

# WINDOW TO THE FUTURE



**HEADQUARTERS AFCC 1989**



**1943**



**1988**

**AFCC CHRONOLOGY 1938 - 1988**

**AIR FORCE COMMUNICATIONS COMMAND**  
**CHRONOLOGY**

**1938 - 1988**

**Office of AFCC History**

**by**

**Linda G. Miller**

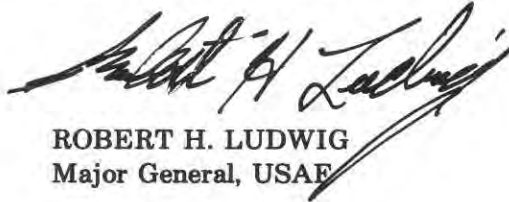
**and**

**Cora J. Holt**

**AIR FORCE COMMUNICATIONS COMMAND  
UNITED STATES AIR FORCE  
SCOTT AFB, ILLINOIS**

# FOREWORD

Air Force Communications Command has a rich and colorful heritage of service to the United States Armed Forces and the American people. For more than half a century, under various designations, Air Force Communications Command has provided an array of air traffic control, data automation, and communications-related support services to the Air Force and sister services. Since 1938, this organization of elite and dedicated professionals has established an enviable reputation for excellence, devotion, and tenacity in the face of adversity. Whether in war or in peace, whether laboring in metropolitan centers or deployed to remote, hill-top sites, the men and women of AFCC have provided and continue to provide a bulwark of singular dedication against the enemies of freedom. The record is clear: Air Force Communications Command successfully has met the challenges of the past, just as it faces the future with bold confidence. To all those who have served and sacrificed in the name of duty and the lofty ideals America holds sacred, this volume is respectfully dedicated.



ROBERT H. LUDWIG  
Major General, USAF

## PREFACE

The year 1988 marked the fiftieth anniversary of organized Air Force communications. To mark this milestone, Mrs Cora J. Holt researched and began a chronology of key events in early airways communications and in the history of Air Force Communications Command. Upon Mrs Holt's transfer to the U.S. Transportation Command, Mrs Linda G. Miller completed the project and saw to its publication.

The first section of this study highlights events in the communications field prior to the formation of the Army Airways Communications System in 1938. The purpose of including events in an Air Force chronology that date as early as 1844 is to show the growing dependence of aviation on communications from the very beginning of manned flight and the rapid merger of these technologies. Almost from the beginning, there was a connection between electronic communications and aviation. It was evident that communications was necessary for rapid command and control. The second section concentrates on this organization as it evolved to become the Airways and Air Communications Service and covers the period 1938-1961. The third section of this study details major events in the history of Air Force Communications Service/Air Force Communications Command since the organization achieved major command status in 1961. A series of appendices and an index completes the study.

In addition to the efforts of Mrs Miller and Mrs Holt, Dr Thomas S. Snyder served as overall editor. Dr Tommy R. Young, Dr Larry R. Morrison, Dr Timothy J. Mucklow, and Mrs Melinda Wigginton Trapp assisted in seminaring the study in its various drafts. MSgt David P. Taylor and Mrs Sharon Iglesias provided general administrative and typing assistance.

This chronology is based almost entirely on the official histories, documents, and interviews contained in the Headquarters Air Force Communications Command historical collection. Without the work of the command's full-time and additional-duty historians, who prepared these official histories through the years, the present writers would not have been able to produce this volume.

For more specific detail on the Strategic Communications Division and Engineering Installation Division, see the chronologies published by the division history offices in 1988 and early 1989 respectively.

It is hoped that this chronology will be useful and can be used as an orientation to the command as well as a quick reference guide to the command's heritage and achievements. (If in using this chronology you should discover any errors, please bring them to the attention of the HQ AFCC History Office, AUTOVON 576-2781.)



THOMAS S. SNYDER, Ph.D.  
Chief, Office of History





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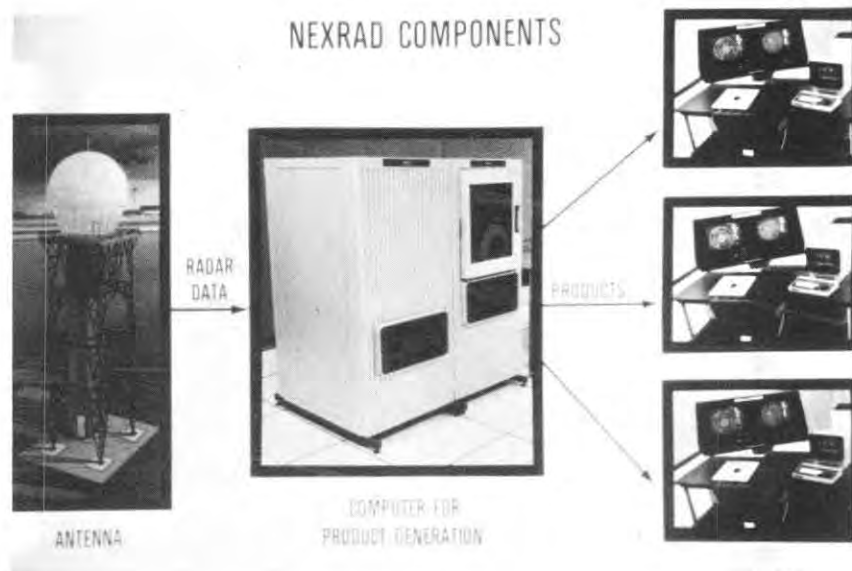
## A PROUD PAST-AN EXCITING FUTURE

Through the fabric of time, the men and women of the Air Force Communications Command have worked under varied conditions throughout the world to complete their mission. The Air Force Communications Command manages the largest communications-electronics complex in the world and provides the reins of command—communications—through which the Air Force can exercise command and control of global and aerospace forces. The Air Force Communications Command has established a proud past and is working toward future challenges.

**'Today's computers and radar have taken most of the guesswork out of weather prediction.**

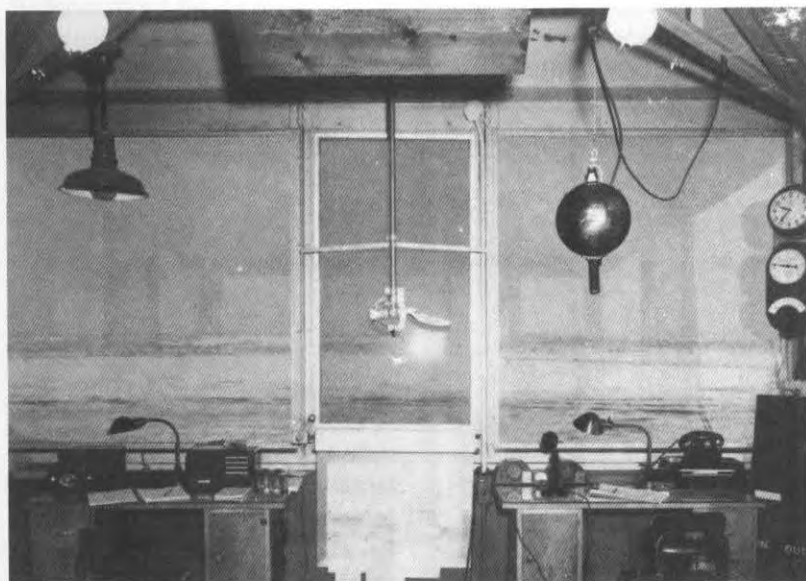


*Facsimile transmission was first used in AACS in 1943 to relay weather maps. This system worked over ordinary telephone lines. Using 96 lines to the inch, it took twenty minutes to transmit a standard map covering the approximate area of the continental United States. The machines shown here were employed at Capodichino Airfield, Naples, Italy.*



***Pictured are Next Generation Radar (NEXRAD) components. This system uses doppler radars and computer technology to better detect and measure storm severity, to improve warning accuracy, and permit the automated exchange of weather radar data among federal agencies.***

**Dramatic changes in air traffic control towers are reflected in the two pictures below.**



*Interior of the control tower at Wright Field (now Wright-Patterson AFB), near Dayton, Ohio, in 1938.*



*An F-15 Eagle taxis past the new air traffic control tower at Edwards AFB, California. The ten-story structure can withstand winds of up to 120 knots and earthquakes measuring 6.0 on the Richter scale.*

Facilities and equipment for the control tower have changed, but the mission remains the same—maintain air traffic control.

*From this open control tower, a 1409 AC Directional Beam was used with a radio to communicate with aircraft at night to provide landing instructions, circa 1920.*



*During the 1940s, AACS men and modernized equipment occupied this rather bare control tower in El Geneina, Africa.*

*In contrast, the present Scott AFB control tower is an office with a view. The tower is a hexagon, eighteen feet in diameter, with windows on every side and air traffic control equipment at the controller's fingertips.*





**Each job has its own demands.**



***After being submerged in water during landing operations on Noemfoor Island in July 1944, radar equipment was laid out to dry.***



***Although these AFCS air traffic controllers at Richards-Gebaur AFB, Missouri, did not have to dry out their equipment before using it, they also found their job demanding. The MPN-14 radar approach control (RAPCON) provided surveillance and precision approach radar guidance to pilots at Air Force bases located around the world.***

Emergency repairs put technicians into similar working conditions.



*Technicians wading water to inspect an AACSS transmitter after a storm in Lagos, Nigeria, Africa.*

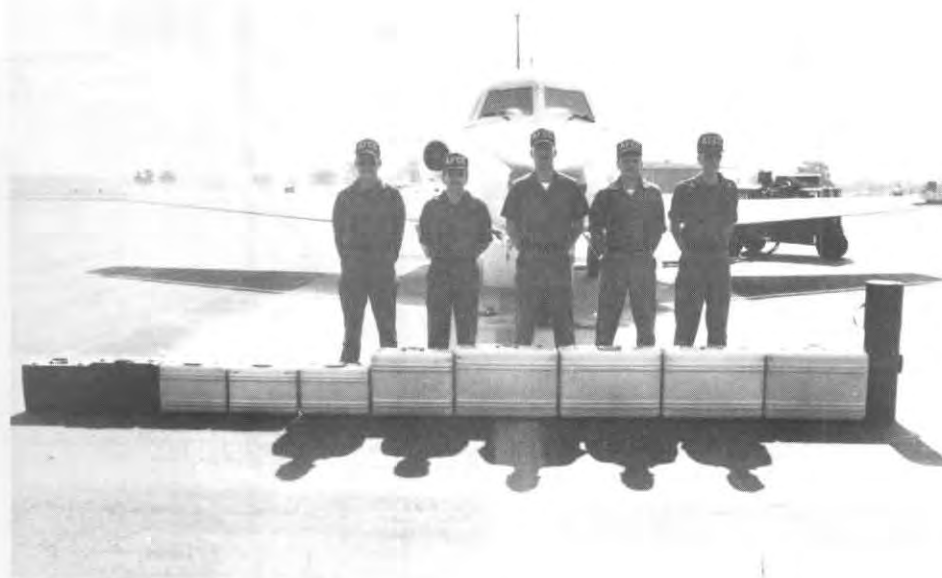


*Technicians repairing cable while standing in a deep quagmire at Bien Hoa.*

Both mobile communications packages were designed to operate in areas where established communication networks were not available; however, modern technology allows HAMMER ACE to do more with fewer people and less equipment.

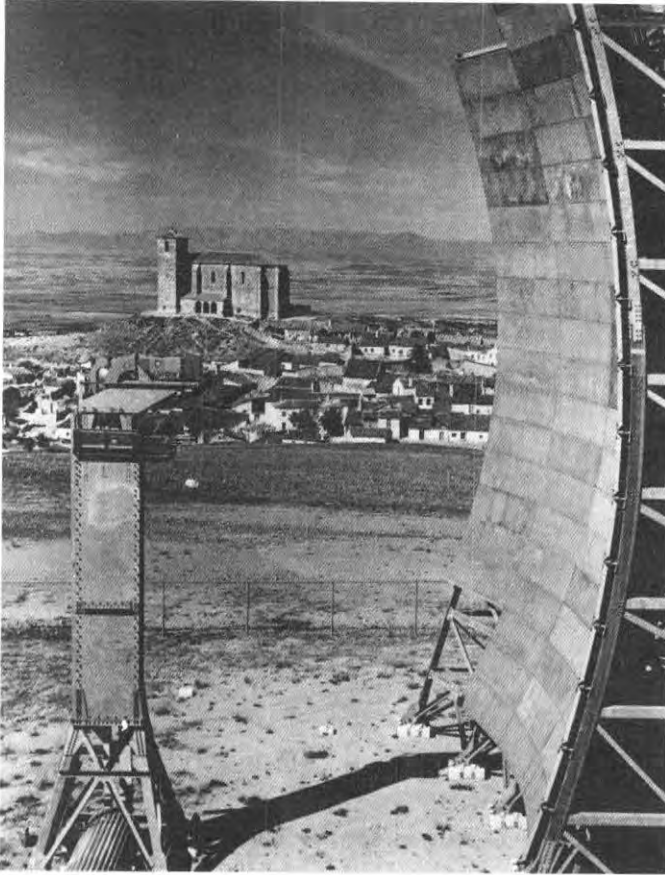


*“Talking Bird,” the communication package of the 1960s is shown here with its crew and the C-130 that transported them.*



*In contrast, through modern technology, HAMMER ACE requires only a five-person crew, has phased-array satellite antennas that fold compactly into small metal-like suitcases, and travels in a CT-39. HAMMER ACE can operate in some situations with a minimum of one person and only five of the suitcases shown.*

**Tropospheric scatter communications have decreased in size and increased in capability over the last few years.**



*A tropospheric scatter communications antenna of the 1960s stands in stark contrast to a centuries-old cathedral in the Spanish town of Humosa. Operated by a detachment of the 1989th Communications Squadron, the "tropo" is a fixed medium capacity system that can support up to 120-voice channels at a single time.*



*This 1980s tropospheric scatter, a TRC 170(V)3 with antenna, is a digital, tactical, troposcatter radio which provides for the transmission and dual diversity (space) reception of digital voice and digital data for ranges up to approximately 100 miles. A minimum site setup requires only two people and one hour.*



# **CHRONOLOGY OF AIR FORCE COMMUNICATIONS COMMAND SIGNIFICANT SELECTED EVENTS**

## **CHAPTER 1**

### **EARLY COMMUNICATIONS**

**1844**

**24 May 1844**

Using an experimental line from the railroad depot in Baltimore to the Supreme Court Chamber in Washington, D.C. (forty-one miles), Samuel F. B. Morse sent his first message over his electromagnetic telegraph: "What hath God wrought?" At first the telegraph was more of a curiosity. People flocked to see the key work, but could not think of any messages to send. To fill the time, operators began promoting chess matches between Baltimore and Washington players, but such frivolity brought criticism from the religious community. It was decided to report Congressional activities instead.

**1861**

**1861 - 1865**

The Union Army, during the Civil War, was the first great military body to demonstrate the advantages of the field telegraph. By the end of the Civil War, more than 200,000 miles of line was in use in the United States.

**18 June 1861**

Balloonist Thaddeus S. C. Lowe sent President Lincoln the first telegraph message from the air. The gas-filled Enterprise was moored on the White House lawn. Because of this success, President Lincoln decided to exploit balloons as aerial observation posts during the Civil War.

**1876**

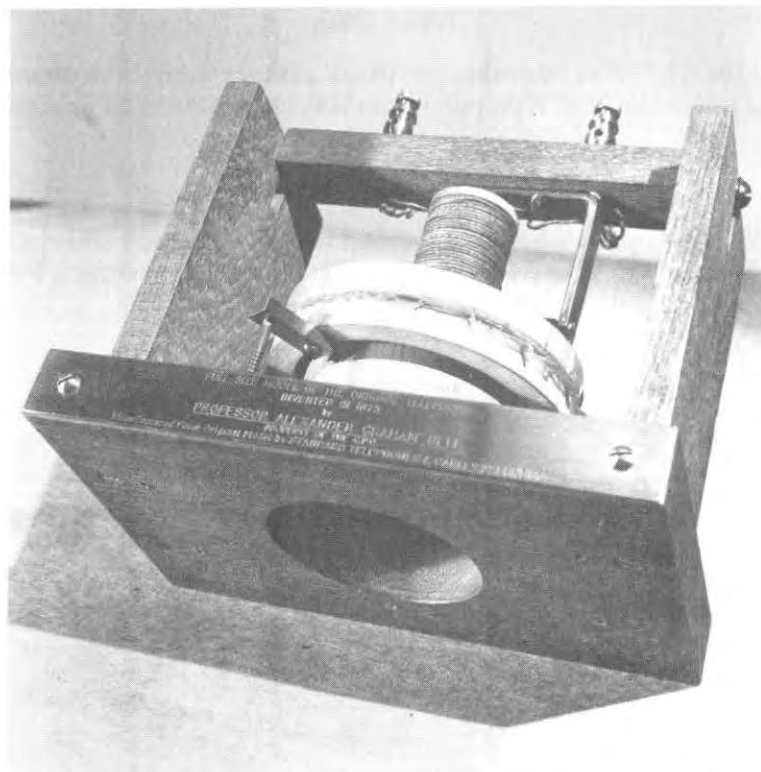
**7 March 1876**

The United States Patent Office issued Alexander Graham Bell a patent for the telephone. It has been called the most valuable single patent in history.





*A CROYDON Telephone Exchange as it looked in 1884.*



*Model of the original telephone invented in 1875 by Professor Alexander Graham Bell.*

**10 March 1876**

The first intelligible message by telephone occurred between Bell and his assistant, Thomas Watson, when Bell shouted into the mouthpiece, "Mr. Watson—Come here—I want to see you."

**June 1876**

Alexander Graham Bell first publicly demonstrated the telephone at the Centennial Exhibition in Philadelphia.

**1894**

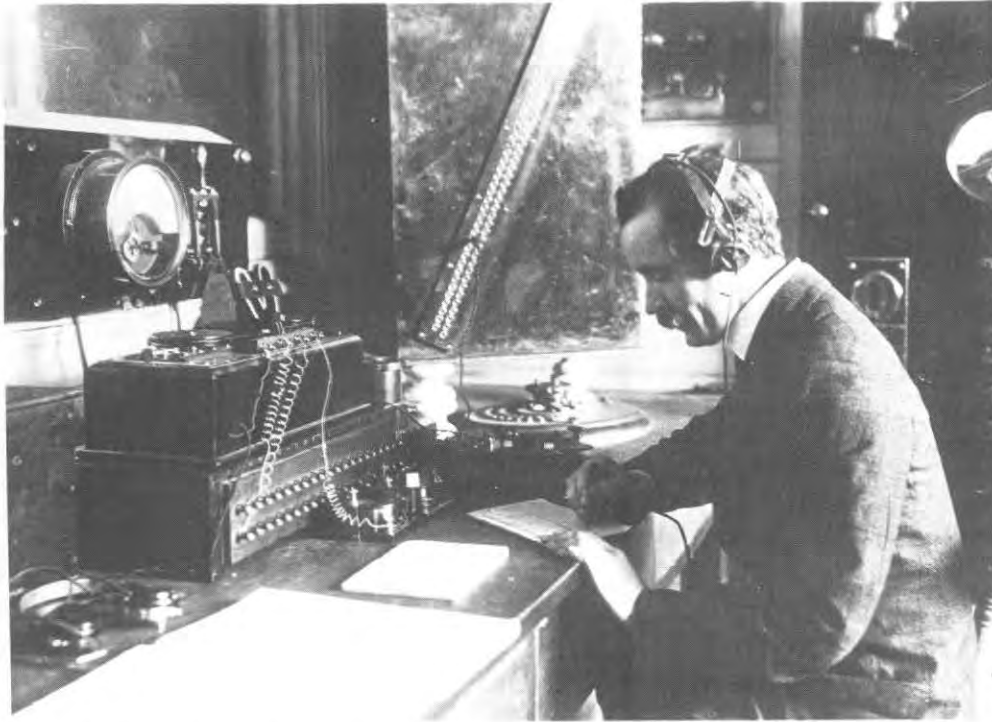
Guglielmo Marconi, an Italian, sent radio signals over a mile.

