift Command.¹⁵⁹

1975

1974



As the pro-Western governments in Indochina were overrun by Communist forces in 1975, refugees evacuated to safe havens on C-130 Hercules and other transport aircraft in Operation New Life.

4-30 April As pro-Western governments in Southeast Asia collapsed before Communist forces, the largest airlift evacuation took place. Military Airlift Command C-141s and C-130s under the operational control of Pacific Air Forces flew 375 missions to carry 50,493 Vietnamese and Cambodian refugees from Indochina to staging areas in the Pacific in Operation New Life, which concluded with the fall of Saigon. KC-135s assisted in the evacuation of Americans, local national refugees, and citizens of friendly nations from Cambodia and the Republic of Vietnam. As Communist forces overran the rural areas and cities, the tankers maintained a ground alert posture. When the situation worsened around Phnom Penh, Cambodia, KC-135s refueled tactical aircraft flying cover for the evacuation operations. During the fall of Saigon, tankers provided air-to-air fueling throughout the evacuation.¹⁶⁰

- 4 April-9 May Under Operation *Babylift*, orphans were airlifted out of South Vietnam and Cambodia to the Philippines, Guam, and Hawaii. C-141s and commercial carriers transported 1,794 Southeast Asian orphans to the United States.¹⁶¹
- April-June Military Airlift Command aircraft carried 8,556 tons of supplies and 5,469 specialized passengers, including cooks and medical personnel, to assist Indochinese refugees housed in reception areas in the Pacific.¹⁶²
- 29 April-16 September During Operation *New Arrival*, 251 C-141 and 349 commercial aircraft missions brought 121,562 Indochinese refugees to the United States from Pacific staging areas.¹⁶³
- 15 May C-141s transported 1,165 Marines and 120.7 tons of equipment from the Philippines and Okinawa to Thailand in preparation for the recovery of the USS *Mayaguez*, which had been captured by Cambodian Communists near Koh Tang Island. HH-53s transported Marines to the island to rescue the ship's crew. Redeployment was accomplished by a C-5 and C-141s. During the operation, KC-135s provided refueling support.¹⁶⁴
- 20 August Secretary of Defense James R. Schlesinger directed the Air Force to provide air refueling support for the peacetime training and transoceanic movements of US Navy and Marine Corps tactical aircraft. He also tasked the Air Force with providing inflight refueling sufficient to sustain support of general purpose forces during increased periods of tension. Strategic Air Command had previously balked at additional refueling requirements levied upon its existing tanker force, but the directive gave impetus to the acquisition of additional tankers. A memorandum of understanding for USAF refueling support for Navy and foreign military sales aircraft was signed on 23 July 1976.¹⁶⁵
- 7 September-3 November Following the Angolan civil war, Air Force-managed civil aircraft flew 31,597 refugees to Portugal.¹⁶⁶

5 February-5 March Aircrews flew 2 C-5, 29 C-141, and 33 C-130 missions to airlift 696 workers and 926 tons of emergency equipment and supplies to Guatemala after an earthquake left homeless 1.5 million people--a quarter of Guatemala's population--and killed or injured nearly 100,000.¹⁶⁷

19-21 August Following increased tension on the Korean Peninsula caused by the murder of 2 American Army officers in the Demilitarized Zone by North Koreans, 11 C-141 missions airlifted 212 F-4 air and ground crewmembers and 132 tons of their equipment from Kadena Air Base, Japan, to Kunsan Air Base, Korea, in Operation *Paul Bunyan*. Later, 3 C-5 and 13 C-141 missions airlifted an F-111 force of 348 passengers and 299 tons of cargo from Idaho to Taegu Air Base, Korea. Thanks to refuelings from KC-135s, the C-5s were able to fly their missions nonstop. Two additional C-141 missions transported 38 passengers and 26 tons of ammunition from Florida to Osan Air Base, Korea.¹⁶⁸

26-29 November 1976 and 20-22 January 1977 A disastrous earthquake in Turkey led to the airlift of 486 tons of support equipment and supplies from Germany, the United Kingdom, Italy, and Cigli Air Base, Turkey, to Incirlik Air Base, Turkey, by Military Airlift Command aircraft. One C-5, 14 C-141, and 15 C-130 missions delivered tents, heaters, forklifts, and other supplies to Incirlik. From Incirlik, 40 C-130 missions transferred nearly 520 tons of supplies and airlift control element members to Van Air Field, Turkey. In the second phase of the operation, 3 C-130s transferred tents to Incirlik, and 7 C-130 missions moved 86 tons of cargo from Incirlik to Van.¹⁶⁹

- 2-12 February In Operation Snow Go, nearly 1,000 tons of snow removal equipment and 495 passengers from as far away as Colorado and North Carolina were airlifted in 10 C-5, 11 C-141, and 28 C-130 missions to Niagara Falls and Buffalo, New York, after a heavy snowfall crippled Buffalo. The redeployment of 752 tons of equipment and 383 people was accomplished in 5 C-5, 5 C-141, and 31 C-130 missions.¹⁷⁰
- 19 February A required operational capability statement called for more powerful engines on KC-135s. More efficient jet engines would give the Stratotankers greater flexibility, at lower cost, than was afforded by the original Pratt and Whitney engines. Modern engines would permit the refuelers to operate from shorter runways, allow takeoffs at a heavier gross weight, reduce fuel consumption and environmental pollutants, and lower maintenance and operating costs.¹⁷¹