**1895**

Marconi developed the first radio wireless telegraph.



*Raising the kite aerial at Signal Hill, Newfoundland, in December 1901, for the first transatlantic wireless experiment. Marconi, who developed the first radio wireless telegraph, is the figure at the extreme left.*



*A Clifden wireless station in northern Ireland, circa 1906. An operator is receiving with a magnetic detector.*

## 1900

Reginald A. Fessenden, an American physicist, demonstrated the first radio-voice transmission. Until then, radio messages had been sent only in Morse code.

## 1903

17 December 1903

Orville and Wilbur Wright, at Kitty Hawk, North Carolina, made the first sustained, controlled-powered airplane flights. The fourth and longest flight of the day was 852 feet in fifty-nine seconds.

## 1907

1 August 1907

The Army established an Aeronautical Division in the Office of the Chief Signal Officer. Under Capt Charles deForrest Chandler, the division was to have charge of all matters pertaining to military ballooning, air machines, and associated subjects.

## 1908

13 May 1908

The first balloon radio reception in the United States was received during a flight from Ft. Myer, Virginia. This radio was a spark-type radio-telegraph set.

**3 September 1908**

Orville Wright made the first test flight of an Army flying machine at Ft. Myer, Virginia.

**1909**

**2 August 1909**

The United States Army accepted the "Wright Flyer" following the successful demonstration of established performance requirements which included a speed run of 42.5 miles per hour and a flight duration of one hour and twenty minutes.

**1910**

**27 August 1910**

Lt Clarence C. Culver, of the Aeronautical Division, set up a receiver in the grandstand of the Sheepshead Bay Race Track in New York and picked up an overhead airplane message as it was tapped out. According to James A. Macready, who sent the message, "Another chapter in aerial achievement is recorded in the sending of this wireless message from an airplane in flight."

**1911**

**January 1911**

Lieutenants Paul W. Beck and Myron S. Crissey guided bombing at San Francisco, California, by radio-telegraphic transmission from an airplane.

**March 1911**

Using radio-telegraph, Lt Benjamin D. Foulois made reconnaissance reports to Signal Corps stations along the Mexican border while flying between Laredo and Eagle Pass, Texas. Widespread use of radio-telegraph was unpopular with pilots because they found it cumbersome trying to manipulate a telegraph key strapped to their knee while flying in open-rigged airplanes.

**7 March 1911**

A new type of airplane radio employing a small Marconi transmitter and loop antenna (replacing the hanging antenna), was demonstrated by P. G. B. Morriss and J. A. D. McCurdy at Palm Beach, Florida.

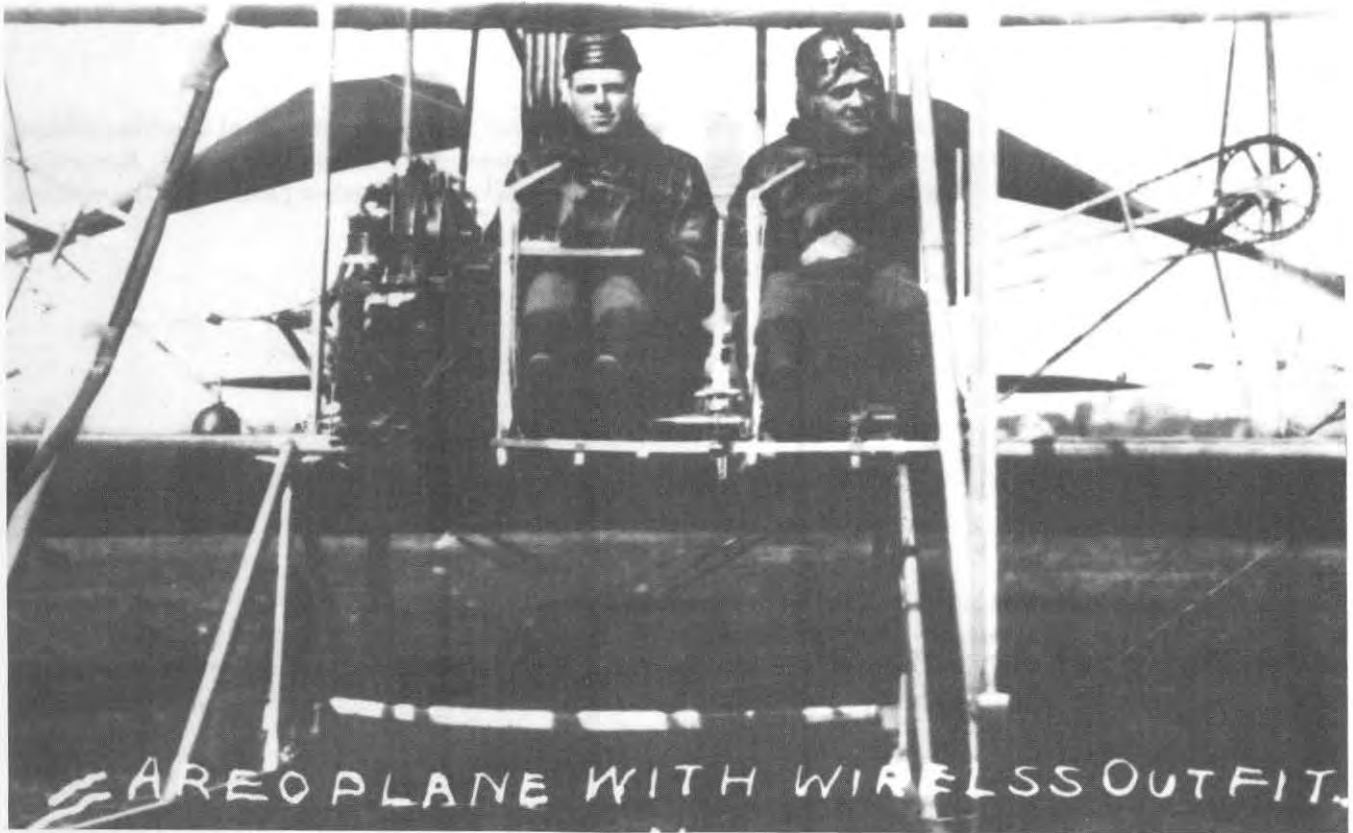
**1912**

**29 July - 1 August 1912**

A series of airplane radio-telegraph tests was conducted by Lt Benjamin D. Foulois in an Army Wright B aircraft at College Park, Maryland. Messages were received from a distance of ten miles.

5 November 1912

An air-directed bombing demonstration was given by Lts Henry H. Arnold, J. O. Mauborgne, and Follett Bradley at Fort Riley, Kansas. Lieutenant Arnold used radio-telegraph to direct the bombing.



*World's first successful air-directed bombing demonstration using air-to-ground radio occurred at Ft Riley, Kansas, on 5 November 1912. Pictured from left to right are Lt Follett Bradley, observer and radio operator, and Lt Henry H. Arnold, pilot.*

1913

6 October 1913

Experimental radio and fire control flights were begun at Ft. Mills, Philippines.

## **1914**

**18 July 1914**

The House of Representatives Bill 5304 assigned the Aviation Section of the United States Army Signal Corps with "the duty of operating or supervising the operation of all military aircraft, including balloons and aeroplanes, all appliances pertaining to said craft, and signaling apparatus of any kind when installed on said craft."

**11 December 1914**

The first ground-to-air messages were received in an airplane from a station ten miles away. Lt J. O. Mauborgne designed a set which received a message transmitted from a Corregidor station in the Philippines to a Burgess-Wright airplane as it flew over Manila.

**16 December 1914**

Two-way radio-telegraphy between the air and ground was first demonstrated by Lts H. A. Dargue and J. O. Mauborgne, as they flew a Burgess-Wright airplane in the Philippines.

## **1915**

**2 September 1915**

Plane-to-plane radio was demonstrated at North Island, San Diego, when radio-telegraph messages were sent and received at a distance of approximately two miles between the planes of Lts W. A. Robertson and A. D. Smith and Lt H. A. Dargue and Capt C. C. Culver.

## **1917**

**28 February 1917**

For the first time in the United States, a human voice was transmitted by radiotelephone from an airplane to the ground at San Diego.

**22 August 1917**

Air-to-ground radiotelephone sets were put into production.

**16 October 1917**

Final tests of the Army's airplane radiotelephone at Langley Field, Virginia, achieved records of twenty-five miles for plane-to-plane communications and forty-five miles for airplane-to-ground.

## **1918**

**28 September 1918**

A JN-4 Jenny aircraft maneuvered another JN-4 solely by radio at Langley Field, Virginia.





*President Wilson talking to aeroplane pilot over wireless radiotelephone, November 21, 1918.*



*Installation of radio equipment, shield ignition system, bonding and metallizing on Douglas O-2 airplane at Chanute Field, Illinois.*



*Direction finding equipment, circa 1929.*

## 1922

19 June 1922

The Air Corps established the Model Airways to maintain a regular schedule for aerial transportation of government officials and express cargo and to promote long distance flying. The first headquarters was at Bolling Field, Washington, D. C., with stops at Langley Field, Virginia; McCook Field, Ohio; and Mitchell Field, New York. A year later, the route was expanded to include Chanute Field, Illinois; Selfridge Field, Michigan; and Wilbur Wright Field, Ohio. Radio stations were established at the seven major stations, but it was not operated as a "system." Each airfield and the communications provided were the responsibility of the local commander. His efforts were not coordinated with those of the other commanders. Flight and weather messages were treated routinely, and it was not unusual for airplanes to arrive at their destination ahead of the message announcing their departure.

## 1927

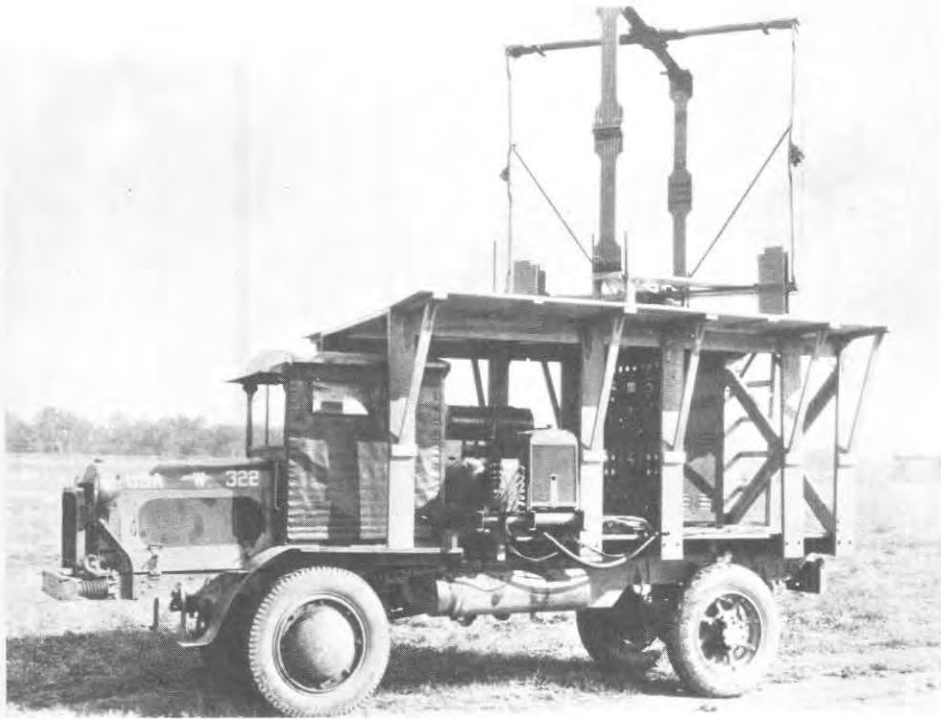
21 May 1927

Charles A. Lindbergh completed the first solo flight across the Atlantic from New York to Paris. His airplane was not equipped with any type of radio.

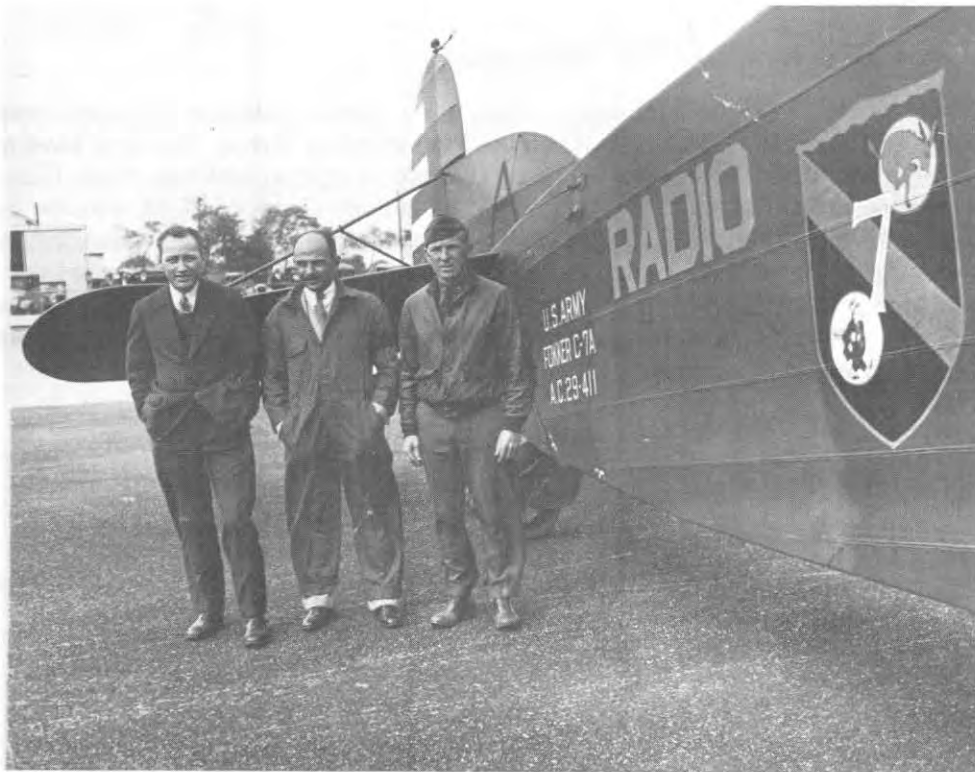
## 1929

September 1929

Lt James H. Doolittle, using radio and altimeter, made the first instrument landing.



*Early style radio transmitter for assisting pilots in blind landings.*



*The Fokker made the first broadcast over the national broadcasting system.*



*The radio compartment on board an aircraft in the early 1930s was often cramped. This radio operator was Lt Ivan Farman, who later, as a Brigadier General, commanded AACCS.*

## 1933

Capt W. T. Larson received the Mackay Trophy for developing procedures of aerial frontier defense involving instrument takeoffs and landings on land and sea, and flying by instruments over water.

## 1934

19 February - 1 June 1934

After President Franklin D. Roosevelt cancelled the contracts with commercial air carriers, the Army Air Corps flew the mail while the government negotiated new contracts with the commercial companies. After ten fatalities, two-way radios and blind flying instruments were added to all planes. The experience highlighted the need for adequate communications advocated by such men as Lt Col Henry H. Arnold, Capt Harold M. McClelland, and 1Lt Ivan L. Farman, who later played key roles in the Army Airways Communications System.

19 July - 20 August 1934

Ten Martin B-10 bombers, led by Lt Col Henry H. Arnold, flew a distance of 8,290 miles from Bolling Field, Washington, D. C., to Alaska without mishap. Communications officers, especially Capt Harold M. McClelland, had made careful advance preparations along the way, and as a result, the flight was never out of contact with communications stations on the ground. Information on weather and local conditions was continuously available, and accurate orientation virtually eliminated the margin for error in navigating across the wilderness of the northwest. The B-10 used by Arnold was the first Army plane completely bonded and shielded to prevent engine ignition interference with radio reception. All of the planes were equipped with a new type interphone vacuum and the 183 command set. A crude radio compass was also installed in each aircraft. Signal Corps ground stations all along the route were alerted to give high priority to the Alaskan flight. This flight demonstrated the need for an integrated communications system to assure safety and regulation of air travel.



3 September 1934

Lieutenant Colonel Henry H. Arnold, Capt Harold M. McClelland, and Capt Charles H. Howard met in Washington, D. C., to discuss the need for airways communications. They agreed that a good air communications system should consist of at least four elements which were not present in existing facilities. (1) Alerted Point-to-Point—radio stations at air fields would remain continuously aware of planes in flight and would be free from interference by other traffic such as long administrative messages or attention to other duties; (2) Air/Ground and Ground/Air—uninterrupted contact insuring emergency attention when needed; (3) Navigational Aid—by means of radio beacons, compasses, and transmission of regular weather information; (4) Traffic Control—at airfields for both takeoff and landing. More than four years would elapse before a peace-inclined nation could be sufficiently aroused to grant military aviation resources to develop airways communications essential for effective air power.

1937

27 January 1937

The 1937 Subcommittee of Air Corps Technical Committee on Item 9 (communications) began its sessions at Wright Field, Ohio. Its final report, published 23 February 1937, was more commonly known as the Olds Report, named after the subcommittee chairman, Lt Col Robert Olds. The report recommended the establishment of an "Army Airways Control System" comprised of meteorological, airways, and airdrome control within the continental United States and in overseas possessions. Among the specific recommendations was the division of the zone of the interior into three Wings, each designated "Wing Regional Control," the 1st, 2d, and 3d, corresponding to the three continental Army Airways Communications System Regions activated a year later.

1 April 1937

The Chief of the Air Corps, Maj Gen O. Westover, wrote to the Adjutant General: "A condition exists in aircraft operation over Department of Commerce airways prejudicial to preservation of life and property, both private and governmental, which results directly from the unwillingness of private airline operators and military and naval operators to avail themselves of the facilities of the Department of Commerce prepared for the expedition and safeguarding of air transportation. There is lacking, however, a central coordinating and control office for each route of the airways between terminals used by these several agencies." He recommended "a complete and extensive network of communications and meteorological stations" superimposed on Department of Commerce and other agency facilities.

12 June 1937

The Secretary of War, Harry H. Woodring, wrote to the Secretary of Commerce: "The War Department is very much interested in all matters which will have an effect upon the concentration of our Air Forces in times of emergency. It is particularly interested in the peace-time development of facilities and methods of procedure to insure the maximum of safety and to further the expeditious and timely movement of Army aircraft from and to such points in the United States as may be required by military exigencies."

## DEVELOPMENT OF EARLY COMMUNICATIONS

### EVENT

Recommendation for establishment of Army Airways Control System. (1937)

Ten B-10 Bombers made successful flight from Washington D.C. to Alaska. (1934)

Lindbergs completed first solo flight across Atlantic. (1927)

Air Corp established Model Airways. (1922)

First human voice transmitted from air-to-ground in U.S. (1917)

Plane-to-plane radio demonstrated. (1915)

First demonstrated 2-way radio-telegraphy between air and ground. (1914)

First ground-to-air message received in an airplane. (1914)

Army Signal Corps assigned operation of military aircraft. (1914)

Air bombing demonstration using radio-telegraph Washington D.C. to Alaska. (1912)

First message from airplane. (1908)

Wrights invent airplane. (1902)

Marconi invents the radio. (1895)

Bell invents the telephone. (1876)

Telegraph used from balloons in Civil War. (1861)

Morse invention of Telegraph. (1844)

YEARS

1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940



## **CHAPTER 2**

**JANUARY 1938 - JUNE 1961**

### **1938**

A specialized airways communications service, under military control, was established in the Pacific. Since it had no definite form or fixed organizational set-up, it was referred to as an "Airways Radio Net" handling point-to-point communications between air fields in the Hawaiian Islands. It was pioneered by Lt Roger Williams and included installations at Morse, Suiter, Homestead, and Burns Field, all of which were being used by the 18th Composite Wing for training in gunnery navigation and field work.

The 1938 Subcommittee of Air Corps Technical Committee on Item 9 (communications), chaired by Lt Col Earl L. Naiden, reiterated the main points of the Olds Report of the previous year and added recommendations for the expansion of the proposed system.

**2 March 1938**

The Secretary of War, Harry H. Woodring, wrote to John M. Costello, House of Representatives: Civil airways "are considered of inestimable value to national defense. However, present facilities are believed to be inadequate. For example, existing teletype circuits for transmission of flight messages required for safe operation cover only a small portion of the civil airways. Such circuits where installed are already heavily loaded."

**15 November 1938**

Following directions from the War Department, Headquarters Army Air Corps established the Army Airways Communications System (AACS). The primary mission of AACS was to provide air-ground and ground-air communications between AACS aeronautical stations in the continental United States to promote safety and to facilitate flying operations. The secondary mission was to provide point-to-point communications between ground radio stations in the continental United States. These stations transmitted aircraft movement reports, weather reports, and messages relating to Army airways traffic between ground stations. Air traffic control was added as an AACS mission in 1939. Major Wallace G. Smith became the first Control Officer of the newly activated AACS. Major Smith selected Capt Russell A. Wilson, Lt Dudley D. Hale, and Lt Lloyd Watnee as his Regional Communications Control Officers with an authorization for 300 enlisted men at thirty-three stations. The system was placed under the direction and control of the Headquarters Army Air Corps Directorate of Communications, within the Training and Operations Division.

**13 December 1938**

The first enlisted men were assigned to AACS when 115 men were assigned among the twelve detachments of the 3d AACS Squadron.

**17 December 1938**

Eighty-one enlisted men were assigned to the thirteen detachments of the 2d AACS Squadron.

### **1939**

**10 January 1939**

The Naiden Report was released officially.

**21 January 1939**

Forty-seven enlisted men were assigned to the 1st AACS Squadron's seven detachments. The 243 enlisted men of the 1st, 2d, and 3d AACS Squadrons (47, 81, and 115 respectively), along with Capt Russell A. Wilson, 1st Lt Dudley D. Hale, and 1st Lt Lloyd H. Watnee, commanders of the 1st, 2d, and 3d AACS Squadrons, were the first members of AACS. Major Wallace G. Smith was the first AACS Control Officer at Headquarters Army Air Corps.

## **1940**

**August 1940**

A small group of enlisted men on detached service from the 3d AACS Region established a cold weather test station at Ladd Field, Fairbanks, Alaska. A short time later, another group established a second station at Elmendorf Field, Anchorage, Alaska. This was the beginning of AACS/AFCC involvement in Alaska.

**15 November 1940**

The War Department, realizing the importance of a coordinated airways supply route, supported by a well organized and reliable airways communications system, created "Air Corps Detachments, Communications" in Hawaii, Alaska, Panama, the Philippines, and Puerto Rico.

## **1941**

**1 January 1941**

Responding to the War Department order of 15 November 1940, the Hawaiian Department established an Air Corps Detachment, Communications using the personnel from the Airways Radio Net. Captain Gordon A. Blake, former commanding officer of the net, was named commander of the detachment which was comprised of twenty-four enlisted men. The control towers remained under the control of the 18th Composite Wing until 13 November 1941, when they transferred to the Air Corps detachment.

**11 January 1941**

The Air Corps established the Air Corps Detachment, Communications, in Alaska. For a time, it consisted of one officer attached on an additional duty basis (2d Lt George E. Cranston) and six AACS enlisted men operating two stations. The headquarters was at Ladd Field. The two stations functioned as part of the radio net of the Pacific coast states.

**March 1941**

The Army Airways Communications System established its first foreign station at Gander Lake, Newfoundland, with five men. This was the first station in a series across the North Atlantic to the British Isles. Each station provided airways communications and navigational aids for the ferrying of lend-lease aircraft to the United Kingdom.

**June 1941**

The Air Corps Detachment, Communications, in Hawaii, fell under the operational control of AACS, although its administration was still the concern of the 18th Bomb Wing. Captain Gordon Blake remained as commander and became the Regional Control Officer when the unit was renamed the 7th Air Corps Squadron, Communications on 5 December 1941.

### **July 1941**

An AACCS detachment established communications facilities at Beane Field on the island of St. Lucia. This was the first AACCS station established on the British bases leased to the United States under the lend-lease program. These bases were scattered on islands in the Caribbean, the South American mainland, and in the South Atlantic. In return, Britain received fifty over-aged destroyers.

### **6 July 1941**

A small contingent of AACCS men landed at Narsarssuak, Greenland, to establish a master net station on the North Atlantic ferry route of aircraft to England. The station, code-named BLUIE WEST 1, became operational on 21 August.

### **1 September 1941**

At Reykjavik, AACCS established its first station in Iceland, which became operational on 1 April 1942.

### **5 - 12 September 1941**

Nine B-17 aircraft belonging to the 14th Bombardment Group made an experimental flight between Hawaii and the Philippines. This was the first military flight between the two locations. The purpose of the flight was to test the radio navigational facilities in operations at American bases on the Trans-Pacific route, with stops at Midway Island, Wake Island, New Guinea, and Australia. The communications officer for the flight was Maj Gordon Blake. Plans for further development of the route were cut short by the Japanese attack on Pearl Harbor.

### **16 October 1941**

Three members of AACCS were part of an eleven person team that established a radio/weather station on Padloping Island in the Arctic Circle. The men worked in fifty degrees below zero Fahrenheit temperatures. Much of the equipment, including batteries, had to be heated before they could be used. This was the northern most AACCS station established during World War II.

### **20 October 1941**

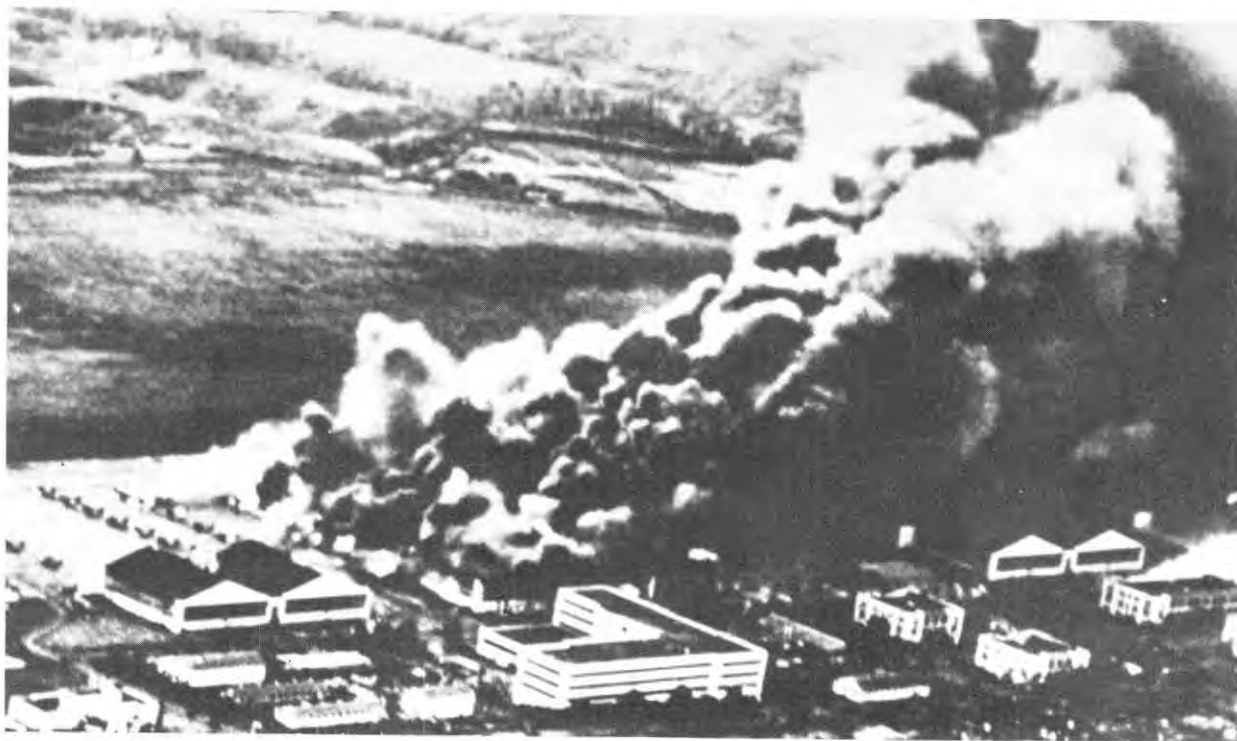
The AACCS station at Sondrestrom, Greenland, became operational. At first, the station transmitted only weather information.

### **7 December 1941**

During the Japanese attack on Pearl Harbor, Maj Gordon Blake, Commander of the 7th Air Corps Squadron, Communications, successfully directed the landing of twelve B-17s arriving from California. He brought in aircraft, one at a time, between waves of Japanese fighter aircraft.

### **23 December 1941**

After the first Japanese assault on Wake Island, the Marine and Navy radio station was completely destroyed. Two AACCS men, SSgt Ernest G. Rogers, Jr., and Pfc Paul F. Futtrup, both radio operators, installed and operated an auxiliary Army radio unit that escaped the attack undamaged. This unit provided a radio guide for transient Army bombers on the shuttle run to Wake Island, who came to the Island Garrison's aid. When Wake Island and the Island Garrison fell, those who escaped death were taken to a Japanese enemy prison camp on Formosa, among them were Sergeant Rogers and Private Futtrup.



*Wheeler Field, Hawaii, the morning of 7 December 1941. Some 90 aircraft were destroyed by the Japanese attack. Here, smoke billows up from the Wheeler hangar line.*

## 1942

24 January 1942

The AACS began expanding its communications network in Alaska by commissioning a station at Naknek. Others followed: Fort Randall at Cold Bay (23 March), Fort Glen at Umnak (31 March), Woody Island near Kodiak (17 June), Cordova (20 June), Shemya (21 June), Attu (5 July), Kiska (6 September), Adak (October), and Amchitka (by May 1943).

30 April 1942

The AACS Net (Provisional) was established in India by the 10th Air Force to handle weather and flight message traffic along the aircraft ferry route between India and China. This was the beginning of AACS involvement in the China-Burma-India Theater. Until 1 June, many of the enlisted operators were from the British Army and the Royal Air Force.

May 1942

Four enlisted AACS men established an Air Corps radio station at Abadan, Iran, as a communications agency for Douglas Aircraft Corporation's plant which was assembling aircraft to be flown to Russia. This was the first AACS station in the Middle East.

The Army Airways Communications System was operating facilities in Prestwick, Scotland, but did not officially move into the United Kingdom until 1 July when two officers and nine enlisted men arrived. This was the first AACS station established in Europe. This completed the line of stations across the North Atlantic so necessary for the ferrying of men and materiel to the United Kingdom. Until 25 March 1943 when Maj Kenneth W. Klise arrived, the ranking AACS officer in the United Kingdom was a first lieutenant.



15 May 1942

The Army took over operation of the Civilian Aviation Administration's intercontinental communications stations at New York, New Orleans, San Francisco, Seattle, Anchorage, and Honolulu. These stations were brought into the AACS system. By agreement, the services of these stations to the Navy and to meteorological agencies and commercial airlines continued and expanded as long as the services remained compatible with the military situation. For coordination with the Navy, Lt Col Lloyd H. Watnee was designated War Department representative.

Summer 1942

The Army Air Forces Director of Communications, Lt Col A. W. Marriner, recommended to the Chief of Air Staff the formation of an "Air Force Communications Command" to operate and direct the Army Airways Communications System, as well as future airways communications units and facilities. The purpose was to assure an integrated communications system. "In order to operate the system efficiently; to provide communications facilities and services based upon the requirements of the system as a whole; and, to vest appropriate authority in the unit which is charged with the operating and responsibility of the system, it is deemed essential that unified control be established over personnel and facilities utilized by the system. Otherwise, the system becomes not a system but a group of separate, isolated units with standards of service, facilities, and adequacy of personnel depending upon variable local conditions." Although this proposal was not immediately accepted, it was the first step in the evolution of AACS as a separate command.

3 - 4 June 1942

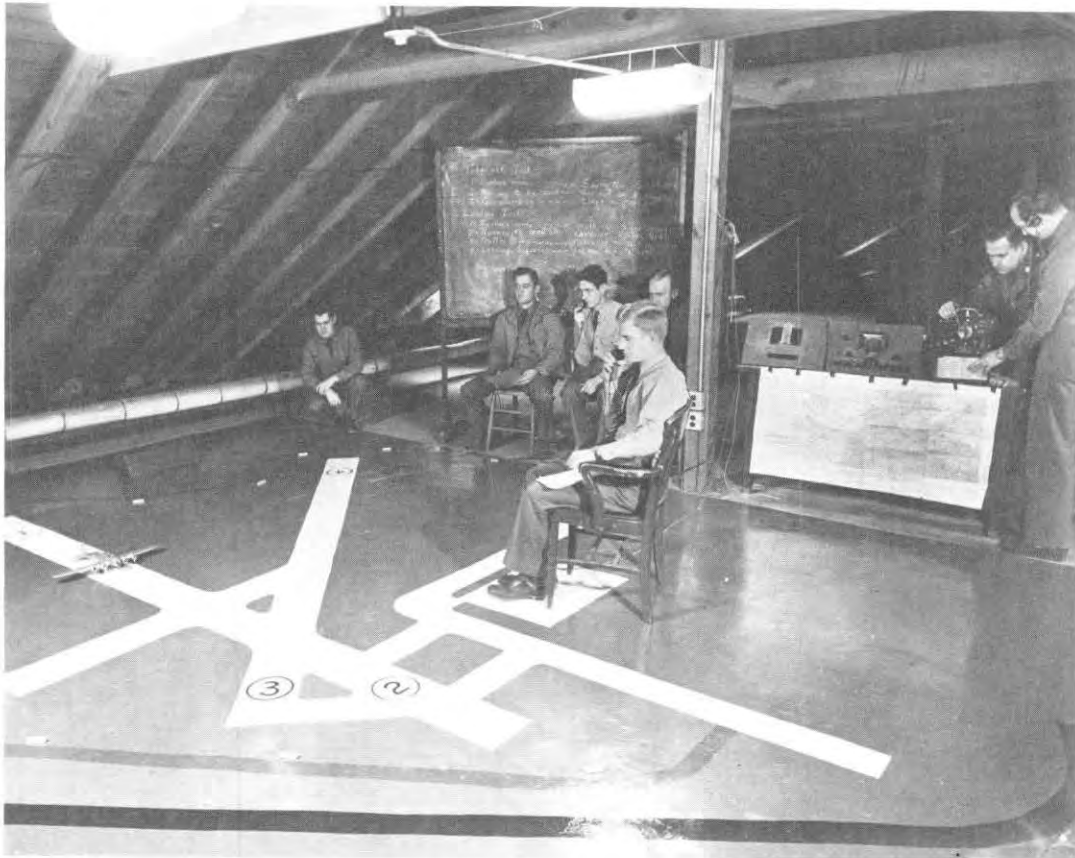
Army Airways Communications Systems people were responsible for operating seven airways communications stations in Alaska when Japanese aircraft attacked Dutch Harbor. At Forts Randall and Glenn (Cold Bay and Umnak), secret bases disguised as fish canneries, AACS people maintained air-ground contact with Army Air Corps fighter-interceptors responding to the attack. They handled flight plans and weather reports. Staff Sergeant Joe R. Veliz at Umnak received the Legion of Merit for maintaining "a definite radio airways aid at the time of the attack on Dutch Harbor."

July 1942

The AACS station in Accra, Gold Coast, became operational. This completed the AACS trans-Atlantic route from Miami to Africa with stations at Borinquen Field, Puerto Rico; Atkinson Field, British Guiana; Belem, Brazil; Natal, Brazil; and Ascension Island. This made possible a ferry route to the Allies similar to the ones across Alaska and the North Atlantic.