- June A C-5 Galaxy crew commanded by Captain David M. Sprinkel transported a 40-ton superconducting electromagnet from Chicago's O'Hare International Airport to Moscow's Shermetyevo Airport for use in a joint Soviet-American energy research program. For this longest flight for the size and weight of the payload, the crew was awarded the Mackay Trophy for the most meritorious flight of the year by Air Force personnel.¹⁷²
- August Fatigue-life tests conducted by Boeing in 1973 had determined that the lightweight aluminum used on the lower wing surface of KC-135s at the request of the Air Force was brittle and prone to crack with age and had a life expectancy of less than 10,000 safe flying hours. Based on the Boeing study, the Air Force began a modification program, replacing the lower wing skins with the same weight aluminum used on commercial 707 models. Replacing the aluminum extended the service life of the aircraft to 27,000 flying hours and would keep KC-135s operational into the 21st century.¹⁷³
- 1978
- 23 March Captain Sandra M. Scott, a KC-135 pilot, became the first female tanker commander to perform alert duty for the Strategic Air Command.¹⁷⁴
- 16 May-16 June One C-5 mission and 42 C-141 missions flew 931 tons of cargo and fuel and 124 passengers to assist Belgian and French forces responding to a Katangan rebel invasion of Zaire's Shaba province. Later, 61 C-141 and 11 C-5 missions moved Pan-African peacekeeping forces to Zaire and concurrently redeployed French and Belgian forces and cargo to Europe. 1,619 tons and 1,225 This airlift totaled passengers. Throughout the operation, supplies and personnel were airlifted to Zaire. Combined crews commanded by Lieutenant Colonel Robert F. Schultz and Captain Todd H. Hohberger flew a C-5 mission carrying a 130,000-pound outsized load and 11 French Legionnaires, earning the Mackay Trophy for the most meritorious flight of the year in the Air Force.¹
- 19 June A program management plan for the design and implementation of an improved aerial refueling system for the KC-135 fleet incorporated technology designed for the pending KC-10. Improvements included development of an advanced aerial refueling boom. The advanced boom's new features included a

fly-by-wire flight control capability, an automatic load alleviation system, and an advanced nozzle. The new boom's increased length permitted receivers to remain clear of tanker turbulence, which resulted in greater fuel efficiency during fueling operations.¹⁷⁶

- 21-30 September Airlift was called into service following Israel's invasion of Lebanon. Aircrews supported United Nations peacekeeping forces, transporting 2,462 passengers and 3,280 tons of equipment and supplies. Additionally, they delivered 85 tons of relief supplies to Lebanon.¹⁷⁷
- 19 November-22 December 22 December 22 December 22 December 22 December 23 December 24 The mass suicide of American expatriate members of the People's Temple colony at Jonestown, Guyana, led to Military Airlift Command C-141s and C-130s flying 59 missions to recover and transport 915 bodies to the United States and to carry support personnel and supplies. Additionally, helicopter missions were required to move the bodies from the remote site of the sect to the airport at Georgetown. The Southern Air Division and the 1550th Aircrew Training and Test Wing supported the effort.¹⁷⁸
- 9 December 1978-17 February 1979
 Deteriorating relations with Iran resulted in the exodus of Americans from Iran. C-5s and C-141s evacuated 5,800 people and 687 tons of cargo.¹⁷⁹
- 1979
- 31 March-15 April Fifteen missions flown by 2 C-5s, 1 C-130, and 12 C-141s brought equipment into Pennsylvania following a reactor malfunction in the Three-Mile Island nuclear power plant near Harrisburg. A 40,000 pound observation station to measure upper-atmosphere conditions, lead bricks, and potassium iodine made up part of the cargo. The aircraft later flew out barrels of contaminated water.¹⁸⁰
- 19-20 April Following an Easter Sunday earthquake in Yugoslavia, 7 C-141 and 4 C-130 missions flew 139 tons of cargo to Titograd International Airport.¹⁸¹
- 31 August-21 November After Hurricane David swept through the Caribbean, tactical and strategic transports airlifted 2,881 tons of relief supplies and 1,358 passengers on 251 missions. An additional 32 tons of cargo and 35 passengers arrived at Jamaica.¹⁸²

- 4 December The first production model C-141B Starlifter, a stretched C-141A, was delivered to the 443d Military Airlift Wing, Altus Air Force Base, Oklahoma. The modified aircraft was 23.3 feet longer than the original model, providing about a third more interior space, and was capable of air refueling.¹⁸³
- 10 December An Air Force program management directive called for development of the C-X, an airplane that could carry outsized cargo over intercontinental distances to austere airfields. The airplane was to be designated the C-17 Globemaster III.¹⁸⁴
- 19-27 December To support British Commonwealth troops monitoring a ceasefire and national elections in Zimbabwe, six C-141 missions carried personnel and equipment to Cairo, Egypt; Harare, Zimbabwe; and Mombasa, Kenya. Additionally, aircrews flew 23 missions to Harare carrying 335 passengers and 428 tons of cargo, including helicopters. Three months later, 2 C-5 missions returned the British monitoring contingent of 120 people together with 100 tons of equipment to the United Kingdom.¹⁸⁵

- 6 April A C-141B carried out its first operational mission, flying from Beale Air Force Base, California, to RAF Mildenhall, United Kingdom. A KC-135 refueled the transport aircraft over the Great Lakes.¹⁸⁶
- 8 June Captain Susan R. Regele commanded the first all-woman airlift mission, flying a C-9 out of Scott Air Force Base, Illinois. During World War II, women had ferried aircraft to operating locations in the United States.¹⁸⁷
- September 1980-May 1989 C-141s airlifted supplies and personnel for an American E-3A airborne warning and control system (AWACS) operation in Saudi Arabia called *Elf One*, which monitored the area during the war between Iran and Iraq. Initially, two KC-135s were based at the Riyadh Royal Saudi Air Base to refuel the surveillance aircraft. Later, KC-10s became involved.¹⁸⁸
- 12-26 October After earthquakes struck Al Asnam, Algeria, 1 C-130, 2 C-5, and 14 C-141 missions airlifted about 340 tons of relief supplies to Algeria.¹⁸⁹

January C-130s delivered 984 tons of material to El Salvador to assist the Salvadoran government in its battle with leftist guerrillas. This was the first of many airlifts in support of the anti-Communist government.¹⁹⁰

20-25 January Following an American agreement with Iran, 52 American hostages held in the American Embassy in Tehran were released and flown to Algeria. Two C-9s flew the hostages to Germany for medical observation. Five days later, a C-137 returned the former hostages to the United States.¹⁹¹



A KC-10 Extender used a hose-and-drogue refueling system to refuel an A-37. The KC-10 was the first aerial tanker that could use both the refueling boom and the hose and drogue on a single mission. (McDonnell Douglas photo)