*Within storm-swept stations such as this one, AACS men helped establish an amazing safety record on the route to England.*



*The first AACCS control tower school in the attic of a building at Maxwell Field, Alabama, in June 1942.*



*An AACCS control tower in Burma.*

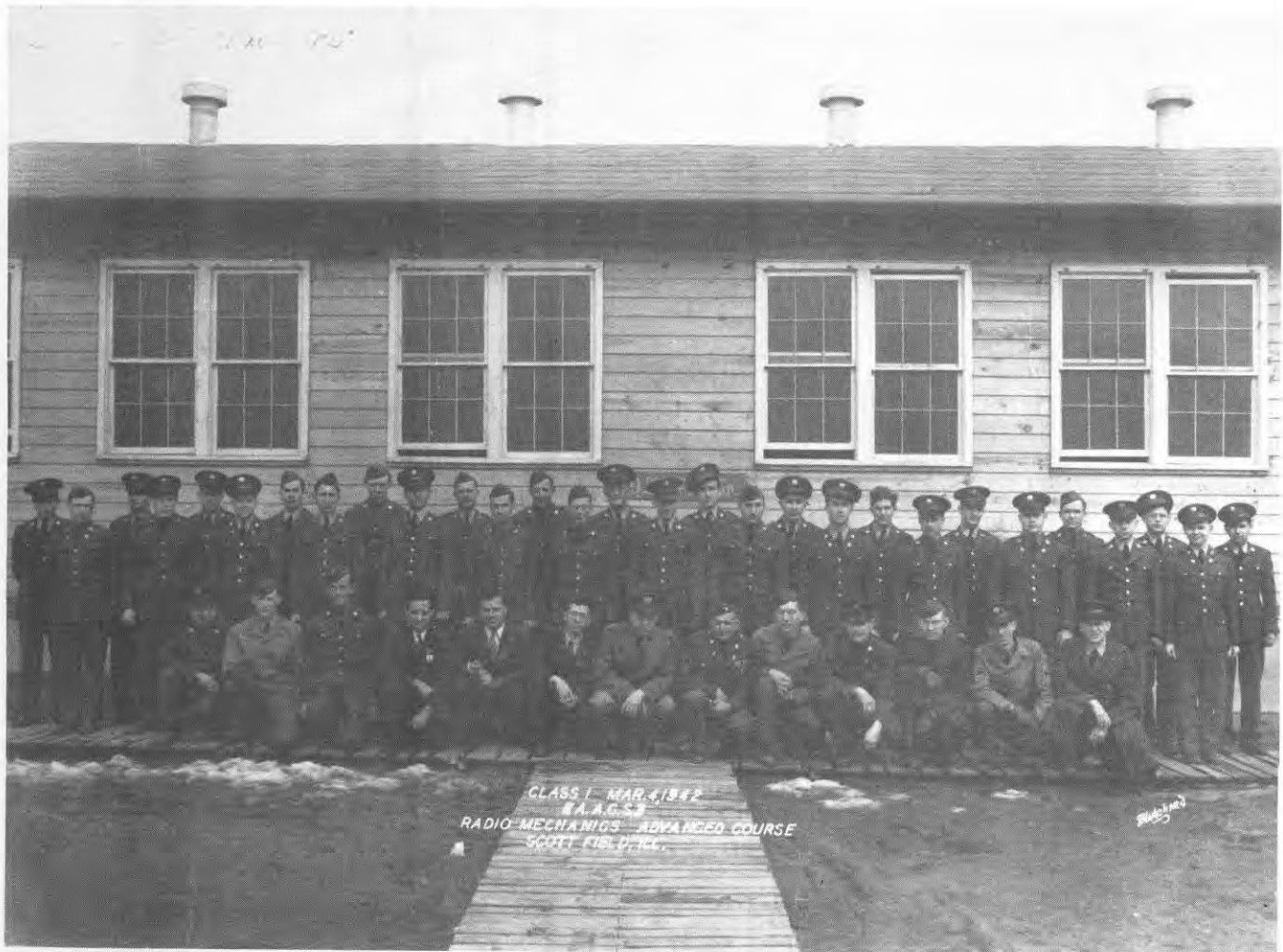


16 July 1942

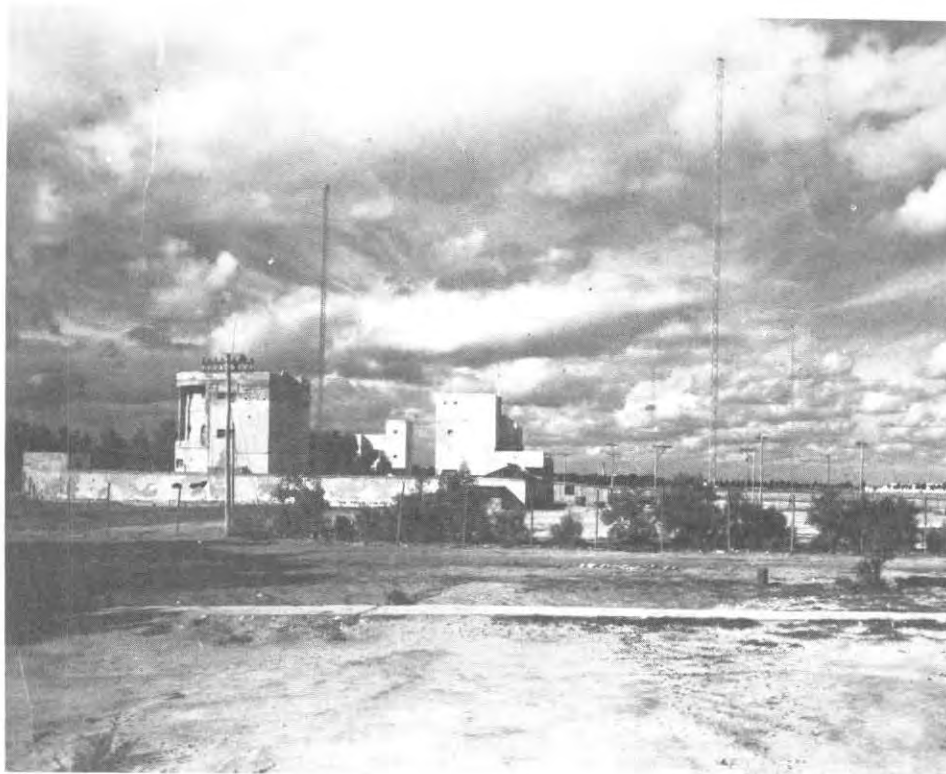
The AACS began absorbing the air-ground and point-to-point facilities of the Northwest Airlines in Western Canada. Six AACS officers were assigned respectively to Edmonton, Regina, Fort Nelson, Watson Lake, Fort St. John, and Whitehorse. To manage these stations, the 16th Airways Communications Squadron was activated on 7 September 1942. These stations were used as part of the ferry route of American planes to the Soviet Union. Russian pilots picked up the planes in Alaska and flew them across Siberia to Russia. By May 1945, a total of 7,303 planes had passed through this region to Russia.

July - August 1942

The 13th AACS Squadron built radio stations across the heart of Africa enabling military aircraft to fly safely from North Africa to the Middle East and India. Within a year, AACS had established an air traffic control network in the skies that was so effective it revolutionized the concept of air logistics. This network made possible the resupply of British General Montgomery before the critical battle of El Alamein which stopped Rommel before he reached Cairo. Ultimately, AACS had twenty-three stations in Africa.



*Class 1 March 4, 1942 (A.A.G.S.) Radio Mechanics, Advanced Course, Scott Field, Illinois.*



*This former Catholic monastery was successively occupied by the Italians, Germans, and lastly the 19 AACCS as a communications site. The equipment used was Wilcox 96c units for teletype and 12 GLX beacon transmitters.*



*An Army Airways Communications System set up at an air base in India.*

### **Late July - September 1942**

The United States began an operation, nicknamed "Bolero," to move bomber and fighter aircraft (as many as 1,000 per month) to the British fighting front. It was the job of AACS to guide these planes across the treacherous North Atlantic.

### **September 1942**

The 14th AACS Squadron established four stations across southern Africa below the line established in July-August 1942 by the 13th AACS Squadron. The locations were Pointe Noire, Leopoldville, Elisabethville, and Nairobi. In the beginning, each station was manned by one lone operator who handled both point-to-point and air-ground frequencies. After the Allied invasion of North Africa in November 1942, many personnel of the 14th were sent to North Africa.

### **January - September 1942**

With only fifty men and almost no equipment, Col Gordon Blake, Region Control Officer of the 7th AACS Region, established a safe airways route between Hawaii and Australia, the one large land mass left to the Allies in the Pacific.

### **13 October 1942**

By executive decree, the functions of the Civil Aeronautics Administration (CAA) (forerunner of the Federal Aviation Administration (FAA)) were consolidated into AACS. Paramount at this time was the incorporation of cryptography into CAA procedures. Headquarters AACS already had responsibility for managing and flight checking navigational aids for the Army Air Forces. The flight checking was accomplished by "air inspectors."

### **30 November 1942**

At the recommendation of Col Ivan L. Farman, Army Air Force Regulation 100-2 was revised, naming five "Airways Communications Areas" for the purpose of unifying and coordinating the supervision and control of AACS facilities and services. Colonel Farman had suggested that the AACS be organized on an area basis, each area to include two or more regions, because of the difficulty the regions had administering their vast territory.

### **December 1942**

Twenty AACS officers and enlisted men arrived at Guadalcanal and went on the air on Christmas Eve. This detachment went through more continuous, concentrated bombings and strafings than any other Pacific detachment of AACS during World War II.

Detachments of the 10th AACS Squadron set up a chain of radio control stations at Chabua, India; Fort Hertz, Burma; and Paoshan, Yunnanyi, and Kunming, China. These stations made possible an air ferry route from India across the Himalaya Mountains to China, a route known as the "Hump." The 25th AACS Squadron was given operational responsibility for these stations, some of which were in enemy territory.

### **5 December 1942**

The first AACS unit in Australia went on the air at Amberly Field, near Brisbane. It completed the Trans-Pacific network which ran from San Francisco through Hawaii, Canton Island, and New Caledonia.

### **16 December 1942**

An AACS detachment set up its first station in the Gilbert Islands on the island of Tarawa.

## **Winter 1942 - 1943**

Army Airways Communications System cryptographic officers were assigned temporary duty as cargo security officers, one to a ship. At sea, these officers performed a variety of duties including manning a 30 mm gun, cryptographic duties, submarine watch, and aircraft identification. A typical voyage lasted three months and included running the gauntlet of German submarines in the Caribbean and Japanese planes and submarines in the Indian Ocean. Intense submarine activity caused high casualties among Army Air Force personnel.

## **1943**

### **Early 1943**

German submarines torpedoed the ship Dorchester off the coast of Greenland. An undetermined number of AACS men went down with the ship.

### **January 1943**

The Army Airways Communications System stations at Ft. Randall, Kodiak, and Nome, Alaska, acquired cryptographic sections. Thereafter, AACS continued establishing security services as personnel became available or as new stations were activated.

### **6 January 1943**

The War Department established a special communications board headed by Col Ivan L. Farman to investigate airways communications along the South Atlantic Route. Colonel Farman's report was a milestone for airways communications. The report established a philosophy for operations, moved airways communications out of the realm of peaceful performance into large scale world war operations, and also defined AACS's wartime mission: "the safeguarding by radio watch of aircraft in flight." The Farman investigation resolved many problems in operational procedures, in AACS-customer relationships, and in overall definition of airways communications functions.

### **22 January 1943**

The Army Airways Communications System began operating its first station in Burma at a location nicknamed Ft Hertz. In the face of Japanese attacks, the station had to be evacuated six weeks later.

### **7 February 1943**

During the campaign to take the Marshall Islands, AACS set up its first station on Kwajalein, three days after the first American troops landed. The station on Eniwetok was set up on 22 February.

### **28 February 1943**

The AACS station at Kunming, China, contacted the AACS station in Brisbane, Australia, forging the last link in the communications chain that now circled the globe. Kunmin was the first AACS station in China.

### **March 1943**

By this time, the Technical Training Command was conducting a radio mechanics school at Scott Field, Illinois, graduating forty-eight mechanics every four weeks. During the same period, the control tower school at Chanute Field, Illinois, turned out sixty graduates weekly.



### **1 March 1943**

The 24th AACCS Region was activated in the United Kingdom with its headquarters in London. By July, it had ten stations operating in England, Scotland, and Ireland. On 13 December, the two stations in Ireland became part of this region.

### **27 March 1943**

A headquarters for AACCS was established at Bolling Field, Washington, D.C. This was the first separate headquarters for AACCS.

### **26 April 1943**

The Army Airways Communications System was activated as a wing and assigned to the Army Air Force's Flight Control Command. The history of AACCS, and subsequently AFCC, as an official organization rather than a system under Headquarters Army Air Forces, began with this action. The first commander, Col Lloyd H. Watnee, served from 27 March 1943 to 11 November 1943.

### **3 May 1943**

Headquarters AACCS relocated from Bolling Field, Washington, D.C., to Asheville, North Carolina, under the name of HQ AACCS Wing, Flight Control Command.

### **June 1943**

The AACCS was allocated one teletype circuit on one of the two pairs of newly installed telephone wires between Edmonton, Alberta, to Whitehorse in the Yukon Territory. The AACCS line was intended primarily to handle operational messages concerning aircraft movements. In October, the line was extended to Fairbanks, Alaska. This meant that AACCS's overworked radio circuits could transfer some of their burden to landline teletype. The station at Great Falls, Montana, was the funnel between Alaska and the continental United States.

### **14 July 1943**

The AACCS Wing was reassigned from the Flight Control Command to Headquarters Army Air Forces "under the immediate supervision and jurisdiction" of the Assistant Chief of Air Staff, Operations, Commitments, and Requirements.

### **Early August 1943**

Sgt Ranier Payton, a radio operator, was the first AACCS combat casualty in the Pacific. He was one of the original members of the Munda task force. While the detachment was assembling its equipment at Guadalcanal, a call came from a bomber squadron for a radio operator to stand in on a raid over the large Japanese airdrome at Buka, off the coast of Bougainville. Sergeant Payton, though strictly a ground operator with no air crew or gunnery training, volunteered. The B-17 in which he flew was riddled by an enemy night fighter and burst into flames over the target.

### **4 August 1943**

Members of the 18th AACCS Squadron were the first from AACCS to take part in the invasion of Europe, setting up two radio control stations at Palermo and Catania in Sicily which went on the air in early September.

### **10 August 1943**

A detachment of twenty AACS men was the first Air Force unit to reach the Pacific island of Munda. The men installed their equipment within a half mile of Japanese guns. Despite as many as ten air raids a day, AACS had a complete radio station operating within eight days.

### **September 1943**

The AACS established a radio-teletype circuit on its South Atlantic route from Miami, Florida, to Natal, Brazil.

### **15 September 1943**

Headquarters Army Air Forces activated the first overseas processing squadron at Smyrna, Tennessee, and assigned it to AACS. This squadron's job was to process the rotation of AACS personnel to and from the United States. A second squadron was activated at McClellan Field, California, on 1 February 1944.

### **October 1943**

In the North Atlantic, AACS began employing high-speed, high frequency radio-teletype circuits instead of manual transmission by Morse code. Radio-teletype was a combination of radio and teletype in which a conventional typewriter replaced the handkey of continuous wave. Instead of sending Morse code by hand, the operator typed his message on a standard typewriter. The message, in the form of a paper tape, fed into an automatic "head" at the rate of up to 250 words per minute. There it was automatically encoded and transmitted by radio to the addressee where equipment received, automatically decoded, and delivered a clear text message. Atmospheric conditions, however, hampered transmission at times and the major stations retained Morse code manual transmission along with the high-speed circuits.

### **6 October 1943**

The official history of the Women's Army Corps (WACs) in AACS began with the assignment of 1st Lt Grace M. Barth (later, Lt Col) to AACS Headquarters in the position of WAC Staff Director. Despite objections and attitudes, WACs, under Lieutenant Barth's leadership, soon became an integral part of AACS, performing such duties as control tower operators, teletype and radio operators, cryptographic technicians, message center clerks, and clerk-typists. By August 1944, there were 598 WACs in AACS; 1,019 by June 1945.

### **13 October 1943**

The AACS Wing reassignment to Headquarters Army Air Forces was amended by eliminating the phrase "under the immediate supervision" of the Assistant Chief of Air Staff, Operations, Commitments, and Requirements. The Army Airways Communications System was now running its own organization.

### **November 1943**

The creation of the Oceanic Air Traffic Center brought together working representatives of all civil, Army, and Navy agencies concerned with movement of aircraft between the United States and Hawaii. The Army Airways Communications System was designated as the communications agency. The Hawaiian center was set up at Hickam Field in the building with Air Transport Command operations and the AACS message center.

An AACS detachment reestablished a station at Ft. Hertz in Burma. This station was essential because it was high up in the Himalayan Mountains and completed the chain of AACS stations across the "Hump," the natural barrier between India and China. Because of its strategic importance, the station came under heavy attack from the Japanese who occupied the surrounding territory.



### **28 November - 1 December 1943**

President Franklin D. Roosevelt, British Prime Minister Winston Churchill, and Soviet Leader Joseph Stalin met at Teheran, Iran, for a major conference on the war. A detachment of the 19th AACCS Squadron handled communications for the American delegation attending the conference.

### **7 December 1943**

A detail of five officers and eighteen enlisted men landed on the island of Terceira, Azores, and was officially on the air on 18 December. The station was soon handling an average of 450 planes daily as well as flight data traffic, navigational aid, and weather information.

### **14 December 1943**

Under fire, the first AACCS detachment landed at Empress Augusta Bay on Bougainville Island, the site of one of the major battles in the Solomons campaign. The first radio contacts and air traffic control assistance given to pilots were from AACCS facilities.

### **1943 - 1944**

The conference of Area and Regional Control Officers in Asheville, North Carolina, was a milestone in the overall history of the Army Airways Communications System. The conference was conducted by Col Ivan L. Farman from 29 December 1943 to 5 January 1944. This first conference touched on matters of policy; relationships with other agencies in the initiating of projects and the procurement and installation of equipment; relationships with the air traffic control and weather service; the innovation of the Women's Army Corps in AACCS; and future policy, emphasizing that AACCS must utilize every new type of equipment and invention and use every new means possible to improve the system.

## **1944**

### **1944**

Continuous wave (Morse code) manual operation was the basic transmission means in AACCS.

### **Early 1944**

The first AACCS airplanes for checking airways communications facilities were assigned to the Pacific.

### **January 1944**

The first Women's Army Corps (WAC) contingent of four enlisted women were assigned to the 8th AACCS Communications Squadron serving the North Atlantic. Within four months, the number grew to three WAC officers and twenty-one enlisted women. The WACs served primarily as cryptographers and teletype operators.

### **Spring 1944**

Ground control approach radar, which enabled aircraft flying in extremely bad weather to land safely, was probably the most significant navigational development during World War II. This new system was first employed by AACCS in the United Kingdom where it supported the Eighth Air Force and the Royal Air Force. Once AACCS had demonstrated its utility, the system was adopted quickly by civil aviation.

**April 1944**

A small detachment of AACS personnel were involved with the shuttle bombing project against Germany. American aircraft took off from Italy or Great Britain, bombed targets in eastern Germany, then proceeded on to land at bases in the Soviet Union. Later, the process would be reversed. The purpose of the shuttle bombing project was to reach targets in the eastern sections of Germany that could not be reached from bases in Italy or Britain and retain enough fuel to return. Fighter coverage, particularly, could not range that far. To accomplish this project, three bases were established in Russia—Poltava, Mirgorod, Piryatin—the latter two being the fighter bases, and Poltava being the bomber base. The personnel and equipment needed in Russia were moved, by air, from England down across North Africa, up through Egypt and Iran, and then into Poltava. Captain John T. Stevenson and 1st Lt John B. O'Conner, along with eight Morse code operators, seven cryptographers, and one maintenance person, provided long-haul communications for the operational traffic and the weather traffic to support the shuttle bombing project.

**25 - 28 April 1944**

Men from AACS installed a station in a Russian operations building at Poltava Field and the station's first signals were transmitted on 28 April.

**26 April 1944**

The "wing" designation was dropped from Headquarters AACS and received full status of a command.

**15 May 1944**

The Army Airways Communications System reorganized. Previously, AACS had followed an "Area-Region" organization under which the Region and Squadron were equivalent to territory covered. The former was responsible for facilities and the latter for personnel. After the reorganization, AACS adopted the standard Army Air Forces pattern with eight wings subdivided into groups, squadrons, and detachments. A direct and definite chain of command was thus established. The wings were: (1) Continental United States, (2) Africa and Middle East, (3) Alaska, Aleutians, and Western Canada, (4) China-Burma-India, (5) Europe, (6) Eastern Canada, Greenland, and Iceland, (7) Pacific, and (8) Caribbean and Central and South America.



*Chinese coolies work in front of the control tower of the 4th Army Airways Communications System Wing at Luliang, China, November 1944.*



*A radio direction finder made of cannibalized parts improvised in the Burma Jungle, 1944.*

**17 June 1944**

As part of the Normandy invasion, AACS mobile and air-borne Detachments "A" through "S" of the 133d AACS Squadron moved with the ground forces to set up advanced outposts for the air forces. Detachment G (with one officer and eleven enlisted men) was the first AACS unit to land in France. The 65th Group's mobile detachments assigned to work with the United States Strategic and Tactical Air Forces, raced into air strips snatched from the enemy only a few hours before, and like most other outfits became extremely nomadic in the D-plus days.

**1 July 1944**

Army Airways Communications System made its entry into the Marianas Islands and set up its first station on Saipan Island.

### **16 August 1944**

The Army Airways Communications System receiving station at Guam went into operation, and on the 17th, homing, air/ground, and point-to-point facilities became operational. On the 20th, the radio range was completed.

### **21 October 1944**

The submarine cable between Marignane, France, and Oran, Algeria, then the longest underwater teletype cable in the world, came under the responsibility of AACS.

### **23 October 1944**

Detachment 50 of the 68th AACS Group was the first AACS station to go into operation in the newly liberated portion of the Philippines, Leyte Island.

### **14 November 1944**

The Eiffel Tower, a famous old Parisian landmark, became a marker-beacon site for AACS.