17 March The long-awaited McDonnell Douglas KC-10A Extender, the advanced tanker-cargo aircraft proposed in 1967, was delivered to the Strategic Air Command. Justification for a new aerial refueler had been based on KC-135 deficiencies, including inadequate range and dispersal capability, and excessive bomber-tanker alert strike team reaction time. The Air Force

version of the DC-10 wide-body commercial aircraft was manufactured with military avionics, an aerial refueling boom, equipment for probe and drogue-type fueling, a refueling receptacle, and a station for the refueling operator. The aircraft could refuel using both boom and probe and drogue methods during the same mission. In addition, the KC-10 had 6 fuel tanks, with a total capacity of more than 356,000 pounds of fuel, and the ability to transfer 1,500 gallons per minute. The plane was substantially larger than the KC-135 and was capable of carrying almost twice as much fuel. Used as a tanker, it had an unrefueled range of more than 11,500 miles and was air refuelable. When performing its secondary mission, the KC-10 could transport up to 75 people and approximately 170,000 pounds of cargo over a non-refueled range of about 4,400 miles. The first KC-10As were assigned to the 2d Bombardment Wing, Barksdale Air Force Base, Louisiana, on 1 November 1981.¹⁹²

- 26 January Boeing delivered the first KC-135E, a Stratotanker refitted with Pratt and Whitney JT-3D engines, to the Air Force. The engines were acquired from commercial airlines and had previously been used on Boeing 707s and 720s. The E model's refueling capability increased by 25 percent while the engine significantly decreased noise and pollution.¹⁹³
- 28 January 1982-27 May 1987 Lockheed-Georgia completed production wing modification of the C-5A, replacing the entire wing structure to counteract wing cracks that had reduced the payload and threatened the service life of the aircraft.¹⁹⁴
- 10 June The first aerial refueling flight by an all-woman crew occurred when a KC-135 crew commanded by Captain Kelly S. C. Hamilton refueled a B-52.¹⁹⁵
- 21 June The geographic range of tanker operations increased when a KC-10 refueled a C-141 750 miles north of the South Pole. While establishing the mark for the southernmost inflight fueling, the KC-10 transferred a record 67,400 pounds of aviation gasoline during the rendezvous in support of the Military Airlift Command's *Deep Freeze* resupply operation in Antarctica.¹⁹⁶
- 6-13 July C-130s provided humanitarian assistance by airlifting 113 tons of sorghum and vegetable oil to refugees during the Chadian civil war.¹⁹⁷

24-30 December Following an earthquake in Yemen, C-141s and civilian aircraft supplied 187 tons of aid, including water tanks, tents, and generators.¹⁹⁸

- 14-24 February Operation *Early Call* in Egypt demonstrated the KC-10's dual importance as a tanker and a cargo carrier. Three KC-10s were stationed at Cairo West Airport to refuel E-3A AWACS aircraft being used to monitor Libyan air traffic and preparations for a possible attack on Khartoum, Sudan, by the regime of Muammar Qadhafi. During their 10-day deployment, the KC-10s flew 21 air refueling sorties, servicing both American and Egyptian aircraft. The KC-10s also carried cargo during deployment to the Middle East. Military Airlift Command aircraft transported 832 passengers and 1,340 tons of cargo during the operation.¹⁹⁹
- 15 August-15 September C-141 missions flew material and other cargo to Chad as part of a US security assistance program. Much of the material supported Zairian troops--some of whom were also transported by the Military Airlift Command--assisting the Chadian government against a Libyan-backed insurgency.²⁰⁰
- 1-12 September KC-135s flew aerial refueling missions in support of the American search and rescue effort following the Soviet downing of Korean Air Lines Flight 007 near Sakhalin Island. The civilian airliner, with 269 persons aboard, had been shot down without warning, killing all crewmembers and passengers. Tankers flew 157 sorties during the search for survivors and the aircraft's flight data recorder. C-141s transported 36 passengers and 36 tons of search equipment during the operation.²⁰¹
- 3-25 September In the wake of the Israeli invasion of Lebanon, a multinational force entered Lebanon to attempt to stabilize the region. US Marines participated in this mission. As part of Operation *Rubber Wall*, aircrews flew 85 C-141, 24 C-5, and 4 C-130 missions to airlift 4,058 tons of ammunition and other cargo to staging areas for shipment to the Marine contingent in Lebanon. Smaller airlifts continued until the Marines left Lebanon in February 1984.²⁰²
- 5 September Captain Robert J. Goodman and the crew of a KC-135 saved an F-4. After the fighter lost engine power over the North Atlantic and its pilot was forced to jettison the centerline fuel tank, the KC-135 towed, escorted, and provided four inflight refuelings to

the airplane, enabling the F-4 to land safely at Gander International Airport, Newfoundland. For this effort, the KC-135 crew earned the Mackay Trophy for the most meritorious flight of the year.²⁰³



Soldiers of the 82nd Airborne Division prepared to board a C-141 Starlifter at Pope AFB, North Carolina, for deployment to Grenada in Operation Urgent Fury in 1983.

22 October-December Installation of a repressive Communist dictatorship on the Caribbean island of Grenada raised concerns about the safety of American and other foreign nationals on the island and about the stability of the region and the safety of democratic institutions. In alliance with the Organization of Eastern Caribbean States, the United States invaded Grenada. KC-10s and KC-135s began aerial refueling operations for Operation Urgent Fury on 22 October. Operating from several bases in the continental United States, the tankers supported virtually all

operations, refueling numerous types of USAF aircraft. Much

of their activity supported C-130s and C-141s involved in the operation, including the airlift of American forces to the island on 25 October. During the deployment phase, airlifters flew 496 missions, carrying 11,389 passengers, including nearly 500 Army Rangers airdropped onto the island, and 7,709 tons of cargo. They flew 203 missions to convey 2,805 tons of cargo and 12,424 passengers supporting ground operations. Following the cessation of hostilities on 2 November, redeployment began on 4 November and continued into December. During this phase, 4,859 tons of cargo and 12,098 passengers were delivered during 292 missions.²⁰⁴

- 23 October-An aeromedical airlift by 8 C-141s and 12 C-9As brought 78 Americans injured during the terrorist bombing of the Marine 16 November barracks in Beirut from Lebanon to medical facilities in the United States and Europe.²⁰⁵
- 1-5 November Following an earthquake in Turkey, 4 C-141 and 13 C-130 missions transported flour and other relief supplies. The C-141s delivered their shipments to Incirlik Air Base, Turkey, where the supplies were loaded onto C-130s and sent to Erzurum.²⁰⁶