### **6 - 9 December 1944**

AACS Radio Hams and cryptographers held up the Japanese counterthrust at Buri Strip for three days and nights on the Island of Leyte, allowing reinforcements to arrive. Withdrawal by the AACS men would have meant destruction of most of the previous airways equipment and elimination of the beam and traffic control that was saving so much of the limited airpower. In the wait for reinforcements, a cryptographer, Pvt Roy E. Birdsong, was killed and eight others wounded.

## **1945**

### **February 1945**

The Army Airways Communications System installed the first Ground Controlled Approach (GCA) equipment, an AN/MPN-1, in Etain, France; and AACS eventually became responsible for operation and maintenance of GCA installations, tactical and otherwise, in Europe.

### **17 February 1945**

As part of the Luzon campaign, AACS established a station at Clark Field, Philippines. The need for traffic facilities was so urgent that temporary facilities were set up in a wrecked Japanese aircraft on the edge of the airstrip. The first radio signals were sent using abandoned Japanese equipment.

### **28 February 1945**

The first AACS echelon crossed the Iwo Jima beachhead and on 7 March had a radio station on the air.

### **Spring 1945**

The 5th AACS Wing assumed full responsibility for air traffic control in Europe, including neutral countries such as Sweden and Spain.



*Lt Fletcher teaching air traffic control to some of the 1st WACs.*



*Women served in AACs in many nonhazardous jobs thus freeing men for the more isolated or hazardous areas of the war effort.*



### **March 1945**

Radio teletype service was established by AACS between Adak, Alaska, and Guam.

### **22 March 1945**

Personnel from AACS installed a range and Z-marker in Stockholm, Sweden. The equipment was to be used to support project "Sonnie," the transfer of American, British, and Polish internees in Sweden to the United Kingdom.

### **4 April 1945**

The AACS men of Detachment 305 (GCA), a ground control approach installation, crossed the German border and set up the first AACS air traffic control station on Strip Y-59 at Strasfeld, a few miles southwest of Bonn.

### **19 April 1945**

The first AACS radio installation on the island of Okinawa became operational, nineteen days after the Tenth Army stormed the beaches.

### **May 1945**

The AACS Commander, Col Ivan L. Farman, was promoted to the rank of Brigadier General. This was the first general officer to serve in AACS even though the command had over 45,000 assigned personnel. Most of AACS's unit commanders were captains. During the same period, AACS's German counterpart was commanded by a Lieutenant General.

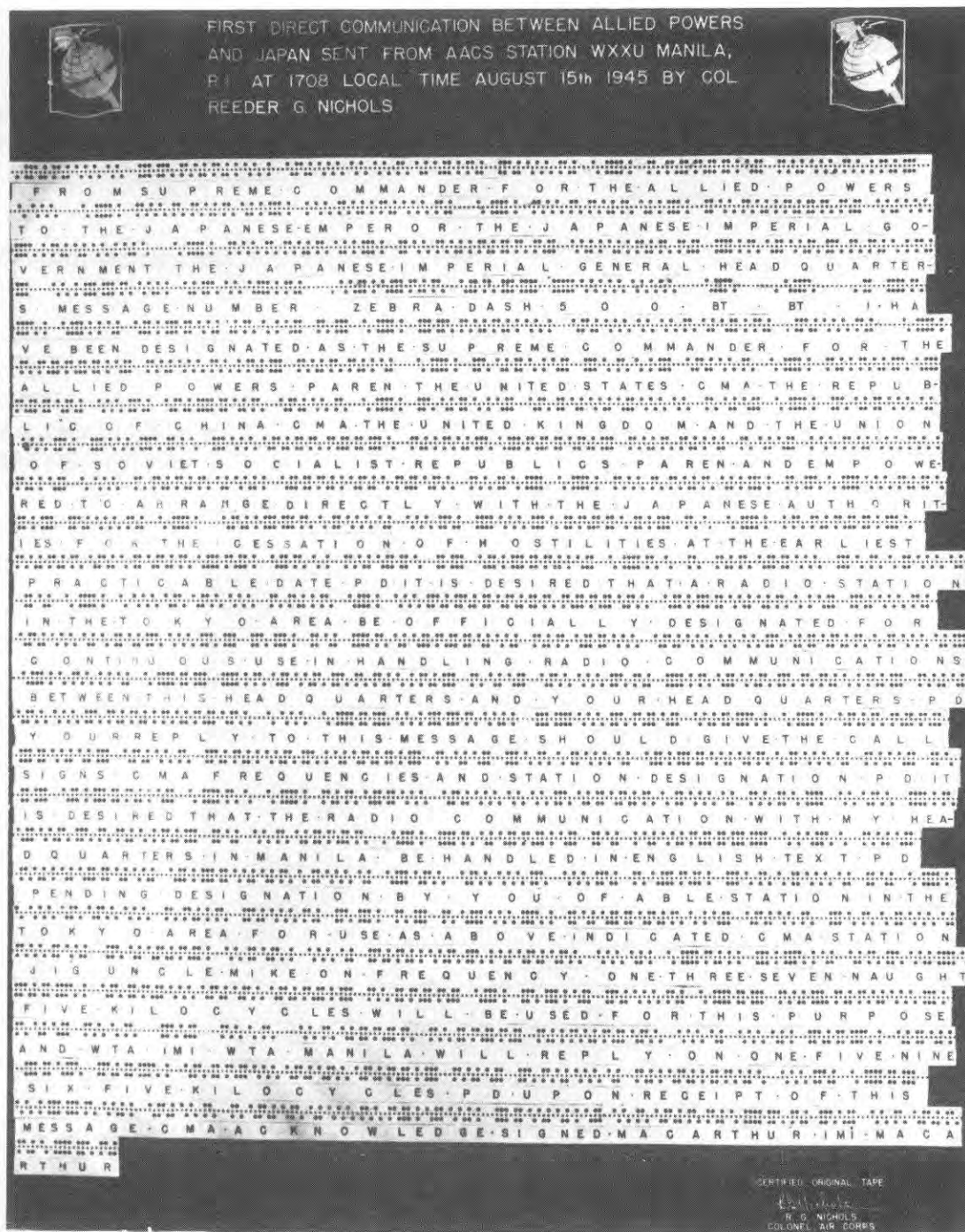


*Brig Gen Ivan Farman, AACS Commander, at the 133d Squadron Headquarters outside Orly, France in 1945. Gen Farman was the first AACS Commander to achieve the rank of general.*



15 August 1945

When Gen Douglas MacArthur, Supreme Commander of the Allied Forces in the Pacific, was unable to communicate with Tokyo using War Department signal facilities, the AACS Manila station sent General MacArthur's instructions to the Japanese using a frequency over which AACS broadcasted uncoded weather information. Tokyo replied within two hours. This was the first direct communication between Allied and Japanese governments.



*First direct communication between Allied powers and Japan sent from AACS station WXXU Manila, P.I., at 1708 local time August 15th 1945, by Col Reeder G. Nichols.*



*AACS at Atsugi in August 1945. The first communications in Japan following World War II were operated from this C-47 (Gooney Bird) at Atsugi. Destruction of the field can be seen in the foreground. The Flying AACS Radio Station, which took part in preparations for General MacArthur and his airborne occupation forces, later became the 1956th Communications Group (AFCS).*



*The first control tower in Japan, after the war, was operated by a unit of the 68th AACS Group, which is now the 1956th Communications Group. Initially, the Japanese had used a wooden platform on top of the base operations building; however, the AACS 7th Wing, needed a better structure to protect their radio equipment. The tower was built by the Japanese within eight hours vice the normal two days.*

**28 August 1945**

A special team of the 68th AACS Group, led by Col Gordon Blake, were the first Americans to reach the main islands of Japan following termination of hostilities. Landing at Atsugi Airfield near Tokyo, the team set up the communications equipment necessary to guide in the first contingent of occupation troops on 30 August. Included in the equipment was the first airborne radio station in Air Force history, a forerunner of modern airborne command posts.

**2 September 1945**

When World War II ended, AACS possessed eight wings, twenty-one groups, fifty-five squadrons, and more than 700 detachments. Its 49,400 military personnel operated 819 different stations throughout the world. Thirty-eight Allied nations, including the Union of Soviet Socialist Republics, used AACS facilities during the war.

**17 December 1945**

Headquarters AACS moved from Asheville, North Carolina, to Langley Field, Virginia.

**1946**

**13 March 1946**

The Army Airways Communications System was redesignated Air Communications Service and was reassigned as a subcommand to the Air Transport Command.

**June 1946**

Demobilization after World War II brought a rapid decline in the number of AACS personnel. From a wartime high of 49,400 military personnel in September 1945, AACS shrank to only 8,635 military personnel (sixty-three percent of its authorizations). The system comprised only 249 stations around the world.

**11 September 1946**

Air Communications Service was redesignated Airways and Air Communications Service. This name change retained the historically significant AACS acronym.

**12 December 1946**

Headquarters AACS moved from Langley Field, Virginia, to Gravelly Point, Virginia, a site adjacent to Washington National Airport.

**1947**

**1947**

The Airways and Air Communications Service installed the Military Flight Service Communications System, the first centralized, integrated communications system designed specifically to aid the control of aircraft for all Air Force bases within the continental United States.

### March 1947

Major General James P. Hodges, Commander of Air Training Command's Flying Division, advocated the abolishment of AACS. Lt Gen John K. Cannon, Commander of Air Training Command, indorsed the letter and sent it on to General Carl Spaatz, Commanding General of the Army Air Forces. General Hodges and General Cannon argued that a base commander had to have total control of all facets of base operations; and that "direction, standardization, and overall control should come from Headquarters, Army Air Forces, not from a small vertical lateral command." Major General Harold M. McClelland, AACS Commander, believed that this was the most serious attack on AACS's existence up to that time. At Gen Ira Eaker's request, General McClelland wrote a brilliant rebuttal focusing on the issue; "either we give base commanders command of everything on the base or we give them only operational control. Although he did not use the terms "dual-hat" or "single manager," the concepts were central to his argument for retaining an organization to centrally manage an integrated communications system. His conclusion was that "no valid reason can be advanced for tearing down a system that has proven itself capable of meeting wartime requirements, just to make the base commander 'king of all he surveys.'" General Spaatz accepted General McClelland's position.

### 26 July 1947

President Harry S. Truman signed the National Security Act of 1947 establishing the United States Air Force, transferring the Army Air Forces to the United States Air Force. The Army Air Corps and Air Force Combat Command as Army Air Force agencies were abolished.

### 18 September 1947

The U.S. Air Force began functioning as an independent service when Stuart Symington was sworn in as the first Secretary of the Air Force. General Carl A. Spaatz became the first USAF Chief of Staff on September 26.

## 1948 - 1949

### Spring 1948

Project Beetle used top loading of the two incomplete antenna towers of the Northwestern Low Frequency Long Range Navigation (LORAN) chain in Canada. This chain consisted of stations at Skull Cliff and Barter Island in Alaska, and Kittigazuit, Cambridge Bay, and Sawmill Bay in Canada. Airways and Air Communications Service personnel were at all sites until the system was operational at which time Canadian personnel assumed responsibility for the Canadian sites. These tests, however, indicated that Kittigazuit and Cambridge Bay were not usable as part of the chain because of insufficient ground wave coverage. Therefore, the LORAN stations at Cambridge Bay, Sawmill Bay, Regina, and Baker Lake were closed on 10 March 1949, thus ending the joint Canada-United States LORAN chain.

### 1 June 1948

Headquarters AACS was reassigned to the Military Air Transport Service as part of a consolidation of strategic airlift resources into one transport organization.

### August 1948

Headquarters AACS was given the responsibility for organizing and supervising the operation of the Hurricane Communications (HURCOM) warning system. The purpose of the HURCOM net was to provide supplementary, alternate, or additional communications facilities for the passage of emergency traffic resulting from the existence of a hurricane. This same net would also provide emergency communications or service needed as a result of tornado, earthquake, or major catastrophe causing widespread loss of life or property.



### **1 August 1948**

The first delivery of weather facsimile equipment was made to AACS units for a worldwide radio-teletype point-to-point weather facsimile network. By March 1949, working in collaboration with the Air Weather Service, AACS was making daily transmissions from Japan and Germany to the Master Analysis Center in Washington, D.C. This network transmitted weather data in completed chart form via radio facsimile.

### **1 October 1948**

In accordance with a new Air Force directive, AACS's units were redesignated. Subordinate groups were numbered in the low 1800 series; communications squadrons were assigned the 1900 block; and other special purpose units such as "mobile" and "installation and maintenance" squadrons were assigned numbers in the 1950s.

### **25 June 1948 - 31 October 1949**

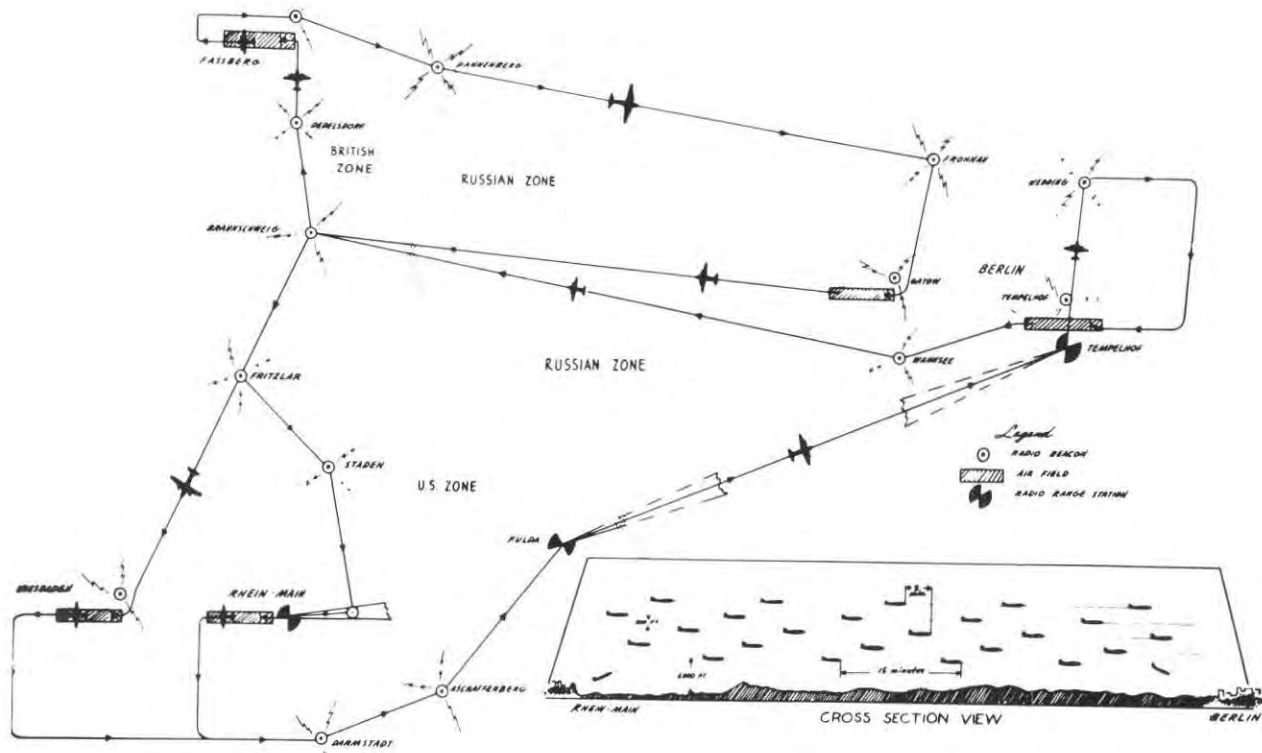
During the Berlin Airlift, also known as "Operation Vittles," the 1946th AACS Squadron provided critical airways communications and air traffic control services. Airways and Air Communications Service personnel handled 276,926 airlift flights in fifteen months under all types of weather conditions.



*A C-54 aircraft carrying ten tons of much needed supplies follows AACS navigational signals in order to avoid the buildings surrounding Tempelhof Aerodrome. The navigational aids were placed in a cemetery.*



*The Silver Streak stands ready for loading in front of the Munich Riem Airport terminal building.*



*This illustration shows the airlift corridors and the placement of AACS navigational aids. U.S. Air Force planes left from three bases, Rhein-Main and Weisbaden ABs near Frankfurt, and the Royal Air Force Base at Fassberg in the British Zone. Aircraft from Wiesbaden and Rhein-Main flew to Berlin along the lower corridor and returned via the center corridor. Aircraft from Fassberg flew to Berlin along the top corridor and returned via the center corridor. Radio beacons and ranges guided them along their routes.*



*This MARS mobile van provides mobile communications during military operations and emergencies. MARS began operations in 1948.*



**19 November 1948**

Headquarters AACS moved from Gravelly Point, Virginia, to Andrews AFB, Maryland, and set up operations in a building which had recently been vacated by Headquarters Strategic Air Command (SAC). This was the fourth move of HQ AACS in five years.

**26 November 1948**

The Military Amateur Radio System (later, Military Affiliate Radio System) (MARS) was jointly formed by the Army and Air Force. Its main purpose was to create interest among amateur civilian radio operators in military radio communications and to provide a pool of trained personnel in case of a national emergency. A second purpose was to assist in transmitting messages for the Army, Air Force, Federal Civil Defense and the Red Cross during emergencies.

**1949**

**20 January 1949**

Headquarters AACS established the 1856th AACS Squadron, the first unit specifically charged with flight inspection of navigational aids.

**10 March 1949**

Headquarters United States Air Force (USAF) directed AACS to survey, install, and operate a three-station Gulf Coast Long Range Navigation (LORAN) chain on a temporary field installation basis using air transportable high frequency LORAN equipment. The primary purpose of this chain was to provide temporary facilities for the training of USAF and Canadian Air Force low frequency LORAN operators and technicians until a permanent LORAN chain could be installed on the Gulf Coast. Even though the joint venture, known as Project Beetle, was decommissioned in 1949, no action was taken to decommission the Gulf Coast stations due to the LORAN requirement for the navigational training program.

**25 April 1949**

Detachment 1, 1962d AACS Squadron, the last AACS unit in China, was discontinued because of the civil war and the unsettled conditions. The unit was located at Kiangway Airfield, Shanghai.

**26 December 1949**

The 1856th AACS Squadron was redesignated the 1856th AACS Squadron (Facility Checking), the first of twenty AACS/AFCC units to bear the facility checking title.

**1950**

**19 June 1950**

The first fatal crash of an aircraft specifically assigned to a flight check unit occurred. A C-47 of the 1856th AACS Squadron (Facility Checking) crashed on take off at Tinker AFB, Oklahoma, killing the pilot and injuring two other crew members.

**5 July 1950**

Hostilities began in South Korea on 25 June. Eleven days later AACS had two detachments at Pusan (Detachment 1955-4) and Pohan-Dong (Detachment 1955-5 Mobile) providing airways communications for the USAF's Far East Air Forces.

**17 July 1950**

Headquarters USAF directed the implementation of the Air Force Global Communications System (GLOBECOM) to "provide the minimum point-to-point and long range ground/air communications required to support global air operations."

**30 July 1950**

The first ground controlled approach unit to operate in Korea was placed in operation at Pohang.

**1 August 1950**

Five weeks after the invasion of South Korea, AACS organized and established the 1973d AACS Squadron at Taegu, with an authorized strength of sixteen officers and 273 airmen, to handle the growing air traffic control and air communications requirements in Korea.

**8 - 15 August 1950**

Airways and Air Communications Service personnel saw actual combat for the first time in Korea at Pohang during the evacuation of the airfield under enemy pressure. The detachment of forty-five men got away safely without injury, and all the equipment was saved except for one jeep and two small power units.



*Quarters and Operations buildings of the Weather and AACS Dets in the middle of the valley at Simiutak, Greenland during April 1950.*



*A 3 AACS Installation and Maintenance troop on the way up Simiutak in April 1950. At that time, men backpacked supplies and equipment up the hill to construct a building and install a VHF/DF to ferry several jet fighters across the Atlantic to Europe. The heavy equipment, normally used to move the supplies and equipment, was inoperable.*



*AACS detachments were operating at Pusan, Taegu, and Pohang, Korea, within a week after President Truman authorized American military involvement. The first unit to go into action was this radio jeep which served as a control tower at Pusan.*

18 August 1950

Headquarters AACS issued instructions to the 1800th, 1807th and 1808th AACS Wings; 1804th and 1805th AACS Groups, and fifteen AACS Squadrons for immediate implementation of the Global Communications System (GLOBECOM) on a limited scale. The implementation of GLOBECOM provided minimum point-to-point and long range ground/air communications required to support global air operations. The installation of this system would complete the augmentation of existing equipment, and rehabilitation of antenna areas and structures. This initial phase provided four-channel operation between key stations by augmenting existing facilities with AN/FGC-5 equipment, and furnishing high power ground/air channels as required. The second phase would provide additional facilities and circuits, and modernize present circuits by use of Wilcox 96-C equipment.

**19 October 1950**

Headquarters USAF stated that it intended the Global Communications System (GLOBECOM) to accommodate most long haul communications requirements between those points served by the system. Headquarters AACS interpreted this statement to be the Air Force policy regarding the establishment and utilization of GLOBECOM facilities. Moreover, AACS contended that this policy statement inferred that AACS, through operation of GLOBECOM, would normally be responsible for handling all long haul Air Force radio communications in present and future areas of Air Force operations.

**1951**

**1951**

All Air Force air/ground radio stations were converted from continuous wave Morse code to radio telephone. Airways and Air Communications Service installed, operated, and maintained these integrated voice air-to-ground facilities on a global basis. The demands for the very high frequency portion of the radio spectrum by both military and civilian agencies led to the adoption of the ultra high frequency band. It was used for short-range communications between flying aircraft. It was extended also to nations of the North Atlantic Treaty Organization (NATO) and enabled all Allied military aircraft to communicate with one another and with NATO's ground stations.

**1 February 1951**

Headquarters USAF approved "in principle" AACS plans to upgrade low frequency radio communications in the North Atlantic.

**March 1951**

The 1808th AACS Wing proposed the formation of a centralized flight check section, under the 1808th, for flight checking all facilities being operated in the Japanese-Far East area.

**1 May 1951**

The 1860th AACS Mobile Communications Squadron, the first mobile communications squadron in Europe, was activated at Munich-Riem Airport, Germany, with an authorized strength of 20 officers and 427 airmen.

**June 1951**

The 1971st AACS Squadron was established at Keflavik, Iceland, with an authorized strength of 5 officers, 130 airmen, and 15 civilians. This was the first AACS unit to operate in Iceland in almost five years.

**1 July 1951**

Two new AACS units in Korea were organized: the 1818th AACS Group at Pusan, with an initial strength of 1 officer and 70 airmen; and the 1993d AACS Squadron at Kimpo Airfield, with an authorized strength of 30 officers and 640 airmen.



18 July 1951

The 1856th AACS Flight Checking Squadron, Tinker AFB, Oklahoma, conducted the first flight check of the Andrews AFB, Maryland, Global Communications System facility.

20 July 1951

Headquarters AACS activated the 1859th AACS Mobile Communications Squadron under the 1808th AACS Wing.



*Where there's a will, there's a way. In July 1951, airmen of the Fifth Air Force used an improvised rack made of shipping crates to support them while they hooked their wires to a supporting cable. Rapid construction of communications systems in the face of adverse field conditions was one reason for the Air Forces's success in Korea.*



*The telephone lines of the Fifth Air Force's 4th Fighter Interceptor Wing were kept in constant readiness through the efforts of airmen in Korea. Communications specialist, Sgt Leslie Robinson of Alamogordo, New Mexico, was checking a telephone line through a maze of wires in May 1951.*

**10 September 1951**

The joint policy for weather communications service and the delineation of responsibilities of AACS and Air Weather Service with respect to weather communications service was announced in Military Air Transport Service (MATS) Regulation 100-1.

**15 November 1951**

From this date forward, all engineering for the Global Communications System, including detailed engineering and preparation of installation specifications, was to be accomplished by AACS in order to effect uniform engineering practices.

**6 December 1951**

Personnel from AACS and the Strategic Air Command (SAC) met to discuss the mutual rotation of radio operators between the two commands. The number of SAC airmen eligible for overseas assignment was the limiting factor. According to the agreement reached, SAC would furnish one hundred airmen for January assignment, one hundred airmen for February assignment, and twenty-five airmen per month thereafter, as long as resources of eligible overseas personnel would permit. Headquarters AACS agreed to furnish SAC with fifty airmen from United States resources by 2 January 1952, one hundred from port arrivals by 10 January 1952, one hundred from port arrivals to arrive prior to February 1952, and twenty-five per month from port arrivals each month thereafter.

## **1952**

**Early 1952**

Headquarters Tactical Air Command (TAC) requested that AACS create a mobile unit dedicated solely to the support of TAC operations. Headquarters USAF rejected the request as not being justified.

**1 March 1952**

The Hurricane Communications Emergency Communications Network deactivated. This was a network of continuous wave radio stations created in 1948 to provide emergency point-to-point communications during hurricane seasons.

The 1859th AACS Squadron (Mobile) was redesignated the 1st AACS Squadron (Mobile).

**March - September 1952**

The Airways and Air Communications Service provided low power radio equipment for the passing of weather observations during the Icicle Island Project. This project involved the establishment of a temporary weather observation station on an ice island in the Arctic Ocean near the geographic North Pole.

**3 March 1952**

The first test of very high frequency propagation using ionospheric forward scatter techniques occurred. The circuit was between Goose Bay AB, Labrador, and Sondrestrom, Greenland, a path length of approximately 1,000 miles.

**April 1952**

Headquarters USAF directed the major commands in the continental United States to deactivate immediately all very high frequency airways stations. Pilot-to-forecaster service, where present, was to be transferred by AACS to control towers. It was deemed unlikely that military ultra high frequency airways facilities would be required in the continental United States since it was anticipated that the Civil Aeronautical Administration would provide services from its airways stations on the military frequencies.

**17 April 1952**

Air Force Regulation 20-51A formally recognized the flight inspection mission as a necessary function of AACS.

### **May 1952**

Headquarters USAF announced a completely revised Instrument Low Approach System program which called for the older SCS-51 mobile equipment and new equipment designated AN/MRN-7 and AN/MRN-8 to be installed. This change was prompted by requirements during the Korean War.

### **1 May 1952**

Headquarters USAF approved the request to consolidate Flight Service Centers and supporting AACS interphone functions.

### **June 1952**

Airways and Air Communications Service and Strategic Air Command agreed to the mutual exchange of ground radio maintenance personnel, AFSCs 30172 and 30173.

### **1 June 1952**

The 1862d AACS Mobile Communications Squadron (Strategic Air Command (SAC) Support) was activated with an initial strength of 45 officers and 351 airmen. The mission of this unit was "to provide a reserve of qualified AACS specialists capable of rapid mobilization for overseas deployment at any time and with minimum warning in support of SAC operations."

Headquarters AACS redelegated the responsibility for the installation of the Global Communications System to the 1872d AACS Squadron (GLOBECOM INSTL) which was established at Andrews AFB, Maryland.

### **30 June 1952**

The 1808th AACS Wing voice air/ground program was completed, with a total of nine stations: Hickam, Kwajalein, Johnston Island, Midway (operated by the Navy as part of the program), Clark, Guam, Okinawa, Iwo Jima, and Johnson AB, Japan.

### **22 September 1952**

The term "Flight" replaced the designation "Squadron" for AACS units performing flight inspections of navigational aids.

### **November 1952**

The Military Air Transport Service directed AACS to assume operations responsibility for the Air Rescue Service Crash Locator System.

### **31 December 1952**

Air Force Specialties and Air Force Specialty Codes replaced the old classification system using officer Military Occupational Specialties and Social Security Numbers.

## **1953**

**1 January 1953**

Responsibility for the operations of the United States Air Force Tape Relay Network at Wiesbaden, Germany; Chateauroux, France; and South Ruislip, England, was transferred to AACS from the United States Air Forces in Europe. This action provided centralized control of tape relay stations and substantially increased the efficiency of the USAF communications system, which included three overseas locations and five major switching centers in the continental United States.

**28 January 1953**

Headquarters USAF approved the interim high frequency ground/air program. This program provided for the operation of USAF ground/air frequencies, voice and continuous wave, by AACS during the preimplementation period of the ground/air portion of the Global Communications System. Eventually voice operations became the primary type of ground/air communications.

**4 March 1953**

Headquarters AACS announced a policy designed to consolidate AACS maintenance activities at all echelons. Wherever feasible, a centrally located consolidated AACS maintenance shop was organized and maintained at each base or other unit location. Existing maintenance personnel and equipment for all types of facilities operated by AACS at that station was merged into this shop.

**1 April 1953**

Headquarters AACS activated the 1816th AACS (Operational Training) Group at Orlando AFB, Florida, to serve as a training center to upgrade basic trainees and to overcome deficiencies in skills which prevented proper duty assignments. The center provided proficiency training and specialized training on new techniques or specialized equipment.

**1 May 1953**

Headquarters AACS established a USAF Communications Message Traffic Control Unit to centrally direct the flow of traffic within the communications system to minimize the effect of circuit outages and peak traffic periods.

**July 1953**

The Airways and Air Communications Service became the message traffic engineering agency for the entire Air Force. The AACS traffic analysis program exercised this responsibility. The primary mission of traffic analysis was a constant evaluation of communications at the station level.

**1 October 1953**

The Air Force program to convert from very high frequency to ultra high frequency (UHF) as the principal means of short range voice communications reached an operationally acceptable, but not totally complete, level. The Airways and Air Communications Service was heavily committed to construction of a large portion of the required ground communications program worldwide. New and faster types of aircraft necessitated this conversion. Starting in 1952, virtually all types of aircraft received by the Air Force were equipped with UHF equipment only. This meant that AACS was continuously plagued by aircraft components getting ahead of the ground environment, necessitating "hurry-up" interim installation programs.



**30 November 1953**

To expedite the landing of aircraft, HQ AACS established a new policy for landing rates: for common-user-type traffic conditions, the instrument flight landing rate would be at least one aircraft every five minutes; for conventional, jet, bomber or fighter aircraft arriving under tactical type conditions, the landing rate would be one aircraft every three minutes.

**December 1953**

The AACS forward scatter system in the North Atlantic was established. The stations were Thule AB and Sondrestrom AB, Greenland; Goose Bay AB, Labrador; and Limestone AFB (later, Loring AFB), Maine, the temporary site of the continental United States terminal. Initially, the site provided a duplex teletype capability.

**31 December 1953**

By this date, AACS had its first five visual omni-directional range (VOR) facilities operating. Instead of the four conventional range legs, the VOR range emitted signals along all 360 degrees of the compass. It could be used as a navigational aid by any aircraft within tuning range. The Air Force program supplemented an existing system operated by the Civil Aeronautics Administration.

**1954**

**23 February 1954**

Headquarters AACS activated the 1875th AACS Squadron (Strategic Support) at Stead AFB, Nevada, to provide the Strategic Air Command (SAC) with communications capability in support of its Evasion and Escape Program. The unit would operate under the command jurisdiction of HQ AACS and under operational control of SAC's 3904th Composite Wing. The Strategic Air Command transferred necessary equipment and a total of eighty personnel to AACS to man the new squadron.

**March 1954**

Headquarters USAF requested that AACS assume the flight check responsibility for certain ultra high frequency and ultra high frequency/direction finding facilities in Canada. Air Force activities were the primary users of the facilities located at Edmonton, Fort Nelson, and Whitehorse.

Headquarters AACS defined its policies concerning navigational aids. The selection of specific types of navigational aids and/or communications systems required to support a specific Air Force mission was the responsibility of the major command concerned. Headquarters AACS was responsible for assisting the major command in preparing an operational plan, conducting site surveys, installing, operating, and maintaining requested equipment after approval by the USAF Chief of Staff.

**June 1954**

The Craig Machine Corporation delivered the first Tactical Control and Navigation (TACAN) AN/TRN-6 unit to the Air Force and installed it at Elmendorf AFB, Alaska. The TACAN was developed by the Federal Telecommunications Laboratories in a series of programs sponsored by the Air Force and the Navy to provide short range navigational information, azimuth and distance, to pilots. The TACAN gave pilots both distance and bearing information instantly, automatically, and with an accuracy never before attained. The system gave pilots the direction to the ground station for a full 360 degrees in contrast to the old low frequency, four-course radio range system. The original TACAN program consisted of thirteen facilities in the continental United States and eighteen in Alaska, but eventually TACANS would be installed at USAF bases and in all aircraft. This program became the largest navigational aid program ever undertaken by the Air Force up to that time.

**27 June 1954**

Headquarters AACS activated the Air Operational Network (AIROPNET) as a communications system engineered within the framework of the Air Communications Network (AIRCOMNET) to increase AACS efficiency in handling message traffic concerned with aircraft movement. Although AIROPNET initially served only the continental United States, AACS extended the system overseas in 1956. It combined the nets in the continental United States, the North Atlantic, Europe, and the Pacific into one common worldwide network. The AACS goal was to deliver AIROPNET messages within thirty minutes or less.

**1 September 1954**

Headquarters AACS established Detachment 1, 3d AACS Squadron (Mobile) at Langley AFB, Virginia, and attached it to Headquarters Tactical Air Command (TAC) for operational control. This detachment was the first AACS mobile combat unit to be dedicated solely to TAC use. It supported TAC until 1 September 1959 when the detachment was discontinued.

**1955**

**8 August 1955**

Headquarters AACS published procedures whereby qualified male airmen could apply for training in the AACS/Civil Aeronautics Administration (CAA) on-the-job training program. Those selected received thirty-nine weeks of training in CAA facilities.

**1956**

**January 1956**

The International Notice to Airmen (NOTAM) Office moved from Fuchu AS, Japan, to Kadena AB, Okinawa, making the office a tributary of that major relay station. This action resulted in increased speed of service, assuring more detailed coverage of the area and simplifying NOTAM office procedures.

**1 February 1956**

The Global Communications System North Atlantic Control Unit activated at Goose Bay, Labrador.

**April 1956**

Headquarters AACS assumed all responsibility for procurement of frequencies suitable for programmed single sideband circuitry.

**1 May 1956**

The USAF Zone of the Interior Weather teletype network was converted from a sixty to one hundred words-per-minute operation. This action culminated more than five years of planning, research, development, and installation by AACS and the American Telephone and Telegraph Company.

**15 May 1956**

After approval by HQ AACS, a full period duplex weather cable was activated between Suitland, Maryland, and High Wycombe, England, for use in transmitting weather information to the European area.

## **Fall 1956**

Fully automatic switching equipment was installed at the Andrews AFB, Maryland, gateway station. This installation was the first of five switches in the continental United States that comprised AACS's Plan 55, the installation of automatic teletype switching centers at Andrews AFB, Maryland, and McClellan AFB, California, gateway stations; Wright-Patterson AFB, Ohio; Carswell AFB, Texas; and Robins AFB, Georgia. Included in Plan 55 were five locations overseas: Fuchu AS, Japan; Hickam AFB, Hawaii; Croughton RAF Station, England; Sidi Slimane AB, French Morocco; and Goose Bay AB, Labrador.

## **1 October 1956**

The Airways and Air Communications Service absorbed the Flight Service, one of the subcommands of the Military Air Transport Service. The meshing of the point-to-point flying aids of the Flight Service, which operated within the continental United States, with those of AACS outside the United States, became the first step in standardizing all flight services. Among AACS's new functions were flight clearance authority, inflight advisory service, aircraft movement messages, and flight plans.

## **31 December 1956**

Of the 549 AACS operational facilities worldwide, only eight had no ultra high frequency communications.

## **1957**

### **17 April - 4 July 1957**

Personnel from the 1st AACS Squadron (Mobile) supported Project Dovecot, the testing of atomic devices by the British government at Christmas Island.

### **July 1957**

The March AFB, California, aeronautical station was inactivated. Adequate coverage could be provided by McClellan AFB, California.

### **1 July 1957 - 31 December 1958**

The 1804th AACS Wing provided point-to-point communications, ground-to-air communications, and air navigational aids in support of a scientific station on the drifting ice pack of the Arctic Ocean. The project (nicknamed Project Ice Skate) was part of the activities associated with the International Geophysical Year under the direction of the United States National Academy of Science.

### **1 August 1957**

The 1931st AACS Squadron, Elmendorf AFB, Alaska, assumed the responsibility for operation and maintenance of the Tenth Air Division (Defense) communications center operated by the Tenth Air Division's 5040th Communications Squadron. The primary reason for the consolidation was to improve service to all agencies at less cost to the Air Force and a reduction of twenty-two operating personnel. The on-line function remained at the original Tenth Air Division (Defense) communications center location, and AACS was given complete control of the Elmendorf-Shemya communications circuits in an effort to increase the circuits' efficiency.

### **September 1957**

The Albrook AFB, Canal Zone, aeronautical station was converted to maintenance status. This left the continental United States with nine air/ground facilities.

**1 November 1957**

"Areas," having statutory air division authority, and "Regions," having wing status, replaced all former AACS wings and groups. The new subordinate command structure consisted of: the Continental AACS Area, the European African-Middle Eastern AACS Area, and the Pacific AACS Area. Two smaller groups, the 1804th and 1805th, located in Alaska and the North Atlantic respectively, became independent regions reporting directly to HQ AACS.

**15 November 1957**

The first of ten fully automatic switching centers (Plan 55) being planned as a part of the USAF Strategic Communications Systems was accepted by the Air Force at Andrews AFB, Maryland. Use of the automatic switching equipment would at least triple AACS's message handling capability over torn tape operations.

## **1958**

**15 January 1958**

Headquarters AACS moved from Andrews AFB, Maryland, to Scott AFB, Illinois.

**17 January 1958**

The Taegu air route traffic control center transferred from AACS to the Republic of Korea Air Force.

**29 March 1958**

The first fully automatic Western Union switching center (Plan 55) station was cutover at Andrews AFB, Maryland.