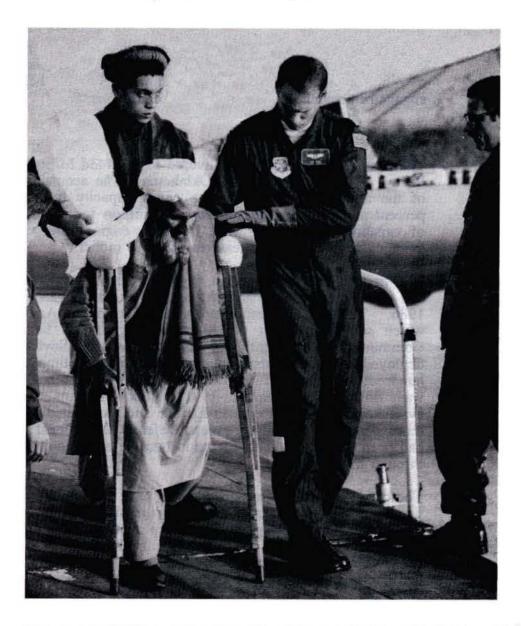
- 19 March-Airlifters supported the Operation Eagle Lift deployment of E-3A AWACS aircraft to Egypt upon the request of Egyptian 9 April and Sudanese officials who perceived a threat to their countries from Libya. In sum, 28 C-5 and 17 C-141 missions airlifted 1,286 passengers and 1,594 tons of cargo. Five KC-135 and 2 KC-10 missions provided aerial refueling.²
- 6 April The first leased Gates Learjet C-21As were delivered to the 375th Aeromedical Airlift Wing, Scott Air Force Base, Illinois, to augment operational support airlift missions. The eightpassenger aircraft, a military version of the Learjet 35A business jet, had a maximum cruise speed of 480 knots true airspeed and a range of 2,100 nautical miles. The jet could carry both passengers and cargo and could be converted to move litter patients. Together with the Beech C-12F, the C-21A would replace the CT-39. 208
- 14 May The first leased Beech C-12F was delivered to the 375th Aeromedical Airlift Wing, Scott Air Force Base, Illinois. The twin turboprop aircraft, a military version of the Beechcraft Super King Air B200C, was used for operational support airlift of passengers and cargo.²⁰⁹

- 20 June After completion of a two-year operational test and evaluation program, the first KC-135R was delivered to the 384th Air Refueling Wing, McConnell Air Force Base, Kansas. The Strategic Air Command formally accepted the airplane on 2 July. The R model was an A model upgraded with General Electric/Snecma International CFM-56 engines and other Boeing Military Airplane Company completed modifications. The new R model achieved a 50 percent the modifications. increase in fuel transfer capability, a 25 percent reduction in fuel consumption, and a 20 percent shorter takeoff distance over The noise level fell by 95 percent, smoke the A model. emissions by 76 percent, and gaseous emissions by 20 percent.210
- 19-21 September A C-141 flew to Kinshasa, Zaire, with three passengers and nine tons of medical supplies and equipment in support of an acquired immune deficiency syndrome (AIDS) research project conducted by the US National Institute of Health.²¹¹
- 22 December A C-141 carried eight 3,000-gallon water tanks, tents, and blankets from Italy to Kassala, Sudan, for the first American relief mission for the benefit of Ethiopian refugees in Sudan.²¹²

- 21 January Lieutenant Colonel David E. Faught, an evaluator pilot conducting a pilot proficiency exercise, saved the lives of the KC-135 crew and prevented the loss of the aircraft after the nose gear on the Stratotanker failed to extend, preventing a landing. After 13 hours in the air and numerous refuelings, Colonel Faught elected to bring the airplane down and safely made a nose-up landing. He received the Mackay Trophy for the outstanding Air Force flight of the year.²¹³
- 5-9 March Airlift crews flew four humanitarian relief missions to the Sudan, Niger, and Mali to counter famine. The 123 tons of cargo included medicine, powdered milk, and canned beans.²¹⁴
- May-June Aircraft returned the 245 American troops that had remained in Grenada after Operation Urgent Fury to the continental United States.²¹⁵
- 4-10 July As forest fires raged over thousands of acres in Idaho and California, C-141s flew 10 missions, moving 385 passengers and 181 tons of fire retardant and other cargo for the fire fighting operation. C-130s flew 200 sorties, dropping over 280 tons of fire retardant.²¹⁶

- 1985 In support of the American relief effort, aircrews flew four C-5, 21-30 September one C-141, and five C-130 missions to transport about 300 persons and 375 tons of cargo to Mexico City following massive earthquakes on 19 and 21 September.²¹⁷ October Heavy flooding in Puerto Rico in the wake of Tropical Storm Isabella resulted in five C-5, two C-141, and three C-130 humanitarian missions to the island to transport 361 tons of cargo and 66 passengers.²¹⁸ 15-18 November After the eruption of a volcano unleashed torrents of mud and water on 13 November, C-130s transported to Colombia 50 tons of relief supplies and 32 tons of fuel for US Army helicopters engaged in search, rescue, and relief operations.²¹⁹ 1986
- 8 January The first C-5B Galaxy was delivered to the 443d Military Airlift Wing, Altus Air Force Base, Oklahoma. The acquisition of 50 of the aircraft increased outsize cargo capacity by nearly 60 percent and provided an additional 8 million ton-miles per day of capability. A new wing, updated engine, and enhanced avionics were among the features of the B model.²²⁰
- 1-5 March The first of the humanitarian flights to airlift Afghan patients and provide aid to Afghan refugees in Pakistan began in March 1986. The mission responded to the McCollum Amendment, which sought to assist the Mujahideen guerrillas battling the Communist government of Afghanistan and Soviet forces deployed to support that government. By the time the onehundredth Department of Defense Afghanistan relief mission was flown in November 1991, 1,200 Afghans had been evacuated for medical care in Europe and the United States and more than \$50 million in excess Defense Department property had been delivered. The operation became a continuing mission through May 1993.²²¹
- 5 March The crew of a KC-10 assigned to the 68th Air Refueling Group was awarded the Mackay Trophy for the most meritorious flight in the Air Force during 1986. A deployment of Marine A-4M Skyhawks across the Atlantic Ocean for a *Coronet East* deployment nearly resulted in disaster when adverse weather and debris from a crippled plane on the runway prevented three A-4s and a supporting KC-10 from landing at Santa Maria Air Base, Portugal. The aircraft did not have sufficient fuel to divert to another location. Realizing the plight of the airborne crews, aircraft commander Captain Mark C. Felman and the crew of a KC-10 that had previously landed at Santa Maria after refueling a contingent of A-4Ms "stopped [ground] refueling,

pulled away the ladders, left two crewmen in Base OPs, didn't pay for the gas, didn't have a clearance, didn't align [the] INS [inertial navigation system], and made an intersection takeoff in front of the mishap A-4 in near zero-zero weather." The KC-10 carried sufficient fuel so that with an additional refueling from a KC-10 diverted from another location all the aircraft arrived safely at Rota Air Base, Spain.²²²