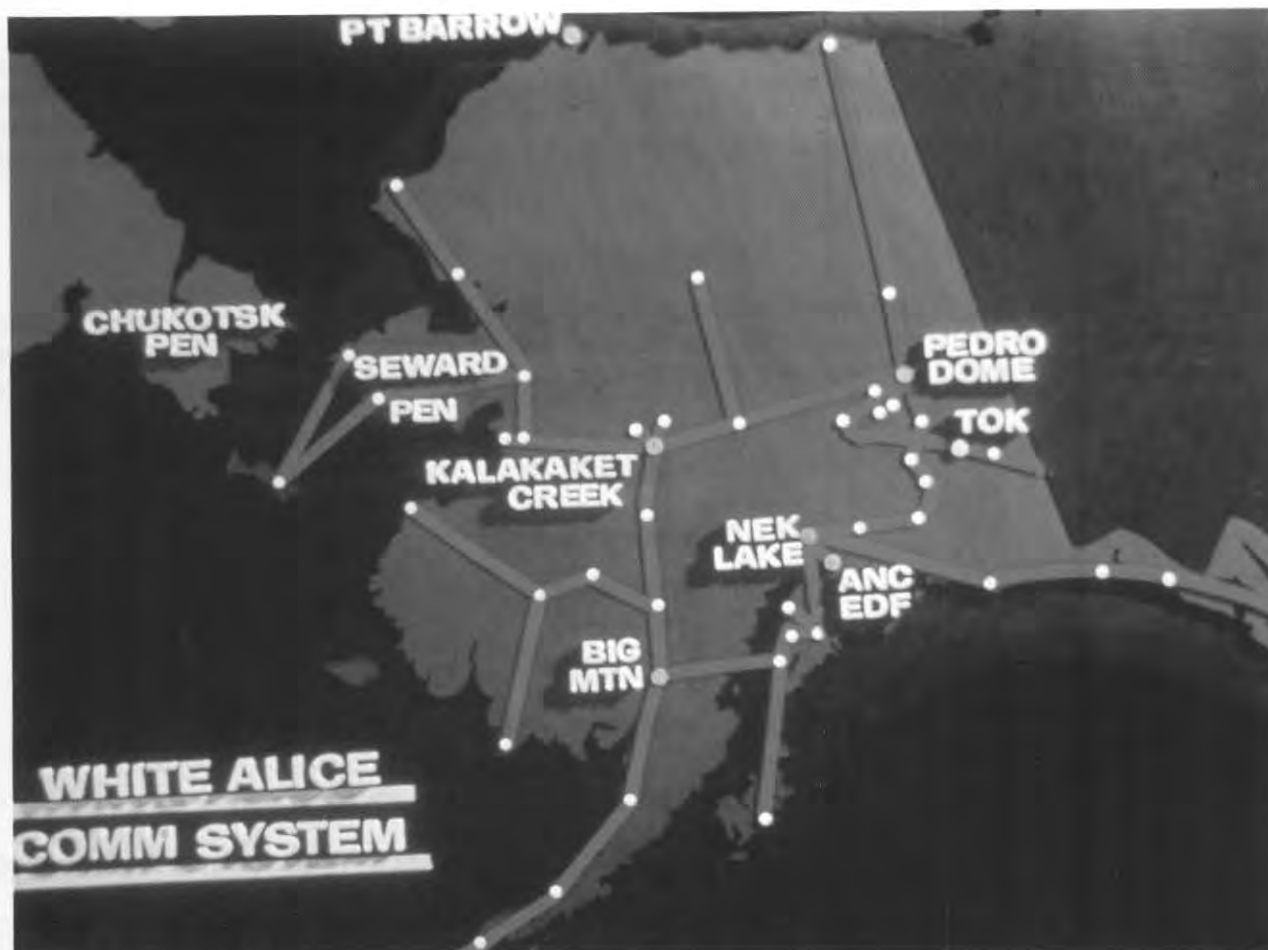
**May 1958**

Headquarters USAF directed AACS to assume a portion of the point-to-point communications operated by the USAF Security Service. On 1 February 1959, AACS activated the 2003d AACS Squadron at Karamursel, Turkey, to perform this mission in the Middle East.



*A White Alice Communications site in Tatalena, Alaska, in May 1958.*





*The White Alice Communications System was a network composed of 33 transmitting and receiving stations designed to give Alaska 3,000 miles of voice and telegraph channels which functioned as a prime carrier for all military and civilian fixed long-line communications. During the 1970s, however, White Alice was leased and later sold to a commercial company because it had become too expensive to operate and was obsolete in the face of satellite communications.*

June 1958

The Ground Electronic Engineering Installation Agency, better known as GEEIA, was established under the Air Materiel Command. The mission of the new organization was to manage the installation portion of the USAF Communications Electronics Support Program, as approved by Headquarters USAF; perform or direct systems engineering-installation to insure technical and schedule compatibility between related ground electronics systems; and perform field engineering and installation of facilities through field offices to insure timely completion of approved ground electronics programs. The Airways and Air Communications Service's engineering and installation units transferred to the new organization between 1 October 1958 and 1 January 1959.

3 July 1958

Airways and Air Communications Service became the system manager for the new Communications Logistics Network, an automatic, fully electronic, transistorized, high speed data communications system. Plans indicated that it would be the world's largest and most advanced digital data system and would provide for more efficient control of Air Force weapons systems, materiel, and personnel.



### **3 September 1958**

The 1938th AACS Squadron, Ramey AS, Puerto Rico, became operational on all authorized weather reconnaissance frequencies except 18023.5 kcs. This made it feasible to use the station as an alternate for Kindley AFB, Bermuda, in the Hurricane Weather Communications Support Program. It also enabled AACS to give adequate communications support to the USAF Hurricane Weather Reconnaissance Program for the first time since the Air Force assumed this responsibility.

### **October 1958**

Headquarters Pacific Air Forces (PACAF) assigned operational control of the Clark, Hickam, and Taiwan communications squadrons to local AACS units. Clark and Taiwan were not a part of the test plan proposed by PACAF, but were included because of the Taiwan "flare-up" and the consequent need to improve communications. Headquarters PACAF, pleased with immediate improvement at Clark, proposed that the test period be shortened to thirty days; that the single manager concept be applied at all locations where PACAF and AACS units were collocated; and that a consolidation program be developed. This was the first use of the single managership for communications in the Air Force and foreshadowed the creation of the Air Force Communications Service in 1961.

### **November 1958**

The cutover of the Robins AFB relay station to the Western Union fully automatic switching center completed the network of five stations in the continental United States (Plan 55). The five locations were Andrews AFB, Maryland; McClellan AFB, California; Wright-Patterson AFB, Ohio; Carswell AFB, Texas; and Robins AFB, Georgia. This was part of the overall conversion of major relays to automatic operations.

### **December 1958**

Headquarters Pacific Air Forces authorized the Fifth and Thirteenth Air Forces to place their communications units and communications-electronics elements under the operational control of local AACS commanders. Each location would develop a joint consolidation plan for integration of the fixed communications facilities.

## **1959**

### **1959**

At the direction of HQ USAF, a special study of Air Force communications, chaired by Col D. E. Williams, recommended a single manager for communications and helped lead to the creation of the Air Force Communications Service in 1961.

### **1 June 1959**

Airways and Air Communications Service transferred the Rhein-Main AB tower and radar approach control facilities to German civil aviation authorities.

The Guam air traffic control center was transferred from the Air Force (AACS) to the Federal Aviation Agency.

### **4 June 1959**

Headquarters AACS transferred the sixty-scan National Facsimile Network to the United States Weather Bureau. Although the Weather Bureau became responsible for funding and operation, AACS personnel remained at the Suitland transmit station until 1 October when personnel could be hired and trained to operate the station.

**11 June 1959**

Headquarters AACS deactivated the Loring AFB, Maine, high frequency aeronautical station because the Andrews AFB, Maryland, and Harmon AFB, Newfoundland, stations could handle the Loring traffic requirements satisfactorily.

**July 1959**

Airways and Air Communications Service received the first delivery of a new lightweight ground controlled approach unit, AN/TPN-12.

**1 July 1959**

Headquarters USAF made AACS responsible for operating the six Logistics Communications Network overseas data relay centers and the Andrews data gateway, as well as all trunk circuits in overseas areas and between the continental United States and overseas. Airways and Air Communications Service also assumed complete responsibility for the leasing and funding of all International Business Machine (IBM) transceivers, signal units, repeater devices, channel selectors, and modifications used worldwide on this system and the Logistics Ballistic Network. This became the first operational portion of the new Communications Logistics Network.

The Tokyo air route traffic control center, located at Johnson AB, Japan, was transferred to the Japanese Civil Aviation Bureau.

Responsibility for the operations of the manual data (IBM) card relay centers at Clark AB, Philippines; Fuchu AB, Japan; Hickam AFB, Hawaii, South Ruislip, England; Chateauroux, France; and Torrejon AB, Spain, were transferred to AACS. This transfer was a portion of an overall Air Force plan to integrate all long haul data communications and relay functions into the Air Force Communications Complex under AACS management.

Headquarters Pacific Air Forces placed its fixed communications units under the operational control of local AACS commanders. Specific functions transferred to AACS were: base wire plant, nontactical radio systems, and all other intrabase communications systems except test equipment repair and calibration functions, airborne electronic systems, mobile control units, and maintenance of UAL-type generators assigned to base units.

**15 July 1959**

The AACS automatic relay center (Plan 55) at Hickam AFB, Hawaii, was officially inaugurated.

**31 August 1959**

Airways and Air Communications Service combined Air Force Specialty Codes (AFSCs) 272X0, 272X1, and 272X2 into one AFSC 272X0. This action consolidated the three air traffic control career ladders into a single air traffic control specialty code with shred-outs at the "three" and "five" level. All personnel were converted to the new AFSC or reclassified out of the field.

**1 September 1959**

Airways and Air Communications Service assumed responsibility for accomplishing overall channel transmission and quality control of all communications circuits between Air Force activities for North Atlantic communications stations, excluding Ballistic Missile Early Warning System and Air Defense Command's facilities.

**1 October 1959**

The Offutt AFB, Nebraska, aeronautical station was deactivated because it was no longer required due to activation of air/ground single sideband facilities at Andrews AFB, Maryland, and Strategic Air Command's single-sideband, short-order stations. A savings of thirty-six manpower authorizations was realized by this action.

**15 October 1959**

The Fairchild AFB, Washington, aeronautical station was deactivated because inherent limitation could not be corrected without a complete rehabilitation of station facilities and antennas. The station at McClellan AFB, California, assumed the responsibility. The deactivation saved thirty-one manpower authorizations.

**16 October 1959**

Headquarters USAF assigned AACS the engineering and technical control of all Ballistic Missile Early Warning System (BMEWS) routes, complete control (including funding and leasing of the commercial segments) of all BMEWS communications facilities at Thule AB, Greenland, responsibility for VHF forward scatter communications from Resolution to Goose Bay, Labrador, and operational control of the Cape Dyer, Canada, switching center.

**30 October 1959**

Headquarters USAF named AACS as the operating agency for the extension of communications systems into space. Airways and Air Communications Service was made immediately responsible for coordinating the efforts of the 480L Electronic Support Systems Project Office, the Strategic Air Command, the Ground Electronic Engineering Installation Agency, the Air Force Ballistic Missile Division, and Air Training Command in this project.

**1 December 1959**

Air/ground single sideband facilities were activated at Harmon AFB, Newfoundland; RAF Croughton, United Kingdom; and Lajes AB, Azores aeronautical stations. These facilities were established primarily to support Strategic Air Command tactical missions and secondarily to support the 1254th Air Transport Group special mission aircraft.

**8 December 1959**

The continental United States' high frequency/direction finder balloon-tracking net was deactivated. The Airways and Air Communications Service had operated this network for Air Research and Development Center in support of high altitude balloon projects. The network was inactivated because of decreased balloon launching activity. Closure of facilities at ten Air Force bases and release of the interconnecting leased telephone circuits saved sixty-three manpower authorizations and over \$100,000 per year.

## 1960

### 1960

The Williams Report of 1960 found that the USAF was not organized to be immediately responsive to and compatible with the Defense Communications Agency/Defense Communications System. It was apparent that the Air Force needed to establish a central manager for its segments of the Defense Communications System. Command communications organizations operated closed networks in many configurations. In some cases, communications units were assigned to each echelon of command. In others, communications units were assigned to the higher headquarters as a complete group. These variations did not stem from unique conditions in the commands involved, but rather from personal preferences of those at command levels. If true systems management were to be applied, centralization of all communications networks should be the objective; thus a single manager was essential.

### 1 January 1960

The Airways and Air Communications Service assumed responsibility for the operation and maintenance of all base communications facilities in Alaska. The functions included base communications at Elmendorf, Ladd, Eielson, Galena, and Shemya. The Alaskan Air Command transferred seven officer, 184 airmen, and thirty-seven civilian authorizations to AACS.

### 5 February 1960

A Federal Aviation Agency (FAA) study entitled "Project Friendship" proposed transferring military air traffic control functions to FAA. FAA would assume the operation of 2100 military air traffic control facilities at 337 locations (ninety-eight abroad). The military functions scheduled for transfer encompassed four areas: air navigation and air traffic control services, military flight service, air traffic controller training, and facilities flight inspection. The Project Friendship plan, although soundly conceived, foundered in execution—owing to unbridgeable differences among the FAA, Defense Department, Bureau of the Budget, and Congress over details of the transfer. However, Lt Gen Elwood R. Quesada (USAF, Retired), FAA Administrator, managed to make some progress in implementing parts of the plan (the integration of military flight service and traffic controller training functions), and achieved the signal success of having civilian controllers placed in air defense long-range radar installations.

### March 1960

The RCA 501 computer became operational at HQ AACS.

### 1 April 1960

The Radio Operator Certification Program was implemented within all AACS areas and independent regions. It was designed to insure that all AACS radio operators met and maintained prescribed radio telephone and radio telegraph operating standards.

### 20 April 1960

Headquarters USAF and the Federal Aviation Administration (FAA) agreed that AACS would maintain and operate certain FAA-selected Air Force radio navigation aid facilities in accordance with mutually agreed upon FAA/USAF standards. Facilities involved in this program included visual omni-directional ranges, low frequency radio beacons and ranges, and terminal visual omni-directional ranges.



### **May 1960**

The Airways and Air Communications Service and the Ground Electronics Engineering Installation Agency accepted the Dew Drop System, a single sideband tropospheric scatter between Thule AB, Greenland, and Cape Dyer, Canada.

### **9 May 1960**

The Air Force's network of ten fully automatic relay centers (Western Union Plan 55) for handling common long haul communications was completed with the cutover of the last station, Siegelbach, Germany, into the system.

### **1 June 1960**

The Carswell high frequency aeronautical station was deactivated. The only requirement that had existed for its operation was support of the First Aeromedical Transport Group at Brooks AFB, Texas. Due to the limited amount of traffic processed, procedures were developed requiring all air evacuation traffic received by McClellan, Andrews, and MacDill airways to be relayed by commercial toll circuit or USAF voice circuitry to the Brooks Aeromedical Transport Group Control Center. With the closure of the Carswell station, only three aeronautical stations remained in the continental United States: Andrews, McClellan, and MacDill.

The United States Navy assumed ownership and operation of all AACS-operated facilities on the island of Kwajalein. Radio equipment for two multiplex circuits from Kwajalein to Hickam AFB, Hawaii, was also given to the Navy.

### **30 June 1960**

The Kwajalein aeronautical station was phased out after the Air Force's communications-electronics responsibilities at Kwajalein were transferred to the United States Navy.

### **1 July 1960**

Airways and Air Communications Service became responsible for the operation and maintenance of the Alaskan forward propagation tropospheric scatter inter-radio system known as White Alice. These management responsibilities had been exercised by the Alaskan Air Command.

### **28 August 1960**

The Rome Air Materiel Area/Ground Electronics Engineering and Installation Agency liaison office was established at HQ AACS.

### **9 September 1960**

HQ USAF directed that all procurement of long lines leased communications services from common carriers by the various USAF commands be consolidated within AACS on or before 1 January 1961.



### **1 October 1960**

The 4607th Support Group, Air Defense Command, transferred to AACS and was redesignated HQ AACS, Detachment 3, Office of Commercial Communications Management. Col Howard S. Gee, Commander of the 4607th Support Group, was designated Commander of Det 3. Initially, Det 3 was given the responsibility for administering Air Defense Command's commercial communications accounts only. As a result of further evaluation of the total commercial communications workload, AACS determined that the USAF directive could best be carried out by consolidating all communications service authorization ordering, negotiating, accounting, paying, and auditing at Det 3. Det 3 was the predecessor of the Defense Commercial Communications Office.

### **November 1960**

Headquarters AACS began transferring personnel from its procurement and contracting branch to Det 3, HQ AACS.

### **15 December 1960**

Headquarters AACS transferred all responsibility for handling military flight service functions at Lowry AFB, Colorado, and Wright-Patterson AFB, Ohio, centers (except clearance and weather briefing activities) to the Federal Aviation Agency.

### **16 December 1960**

The Strategic Air Command's commercial communications accounts were officially transferred to AACS.

### **23 December 1960**

Airways and Air Communications Service transferred all of its commercial communications accounts to Det 3, HQ AACS. This completed the intent of the 9 September 1960 HQ USAF directive.

## **1961**

### **1 January 1961**

A change in Air Force Regulation 60-16 deleted AACS military flight service clearance authority, and on 15 February 1961, the Federal Aviation Agency assumed responsibility for all remaining AACS military flight service functions. Skeleton AACS forces remained on duty until 1 April 1961 to assist the agency in completing the changeover.

### **15 February 1961**

A detachment of AACS's 1st Mobile Communications Group, Clark Air Base, Philippines, arrived in Thailand to assist in providing air route traffic control for the Thai Air Force. This was the first USAF team to be deployed to Southeast Asia for this type of support.

## **CHAPTER 3**

**July 1961 - December 1987**

**1961**

**1 July 1961**

The Airways and Air Communications Service was relieved from assignment to the Military Air Transport Service and redesignated the Air Force Communications Service (AFCS). It became the Air Force's sixteenth major air command. The mission of the command was to provide air traffic control and telecommunications services to the USAF's subordinate commands. Initially, the command carried out these major functions for the Military Air Transport Service, the Air Force Accounting and Finance Center, the Aeronautical Chart and Information Center, the Caribbean Air Command, and the Alaskan Air Command. Over the next two years, the new command was assigned the telecommunications and air traffic control functions of all other major commands except the Strategic Air Command and the Air Defense Command. The Airways and Air Communications Service's major subordinate units were the European-African-Middle Eastern Communications Area, the Pacific Communications Area, the North Atlantic Communications Area, the Alaskan Communications Region, the Western Communications Region, the Southwestern Communications Region, the Midwestern Communications Region, the Southeastern Communications Region, and the Continental Systems Region. Major General Harold Grant became AFCS's first commander.

The Secretary of the Air Force ordered that the Office of Commercial Communications Management be established as a named activity at Colorado Springs, Colorado, (Ent AFB) and assigned to AFCS. The unit was known previously as AACS Detachment 3 and had been transferred from the Air Defense Command in October 1960. Military Air Transport Service Special Order G-78, 19 June 1961, discontinued Detachment 3, HQ AACS, and organized Detachment 3, 1800th Support Squadron, 25 June 1961. These actions had no affect upon the Office of Commercial Communications Management or its mission, but were accomplished for administrative reasons in connection with the establishment of the new command. The mission and responsibilities of the Office of Commercial Communications Management related to the negotiating, ordering, and managing of leased communications services for all major commands of the Air Force remained essentially unchanged.

Each of the AACS Facility Checking Flights was redesignated as simply a Facility Checking Flight. There were now thirteen Facility Checking Flights in AFCS: the 1850th, 1852d, 1853d, 1854th, 1855th, 1856th, 1857th, 1858th, 1859th, 1861st, 1862d, 1864th, and 1865th.

**28 August 1961**

Headquarters USAF authorized AFCS to activate the Central Notice to Airmen (NOTAM) Facility at Tinker AFB, Oklahoma. For the first time, the NOTAM Facility began transmitting weather and critical flight information in plain language to pilots, aircrews, and base operations centers located throughout the continental United States.