The humanitarian evacuation of Afghan refugee patients to obtain medical care in the West bolstered the morale of the guerrillas seeking to oust the Soviet-backed government in Afghanistan in the later 1980s.

- 26-28 February President Ferdinand Marcos boarded a C-9 while most of his entourage boarded a C-141 that would take them into exile following massive political protest in the Philippines. After a stopover in Guam, the entire party flew on the C-141 to Hawaii.²²⁷
- 14-15 April Twenty-eight KC-10s and KC-135s contributed to Operation *El Dorado Canyon*, the air raid against suspected terrorist strongholds in Tripoli and Benghazi, Libya. The attack was in retaliation for terrorism sponsored by Libyan leader Muammar Qadhafi. After departing from the United Kingdom, the tankers refueled the F-111 strike force four times, maintaining radio silence for the entire mission. On the return leg immediately following the joint Air Force-Navy raid, the tankers refueled each F-111 twice before the fighter-bombers landed in the United Kingdom.²²³
- 19-28 July During Operation *Haylift*, C-141s and C-130s flew 32 missions to airlift about 500 tons of donated hay to drought-stricken farmers in 7 southeastern states.²²⁴
- 22-23 September Two C-5s transported 174,185 pounds of humanitarian cargo to the Philippines. This shipment constituted the largest single humanitarian airlift yet flown under the auspices of the Denton Amendment, as revised in fiscal 1986, which allowed no-cost Department of Defense transportation of privately-donated humanitarian cargo anywhere in the world.²²⁵
- 11-16 October Airlift aircraft began transporting food, medicine, and other relief supplies to El Salvador's capital, San Salvador, after the city was virtually cut off from the rest of the world by a devastating earthquake that destroyed 95 percent of the buildings.²²⁶

June

The Strategic Air Command and Military Airlift Command signed an extension of the memorandum of understanding for KC-10 operations, an agreement by which Strategic Air Command would maintain operational command and control of the Extender in both its refueling and airlift roles.²²⁸

22 July 1987-21 December 1988 Tankers participated in Operation *Earnest Will*, the US Navy escort of reflagged Kuwaiti oil tankers through the Persian Gulf. They refueled Navy fighters protecting the Kuwaiti convoys from Iranian attack during the war between Iran and Iraq. Airlifters transported Navy forces that cleared mines from shipping lanes.²²⁹

- November-December Following rioting by Cuban detainees from the Mariel boatlift at the Federal Correction Center at Oakdale, Louisiana, and the Atlanta Federal Prison, Georgia, airlifters transported federal marshals and sharpshooters to riot sites. They later airlifted 715 prisoners and 105 accompanying guards to Dobbins, Missouri, and Augusta, Georgia, where the detainees were transferred to other prisons.²³⁰
- In Busy Tiger's initial test, KC-135s and support equipment and 16 November personnel deployed from Grissom Air Force Base, Indiana, to Beale Air Force Base, California, to develop unit integrity and skills by planning short-notice deployments and conducting operations away from home station. The concept of unit deployments for aerial refueling operations was new. Historically, tanker activities had been tied to specific bomber or fighter requirements. Tanker support for combat operations normally meant singling out specific refuelers, frequently from several units, to handle a particular assignment. **Busy** Tiger directed that a numbered air force assign a specific unit to deploy from five to eight tankers, along with sufficient personnel and equipment to sustain operations for up to a week.231

- 17-18 March More than 50 transport aircraft carried approximately 3,200 US soldiers to Honduras in support of emergency deployment readiness exercise *Golden Pheasant*, a response at the urging of the Honduran government to a border crossing by forces of the Sandinista government of Nicaragua. Twenty-three tankers refueled 31 airlift planes, transferring a total of 1.49 million pounds of fuel.²³²
- April C-141s furnished the airlift needed to rotate the American contingent of the Sinai Multinational Force and Observers. The Starlifters transported about 1,000 passengers between McChord Air Force Base, Washington; Royal Air Force Station Nasrani, Egypt; and Pope Air Force Base, North Carolina.²³³
- 5-8 April Eight C-5s and 22 C-141s began airlifting 1,300 security specialists from the continental United States to Panama, where political instability threatened the safety of the several thousand Americans living there. The total deployment consisted of 45 missions.²³⁴

- 17 April-23 July Warming relations between the Soviet Union and the United States led to joint verification experiments monitoring nuclear testing. C-5s, refueled by KC-10s, carried test equipment and scientists from the United States to Europe and then on to Semipalatinsk in the Soviet Republic of Kazakhstan. The Mackay Trophy went to Captain Michael Eastman and the rest of the first crew to land in the Soviet Union on this sensitive Department of Energy mission.²³⁵
- 18-19 April Tankers provided extensive air refueling support to US Navy aircraft pounding Iranian offshore oil platforms and warships in the Persian Gulf. The two-day American campaign was a measured military response by the Reagan Administration to Iran's provocative mining of international waters, which had injured 10 sailors when a US Navy frigate hit an underwater mine on 14 April.²³⁶
- 1 July-31 August With ratification of the Intermediate-Range Nuclear Forces Treaty, the Soviet Union and the United States agreed to destroy their stockpiles of intermediate-range missiles. To verify compliance, each side sent inspectors to conduct on-site inspections of production facilities. During Phase I, C-5s and C-141s transported Soviet inspectors within the United States and carried American inspectors to the ports of entry in the Soviet Union. Phase I inaugurated a continuing mission.²³⁷
- 1 August Strategic Air Command initiated a KC-135 low-altitude refueling training program, with missions flown down to 3,000 feet above ground level. The normal altitudes for aerial refueling were above 10,000 feet.²³⁸
- 15-28 August C-5s airlifted a 500-man United Nations peacekeeping force from Trenton, Ontario, to Incirlik Air Base, Turkey, and Baghdad, Iraq, in Operation *Post Road*. Forty KC-135 and KC-10 missions provided aerial refueling. The mission of the peacekeeping force was to help monitor a United Nationsnegotiated cease-fire between Iran and Iraq.²³⁹
- 22 August-1 September Aircrews flew 1 C-5, 1 C-130, and 29 C-141 missions to Bozeman, Montana, and West Yellowstone, Wyoming, to transport 2,497 Army firefighters and 420 tons of equipment, as the worst forest fire in Yellowstone National Park's history raged over 582,000 acres.²⁴⁰
- September-October C-5s, C-141s, and C-130s flew to Kingston, Jamaica, after Hurricane Gilbert--the most violent storm ever documented in the Western Hemisphere--devastated the island on 12 September. Five more C-5 missions were flown in October in support of the continuing humanitarian relief effort.²⁴¹

10 December 1988-31 December 1989 Two C-141s loaded with humanitarian relief supplies arrived in Yerevan, Armenia, on 11 December. These, together with a C-5 mission to Incirlik Air Base, Turkey, were the first of 20 humanitarian missions to assist Soviet Armenia after a massive earthquake on 7 December claimed the lives of more than 40,000 persons and left another 500,000 homeless. The 572 tons of cargo included rescue equipment, blankets, tents, and medical supplies. During the operation, 188 passengers-including physicians sent to Armenia and patients evacuated-were transported. For the first time since World War II, the American aircraft on these missions did not carry Soviet observers.²⁴²

1989



On 12 January 1990, paratroopers from the 82d Airborne Division parachuted from C-141 Starlifters to Fort Bragg, North Carolina, upon completion of duty in Panama during Operation Just Cause.

3 February The Secretary of Defense formally implemented the new Department of Defense antidrug mission mandated in the Fiscal Year 1989 Defense Authorization Act, which directed military agencies to support the antidrug mission provided their participation did not degrade military preparedness.²⁴³ Both tanker and airlift assets became involved in this mission.

- 5 March-May C-5s, C-130s, and a C-141 airlifted a United Nations Transition Advisory Group and its cargo to Namibia, fulfilling a United Nations requirement to transport observers and a large quantity of cargo. In all, the airlift moved 854 passengers and 1,023 tons of cargo. Dubbed *Election District*, the operation supported United Nations peace accords providing for the withdrawal of Cuban troops from Angola, the pullout of South African forces from Namibia, and independence for Namibia.²⁴⁴
- 26-28 March Two C-130s transported 14 people and 10 tons of cargo from Bangkok, Thailand, to Savannakhet, Laos, where the landing party was to begin searching for American troops missing in action since the war in Southeast Asia.²⁴⁵
- 27 March-April Seven C-5 and 4 C-141 missions assisted oil cleanup efforts after an oil tanker ran aground near Valdez, Alaska, producing the worst oil spill ever in North America. On 27 March, a C-5 transported two Navy oil skimmers to Elmendorf Air Force Base, Alaska. Additional missions delivered oil spill cleanup equipment, other cargo, and passengers.²⁴⁶
- 16 May Following deteriorating relations between the United States and Panama and a presidential decision ordering military dependents not resident on American bases in Panama to depart, the Military Airlift Command evacuated 5,915 dependents, mainly on civil aircraft, in Operation *Blade Jewel*.²⁴⁷

September-November In the aftermath of Hurricane Hugo, which devastated islands in the Caribbean as well as Charleston, South Carolina, C-5s, C-130s, C-141s, and a KC-10 from the Strategic Air Command flew 215 missions, carrying over 3,330 passengers and more than 8,200 tons of cargo. Among the passengers were military police deployed to the Virgin Islands in Operation *Hawkeye* to recover prisoners who had escaped during the storm.²⁴⁸

- 4 October A C-5 landed on an ice runway at McMurdo Sound, Antarctica, as part of Operation *Deep Freeze* to resupply the scientific community there. The mission marked the first landing of a C-5 on the Antarctic continent and was made possible by aerial refueling from a KC-10.²⁴⁹
- 18-24 October Airlift aircraft delivered relief equipment and rescue personnel following an earthquake in northern California. Two C-5s transported two 500,000-volt circuit breakers to Moffett Naval Air Station for use in repairing electrical power plants.²⁵⁰

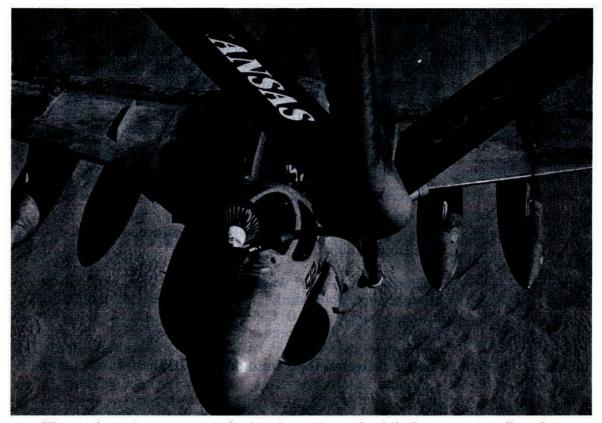
17 December
1989-
14 February
1990Airlift support for the American Operation Just Cause to oust
General Manuel Noriega and restore democracy in Panama
involved C-5s, C-141s, C-130s, C-9s, C-12s, and contracted
civilian airplanes. They flew 775 missions to transport 39,994

passengers and 20,675 tons of cargo. On 20 December, 63 C-141s, 21 C-130s, and 2 C-5s delivered American forces to Panama, with 12 C-141s and 19 C-130s airdropping Army Rangers and their equipment. In the aeromedical evacuation phase of the operation, 20 December through 5 January, 8 C-141 missions and 1 C-130 mission transported 257 wounded soldiers from Panama to the United States. During the humanitarian airlift phase, 27 December-3 January, airlifters carried 3 tons of medical supplies, 10,000 blankets, sheets, and food to Panama. During the redeployment phase, 1 January-14 February, nearly 18,000 troops were returned to the United States. Airlifters and other aircraft were fueled by over 100 KC-10s and KC-135s, which delivered more than 12 million pounds of fuel during 256 sorties conducted from 17 December through 4 January.²⁵¹

- 11 April 1990-March 1991 A C-5 returned the first European-based ground launched cruise missiles (GLCM) to the United States on 11 April for destruction in accordance with the Intermediate-Range Nuclear Forces Treaty. The last of the missile components was airlifted from Sicily.²⁵²
- 7 August 1990-During Operations Desert Shield and Desert Storm, the United 28 February Nations efforts to end the Iraqi occupation of Kuwait, KC-10s 1991 and KC-135s logged over 141,000 flying hours, delivering 1.2 billion pounds of fuel during some 85,000 refuelings and carrying nearly 17,000 passengers and 6,500 tons of cargo. KC-10s released by the Strategic Air Command to the Military Airlift Command carried 1,111 passengers and 12,129 tons of cargo through 10 March 1991. Strategic airlift, using C-5s, C-141s, KC-10s, C-9s, and commercial aircraft, flew 15,976 missions carrying 500,720 people and 542,759 tons of cargo. C-130s and C-21s from the Military Airlift Command flew 52,300 intratheater sorties through 7 August 1991, carrying 514,600 passengers and 245,200 tons of cargo. Military and commercial aircraft airlifted 4,437 litter-borne patients and 7,883 ambulatory ones on intertheater flights, while intratheater airlift carried 1,600 litter-borne and 2,424 ambulatory patients through 10 March 1991.253
- 17 August 1990-24 May 1991 The Civil Reserve Air Fleet was activated for the first time to augment military airlift during *Desert Shield*. The Stage I activation of the Civil Reserve Air Fleet on 17 August 1990 was followed on 16 January 1991 by the activation of cargo aircraft from the long-range international segment of Stage II. The aircraft carried 709,613 passengers and 126,309 tons of cargo.²⁵⁴

17 January

During the first day of the Gulf War, a KC-135R saved an F-117 Stealth fighter. The F-117 was part of the opening assault on Baghdad, Iraq. Due to foul weather, it was unable to make its refueling contact following the attack. With the aircraft running dangerously low on fuel, the Stealth pilot broadcast for assistance. The tanker aircraft commander, Captain David Horton, and his KC-135 crew heard the distress call and arranged a rendezvous. The fighter had difficulty holding position to complete the refueling due to the heavy payload of an unused smart bomb in the weapons bay. To ensure fuel transfer, Captain Horton used the "toboggan" While the aircraft were linked by the refueling maneuver. boom, the tanker descended rapidly and the Stealth behind picked up the speed needed to hold position. With refueling complete, the Stealth pilot saluted the tanker crew: "You guys really saved my bacon."255



Illustrating the potency of global reach and global power, a Guard KC-135E refueled an A-6E during Operation *Desert Storm* in 1991. All E model KC-135s came from Air National Guard and Air Force Reserve units.

- 1 March 1991-14 April 1992 Although the official start of Operation *Desert Sortie*--the redeployment of forces back to the United States from the Middle East--was 10 March, redeployment activities began earlier. From 6 March through 31 May 1991, Strategic Air Command KC-10s and KC-135s, during 11,714 hours aloft, flew 4,925 sorties to deliver 34 million gallons of fuel as well as conducted 2,894 airlift sorties. From 1 March 1991 through 14 April 1992, C-5s, C-141s, C-130s, KC-10s, and commercial aircraft flew 5,892 missions, transporting 473,472 passengers and 173,648 tons of cargo.²⁵⁶
- 4 April Strategic Air Command KC-10s were assigned to the Tactical Air Command's 4th Wing, the first composite wing, which was designed to draw together different airframes needed to function as a self-sustaining, readily deployable unit. Although giving up the aircraft to a different command, the Strategic Air Command remained the single air refueling manager.²⁵⁷
- 6 April In the wake of Desert Storm, Kurds rebelled against the Iraqi regime of Saddam Hussein. With the collapse of the uprising, the Kurds fled to the mountains as Iraqi forces went on the offensive. To protect the Kurds and provide humanitarian assistance, the United Nations mounted a relief effort, of which the American component was called *Provide Comfort*. Through the end of May 1991, KC-135s flew 905 sorties lasting 1,668 hours to deliver 4.5 million gallons of fuel to aircraft protecting the Kurds. They also flew 2,984 airlift sorties. KC-10s later became engaged in the effort. Through June 1992, C-5s, C-141s, C-130s, KC-10s, and commercial aircraft flew a total of 2,083 missions, transporting 23,901 passengers and 101,365 tons of cargo. During the early part of the operation, supplies were flown to Turkey and then airdropped by C-130s to Kurdish positions in Iraq and Turkey.²⁵⁸
- 11 May-13 June Operation Sea Angel was a response to Cyclone Marion, which brought great flooding and destruction to Bangladesh. A strategic airlift of 10 C-5, 14 C-141, and 5 C-130 missions delivered 738 passengers and 832 tons of food, equipment, and supplies to the country. Additionally, an intratheater airlift by C-130s delivered food from depots established in-country.²⁵⁹
- 14-28 June In Operation *Fiery Vigil*, the largest US airlift evacuation since the war in Southeast Asia, military members and their dependents departed Clark Air Base, Philippines, and Subic Bay Naval Station in the Philippines for the United States following the volcanic eruption of Mount Pinatubo. Civil aircraft, C-5s, C-130s, and C-141s brought over 50,000 passengers to safety.²⁶⁰

- 15 September The McDonnell Douglas C-17 test aircraft (T-1) made its first flight. The C-17 was designed to combine the C-5's capability of hauling outsized cargo with the C-130's ability to land at small, austere airfields.²⁶¹
- 28 September In accordance with President George Bush's decision to terminate bomber alert, tankers supporting these bombers were taken off alert.²⁶²
- 1992
- 10-26 February During Operation *Provide Hope*, the Military Airlift Command airlifted food and medical supplies to the new Commonwealth of Independent States. The State Department initiative was designed to alleviate hunger and illness in some of the most needy areas of the former Soviet Union and to demonstrate American support for the establishment of democratic institutions. In Provide Hope Phase I, 10-26 February, 19 C-5 missions and 46 C-141 missions delivered 2,270 tons of cargo to 24 cities in 11 states of the Commonwealth of Independent States. Phase II began 29 February and became a continuing mission.²⁶³
- 4 March A KC-10 landed at Dyagilevo Air Base, near Ryazan, Russia, with the two B-52Gs it had fueled. The arrival of these warplanes on a friendship mission in the former Soviet Union demonstrated the dramatic changes that had occurred in international relations since the late 1980s.²⁶⁴
- 1 April The transfer of overseas C-130s to theater component commanders became effective with the reassignments of the 374th Tactical Airlift Wing to Pacific Air Forces and the 435th Tactical Airlift Wing to United States Air Forces in Europe and with the inactivations of the 322d Airlift Division and the 834th Airlift Division. This reorganization ended the Military Airlift Command's single ownership of airlift assets. The action was in accordance with the 14 February 1992 memorandum issued by Secretary of Defense Richard B. Cheney affecting the ownership of "service-unique and theater-assigned transportation assets."²⁶⁵
- 13 April A KC-135 transferred 22,000 pounds of fuel to C-17 test aircraft T-1 in the first demonstration of the new airlifter's ability to be refueled while airborne.²⁶⁶

- 1992
- 18-19 April C-141s flew five relief missions to Bosnia-Herzegovina's capital of Sarajevo, in the first airlift by the Military Airlift Command to the new nation at war with the Serbia-led remnant of Yugoslavia. The 130-ton cargo consisted of food, blankets, and medical supplies.²⁶⁷
- 1 June The Air Mobility Command was activated, merging the airlift assets of the Military Airlift Command and tanker capabilities of the Strategic Air Command. It was to be "the lead command for requirements, operating procedures, aircrew training, tactics, standardization and evaluation, and overall fleet management for tanker and airlift aircraft."²⁶⁸ The reorganization responded to changing international relations, declining resources for the Department of Defense, and evolving military doctrine.



During 1990, C-5 Galaxys on the flightline at Rhein-Main AB, Germany, awaited their turn to fly to the Middle East in support of Operation *Desert Shield*, the first major global military operation of the post Cold War era. In the foreground is the memorial to the Berlin Airlift, the first major air mobility operation of the Cold War. Air mobility was a critical factor in the demise of the Cold War and the ability to wage war successfully in the newly emerging international order.

APPENDIX

Mackay Trophy

The Mackay Trophy is presented by the National Aeronautic Association to recognize "the most meritorious flight of the year" by the Air Force. The following list indicates air mobility award winners since the creation of the Air Force. The award for 1984 in effect was for a second event in 1983.

- 1963 On 20 July in a nighttime mission under hostile fire, Captain Warren P. Tomsett and the crew of a C-47 assigned to the 1st Air Commando Wing (USAF Special Operations Force) evacuated wounded soldiers from Loc Ninh, Laos, during *Farm Gate* counterinsurgency operations.
- 1964 C-130 aircrews of the 464th Troop Carrier Wing (Tactical Air Command) airlifted refugees from Zaire to France in November as a rebellion threatened the lives of residents and foreign nationals.
- 1967 Flying over the Gulf of Tonkin on 31 May, Major John H. Casteel and the crew of a KC-135 assigned to the 902d Air Refueling Squadron (Strategic Air Command) during the Vietnam War conducted the first emergency multiple air refueling, which involved two F-104s, two A-3s, and two F-4s.
- 1968 Lieutenant Daryl D. Cole of the 374th Tactical Airlift Wing (Pacific Air Forces) displayed conspicuous gallantry on 12 May at Kham Duc, South Vietnam, when he flew a C-130 into the besieged town and evacuated a combat control team despite damage to the aircraft from hostile fire.
- 1973 Military Airlift Command aircrews evacuated released American prisoners of war from Southeast Asia in Operation *Homecoming*, 12 February-4 April.
- 1977 Captain David M. Sprinkel and the C-5 aircrew from MAC's 436th Military Airlift Wing and 512th Military Airlift Wing (Associate) airlifted a superconducting electromagnet from Chicago, Illinois, to Moscow, Russia, for a joint Soviet-American energy research project in June, setting a distance record for the size and weight of the payload.
- 1978 In May, aircrews from MAC's 436th Military Airlift Wing under the command of Lieutenant Colonel Robert F. Schultz and Captain Todd H. Hohberger transported a 130,000-pound outsized load and passengers to Zaire on a C-5 in support of the Zairian efforts to defeat rebels.
- 1983 Captain Robert J. Goodman and his crew from the 42d Bombardment Wing (SAC) saved an F-4, using their KC-135 to refuel, escort, and tow the disabled aircraft on 3 September.

- 1984 On 25 October 1983, Lieutenant Colonel James L. Hobson, Jr., of MAC's 1st Special Operations Wing assumed the lead airdrop position in Operation *Urgent Fury* in his MC-130, flew over Point Salines, Grenada, and, while ground fire arched over the aircraft, conducted the first drop of combat paratroopers from an altitude of 500 feet.
- 1985 While conducting a pilot proficiency exercise on a KC-135, evaluator pilot Lieutenant Colonel David E. Faught of the 97th Bombardment Wing (SAC) safely brought the airplane down with a nose-up landing after the aircraft's nose gear failed to extend.
- 1986 Following a precipitous and hazardous launch in near zero-zero weather, Captain Mark C. Felman and the crew of a KC-10 assigned to SAC's 68th Air Refueling Wing provided emergency refueling to a KC-10 and three A-4s over the Atlantic Ocean on 5 March.
- 1988 Captain Michael Eastman and the C-5 crew assigned to the 436th Military Airlift Wing (MAC) flew the first of the missions carrying equipment used to monitor nuclear testing to the Soviet Republic of Kazakhstan for joint verification experiments.
- 1992 While on a counternarcotics mission on 24 April, an aircrew commanded by Captain Pete B. Eunice from MAC's 310th Military Airlift Squadron showed exceptional skill in landing a C-130 after it was severely damaged by Peruvian fighters in an attack that left one crewman dead and four others injured.

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