**11 October 1961**

Headquarters USAF approved the recommendation by AFCS planners to change the name of Combat Logistics Network (COMLOGNET) to USAF Data Communications System because AFCS had decided to use the network for other than logistics traffic. The COMLOGNET system demonstrated that the world's largest and most sophisticated logistics data and message communications method, was capable of handling 7,000,000 punched cards or an equivalent of 100,000,000 words daily.

**3 December 1961**

The second fatal crash of a flight inspection aircraft occurred. While checking a navigational aid at Aviano Air Base, Italy, an AC-47 from the 1857th Facility Checking Flight at Rhein-Main crashed into a mountain top, killing the four aboard—Capts James R. Boone, Travis N. Daniels, Joe G. Remalkus, and SSgt Kenneth M. Jackson.

## **1962**

**1 January 1962**

Air Force Communications Service assumed operational communications responsibilities of all or part of seven Air Force components which included twenty-six locations of the Air Force Logistics Command, nine locations of the Air Force Systems Command, thirteen locations for the Pacific Air Forces, one location at the Air Force Academy, two locations at the Air University, twenty Aircraft Control and Warning sites for the Alaskan Air Command, and two sites for the Air Defense Command at Thule and Sondrestrom Air Bases in Greenland.

Headquarters AFCS assumed the functions and responsibilities of the Military Affiliate Radio System (MARS) Directors for the Air Force Logistics Command, the Air Force Systems Command, the Air University, and the Air Force Academy. AFCS ultimately became the single manager for the entire USAF MARS program.

Detachment 3, 1800th Support Squadron, officially opened for business at Scott AFB, Illinois, as the Office of Commercial Communications Management, a special staff agency of HQ AFCS. Under its new designation, the Office of Commercial Communications Management assumed a greater mission than it had previously at Ent AFB, Colorado. It also assumed the leased communications accounts of both the Army and the Navy. Stated simply, the Office of Commercial Communications Management was made responsible for the leasing of all private line communications for the Department of Defense within or emanating from the Continental United States.

**8 January 1962**

The Air Force Communications Service's Southeast Asia Communications Region headquarters was activated at Clark AB, Philippines.

**14 January 1962**

A detachment of AFCS's 1st Mobile Communications Group installed a tactical air control system in South Vietnam. Also, the group installed voice and teletype services at Tan Son Nhut, Pleiku, DaNang, and Nha Trang.

**20 February 1962**

Air Force Communications Service activated the Emergency Message Automatic Transmission System, a highly dependable and reliable system of communications through which the Air Force Chief of Staff, using preformatted messages, could direct higher levels of readiness for major Air Force units.

**1 March 1962**

The HQ AFCS Command Post was officially activated, with the AFCS Command Telecommunications Operations Center being deactivated concurrently.

**1 April 1962**

Headquarters AFCS assumed communications operating responsibilities for the USAF Headquarters Command.

**1 May 1962**

In response to the need for fixed rather than mobile communications in Southeast Asia, AFCS activated the 1964th Communications Squadron at Tan Son Nhut, South Vietnam.

**14 May 1962**

The Office of Commercial Communications Management was designated as Headquarters 1801st Communications Group, operational at Scott AFB, Illinois, assigned to AFCS, and attached to the 1800th Support Squadron.

**1 July 1962**

In order to manage the service evaluation mission, AFCS established three geographic areas of responsibility, one in Europe, one in the Pacific, and one in the continental United States. One T-33 was to be assigned to the Pacific, three to Europe, and five to the continental United States. The new C-140 aircraft, the first aircraft purchased to perform the military navigational aid flight inspection mission, would be allocated along the same geographic areas to provide emergency mission support and to supplement the service evaluation program. The continental United States was to have one aircraft (this was deleted with the crash of one at Robins AFB, Georgia) and each of the overseas theaters was to receive two. Three new units were established to which the aircraft and crews were assigned: the 1866th Facility Checking Flight (Service Evaluation), Scott AFB, Illinois, the 1868th Facility Checking Flight (Service Evaluation), Wiesbaden AB, Germany, and the 1867th Facility Checking Flight (Service Evaluation), Clark AB, Philippines. Previously, AFCS service evaluation missions had been flown in conjunction with flight check activities and administrative/logistics support flights. Because of the diversity of aircraft flown (C-47, T-29, C-54, T-33, etc.) and the varied pilot qualifications operating the air traffic control procedures and controller techniques, it was not possible to evaluate effectively the operation of the air traffic control systems. Moreover, evaluation procedures were not standardized and the responsiveness of the air traffic control system to Century series aircraft could be checked only on a sporadic basis.

The Department of Defense transferred the Alaskan Communications System from the Army Signal Corps to AFCS. The Air Force Communications Service gained a network of long distance communications facilities, stretching across the northern rim of Canada, Alaska, and Greenland, supporting military and civilian needs, as well as the development of radar stations which were designed to spot flights of enemy bombers.

The Air Force Communications Service assumed communications functions of the USAF Security Service in the Pacific and Alaskan areas.

The Air Force Communications Service assumed operating communications responsibilities at fifteen Continental Air Command bases. Also, AFCS became responsible for operating the communications for the United States Air Forces in Europe at forty-nine locations and for the Air Training Command at twenty locations.

**17 August 1962**

The Air Force Communications Service received its first C-140A Jet Star aircraft from Lockheed. The aircraft was designed to evaluate navigational aids as part of the command's facility checking mission. The aircraft was assigned to the 1852d Facility Checking Flight at Robins AFB, Georgia.



**28 August 1962**

President John F. Kennedy signed Executive Order 11047 which mandated the transfer of all flight inspection responsibility to the Federal Aviation Agency (FAA). In order to implement this directive as quickly as possible, sixteen aircraft assigned to AFCS would be permanently transferred to the FAA. This included six AC-54 and ten AT-29 (AC-131) aircraft, all equipped with the Navigational Aid (NAVAID) Flight Inspection System (NAFIS) panel. Approximately one hundred military personnel would be loaned to the FAA for periods ranging from nine months to two years. Their primary purpose would be to train and augment FAA crews in the AC-54 and AT-29 aircraft. Because the NAFIS panel operators were either radio or radar operators, they were all given the option of attending NAVAID maintenance school. Many of them selected this option, doing well in the NAVAID career field, and eventually coming back into the NAFIS panel operator work. The pilots were given three options: retire if eligible, remain on active duty and be loaned temporarily to the FAA or assigned to another aircraft, or transfer permanently to a civilian position within the FAA. In the Memorandum of Agreement between the FAA and USAF implementing Project Friendship, the Secretary of the Air Force specifically exempted those military exigencies which would be outside the scope of planned FAA activity. Such exigencies might include mobility and/or combat operations. The issue of FAA flight check during war, or hostile conditions short of declared war, was to be raised several times during the Vietnam War period. Federal Aviation Agency Order 8240.30 specifically exempted FAA personnel from flight checking in hostile areas without a declared war, unless the individual requested in writing to participate. In order to provide flight inspection services under such circumstances, or on deployed mobile facilities (collectively called Emergency Mission Support (EMS)), AFCS excluded the new C-140 aircraft from Project Friendship. These aircraft, plus other nonflight check equipped planes such as the T-33s, would be used worldwide to provide EMS flight check and continue the service evaluation program.

**1 September 1962**

The Federal Aviation Agency assumed facility checking responsibilities in Alaska from the 1855th Facility Checking Flight, Elmendorf AFB. Subsequently, the AFCS flight was discontinued as a unit, effective 1 October.

**4 - 21 September 1962**

Following a major earthquake in Iran, the United States provided airlift disaster assistance. Using especially equipped C-130 aircraft called "Talking Bird," AFCS's 2d Mobile Communications Squadron, Hahn AB, Germany, provided airborne and initial on-site communications. This was the first emergency mission for this airborne command post.

**1 October 1962**

The first facility checking flight deactivated under Project Friendship was the 1855th at Elmendorf AFB, Alaska.

**18 October - 4 November 1962**

Air Force Communications Service's 3d Mobile Communications Group, Tinker AFB, Oklahoma, provided special support for the tactical forces involved in the Cuban Missile Crisis buildup. By the end of the first week of operations, the group's personnel had placed air navigational equipment at strategic locations throughout Florida, installed commercial circuit extensions, and deployed weather teletype machines.

**1 November 1962**

The third fatal flight check aircraft accident occurred. One of AFCS's C-140s crashed at Robins AFB, Georgia, while practicing emergency procedures. Those killed in the crash were Maj Lee M. Tappan, Jr., Capt Earl B. Butler, Joseph Q. Spell, Thomas L. Edmondson, Jr., and TSgt Billie E. Garrison. One pilot managed to escape through a sliding side window.



## **20 November 1962**

The first Air Force Data Communications system became operational at Norton AFB, California. This system, which replaced the Combat Logistics Network, was the Air Force's first automatic, fully electronic, transistorized, high speed data communications network. Air Force Data Communications was the first increment of an even more extensive data system known as the Automatic Digital Network (AUTODIN).

## **December 1962**

The second automatic electronic switching center to handle AUTODIN functions became operational at McClellan AFB, California.

## **31 December 1962**

By direction of the Secretary of Defense, with the concurrence of the Joint Chiefs of Staff, the 1801st Communications Group was redesignated the Defense Commercial Communications Office and was transferred to the Defense Communications Agency. The Defense Commercial Communications Office remained at Scott AFB, Illinois, and continued to negotiate, order, and pay bills for all long lines leased communications requirements of the Department of Defense within or emanating from the continental United States.

# **1963**

## **Early 1963**

After a year of study, the Joint Interagency Steering Committee concluded that the plan for general worldwide operation of United States military air traffic control facilities by the Federal Aviation Agency could not be justified on the basis of costs or operational efficiency; however, in cases where Federal Aviation Agency operational responsibility for individual military air traffic control facilities and services would be advantageous to the government, the responsibility should be transferred to the Federal Aviation Agency on a selective and mutually agreeable basis. Air Force Communications Service watched its serious continental United States-overseas air traffic control personnel imbalance situation closely and weighed this when considering a proposed transfer of a military air traffic control or navigational aid service to the Federal Aviation Agency under the Project Friendship program.

## **January 1963**

The third and fourth automatic electronic switching centers to handle AUTODIN functions became operational at Tinker AFB, Oklahoma, and Gentile AFB, Ohio.

## **1 January 1963**

AFCS established a new region known as the TAC Communications Region and collocated it with the Tactical Air Command's headquarters at Langley AFB, Virginia. As an independent region reporting directly to HQ AFCS, the TAC Communications Region provided support to the Tactical Air Command and was unique in AFCS organizations in that its operations paralleled that of an Air Force major air command. By 1986, an AFCC organization directly supported all of the major air commands.

Air Force Communications Service assumed the United States Air Force Security Service communications function in Europe, transferring 752 manpower authorizations to AFCS: 15 officers, 701 airmen and 36 civilians.

**27 February 1963**

The Automatic Digital Network (AUTODIN) system became fully operational when the fifth and last center opened at Andrews AFB, Maryland. The system served all elements of the Department of Defense as a part of the Defense Communications System. The system, installed, operated, and maintained by AFCS, was an outgrowth of the Air Force Data Communications System. It made possible a single, integrated, automatic switching system for long distance communications. In 1963, it was one of the largest and most sophisticated data systems in the United States. The AUTODIN system had the capability to handle seven million punched cards daily, an amount equal to one hundred million words. As the prime contractor, the Western Union Telegraph Company designed and constructed the system and leased it to the Air Force.

**1 April 1963**

Air Force Communications Service assumed the communications function of the United States Air Force Security Service in the continental United States. This did not include operation and maintenance of the Service's primary mission equipment or the programming responsibility for that service.

The 1868th Facility Checking Flight (Service Evaluation) was organized at Wiesbaden AB, Germany.

**14 May 1963**

Air Force Communications Service first became involved in the space program when the 2d Mobile Communications Group deployed single sideband radio teams and equipment to seven African sites in support of the Project Mercury "Man in Space" program. Personnel from AFCS also participated in subsequent space programs such as Gemini, Apollo, and the space shuttle.

**1 June 1963**

In accordance with Project Friendship, flight check responsibility in Southeast Asia was turned over to the Federal Aviation Agency in all areas except contingency operations, allowing AFCS to reduce its aircraft inventory from fifty-nine to sixteen. The navigational aids in areas of hostile action—the Republic of Vietnam, Cambodia, Thailand, and First Mobile Communications Squadron assets—remained the responsibility of the USAF. Since the two C-140s were not due in theater until July, deactivation of the 1861st Facility Checking Flight at Tachikawa AB, Japan, was delayed so that the two AC-47s there could continue to support the Southeast Asian requirements.

The 1867th Facility Check Flight (Service Evaluation) was organized at Clark AB, Republic of the Philippines.

**1 July 1963**

Air Force Communications Service reduced its independent continental United States communications regions from seven to four. Eliminated were the Midwestern, Southwestern, and Southeastern Communications Regions. The North Atlantic Communications Region was redesignated Eastern Communications Region and the Continental Systems Region became the Central Communications Region. The Western and Tactical Air Command Communications Regions did not change designations.

**16 September 1963**

The 1867th Facility Checking Flight initiated a flight check of selected United States Army navigational aids in South Vietnam at the Army's request. This action began AFCS's flight checking responsibilities in Southeast Asia.

**1 October 1963**

Two EC-47s were reassigned from the 1861st Facility Checking Flight, Tachikawa AB, Japan, to the 3d Mobile Communications Squadron, Tinker AFB, Oklahoma. This reassignment was implemented to fulfill the 3d Mobile Communications Squadron's mission of providing navigation aid flight check support to major air commands and the unified/specified commands during contingency/exercise operations in the Western Hemisphere.

**December 1963**

The Automatic Voice Network (AUTOVON) became operational in the continental United States. The AUTOVON network, AFCS installed, operated, and maintained, provided the Department of Defense with an internal telephone capability to replace toll and wide area telephone service calls and allowed precedence preemption for high-priority users.

**31 December 1963**

The three Ballistic Missile Early Warning System Rearward Communications System sites were completed at Clear, Alaska; Thule, Greenland; and Fylingdales Moor, United Kingdom.

**1964**

**22 January 1964**

Big Rally II, a tropospheric scatter system linking Italy, Greece, and Turkey to existing European communications, was formally accepted by HQ European-African-Middle Eastern Communications Area at Rome, Italy.

**1 March 1964**

Air traffic control operators from Det 1, 2001st Communications Squadron, were assigned to the Duluth, Minnesota, mobile radar approach control facility. This was the first Air Force air traffic facility operated by the Federal Aviation Agency (FAA) in which AFCS personnel served under FAA supervision.

**27 March 1964**

Following the Alaskan earthquake, the most severe earthquake ever recorded in North America, AFCS had eleven communications circuits operating to Seattle within one and one-half hours. All priority communications circuits were restored within seven hours of the earthquake. The first news of the disaster was relayed to the lower forty-eight states via the Military Affiliate Radio System (MARS) by off-duty military and civilian operators. The effectiveness of MARS was demonstrated by the fact that needed communications equipment and operators were enroute to Alaska within twenty-four hours after the earthquake. Another use of MARS was that many friends and relatives of Alaskans were notified of the situation soon after the catastrophe.

**1 July 1964**

Faced with the lessons from the Cuban Missile Crisis of October 1962, AFCS created two additional mobile squadrons, the 4th and 5th Mobile Communications Groups, located at Hunter AFB and Robins AFB, Georgia, respectively.

**15 July 1964**

Headquarters AFCS established a worldwide Communications Computer Programming Office for the Defense Communications System Automatic Digital Network system at Tinker AFB, Oklahoma. The office was established to provide programming support for computer systems interfacing with the Defense Communications System Automatic Digital Network.

**1 October 1964**

Air Force Communications Service assumed responsibility for field and depot level maintenance of the Air Force National Missile Range Division's communications equipment at Vandenberg AFB, California.

**10 November 1964**

A special USAF panel published its final report on the evaluation of the implementation of the 1960 Ad Hoc Committee's recommendations. This report, the Dickerson Report, concluded that the findings and recommendations of the Williams Report were basically sound and remained valid. Where recommendations had been followed, economies and service had improved. Difficulties encountered in the field were, almost without exception, traced to a failure to comply with one or more of the stated recommendations.

**1965**

**29 April - 7 May 1965**

During the political turmoil in the Dominican Republic, President Lyndon B. Johnson directed that Americans in the area be protected. Air Force Communications Service mobile controllers were among the first Americans to arrive on Dominican soil and the AFCS "Talking Bird" aircraft served as the initial airborne command post for the United States joint operations. This support was an indispensable part of a massive airlift of 16,515 people and 16,065 tons of equipment and supplies to and from the United States and the Dominican Republic.

**1 July 1965**

Air Force Communications Service's worldwide Automated Weather Network became operational at Tinker AFB, Oklahoma; High Wycombe AS, England; and Fuchu AS, Japan.

**13 December 1965**

Air Force Communications Service established its first Military Affiliate Radio System (MARS) station in South Vietnam as part of an effort to improve the morale of military personnel serving in Southeast Asia. The first station was at Tan Son Nhut AB. Using MARS stations, servicemen could speak to their families in the United States by telephone patches, or they could send a written message relayed by radio teletype to a MARS station nearest the serviceman's home.

**1966**

**1 January 1966**

Air Force Communications Service's three facility checking flights (1866th, 1867th, and 1868th) were redesignated as facility checking squadrons.

**18 January 1966**

The first AFCS base distribution system, a computerized device capable of storing and forwarding electronic data communications and interfacing directly into the automatic digital network, was activated at McClellan AFB, California.



**23 February 1966**

The AFCS base distribution system was activated at Tinker AFB, Oklahoma. Patterned after the McClellan base distribution system, this system had six International Business Machine 1051 terminals and twelve electronic data processing equipment output channels.

**21 March 1966**

The Air Force Communications Service provided the first communications support for Project SKY SPOT in South Vietnam. This was a radar system in which controllers operating mobile radar sets tracked aircraft, corrected the aircraft's direction and speed, and signalled pilots when they were over their targets.

**12 April 1966**

The third AFCS Base Distribution system was activated at Hill AFB, Utah. This radar permitted a controller to accurately direct aircraft through poor weather conditions or in darkness to strike enemy positions.

**22 May 1966**

Air Force Communications Service personnel at Don Muang activated the first USAF-operated interim Automatic Digital Network terminal in Thailand.

**June 1966**

The flight inspection aircraft were repainted. Because of hostile ground fire in the Southeast Asia combat zones, the silver and bright red flight inspection aircraft were camouflaged.

**3 June 1966**

The cable barge, Colonel Basil O. Lenoir, was transferred from the Army to the Air Force. In turn, AFCS assumed the Lenoir's operational responsibilities for maintaining the Alaska communications system's submarine cable.



*The Air Force Communications Service utilized specially configured C-140s, like this silver and bright red one, to check Air Force air traffic control and air navigational aids for accuracy and efficiency at air bases around the world.*





***A less noticeable camouflaged version of a C-140; hostile ground fire made the paint change a necessity.***

## **1967**

**26 February 1967**

DaNang AB, South Vietnam, came under hostile attack and lost its landing and teletype communications. The Tan Son Nhut AB Military Affiliate Radio System station provided essential back-up communications until communications at DaNang were restored.

**28 April 1967**

Two of the EC-47 aircraft from the 1869th Facility Checking Squadron at Tinker AFB, Oklahoma, transferred to the 1867th Facility Checking Squadron at Clark AB, Philippines, to provide flight inspection of Army and Marine navigational aids in Vietnam.

**8 June 1967**

The USS Liberty was attacked by Israeli air and naval forces. Had the communications system used by the Joint Chiefs of Staff been more responsive, the Liberty would have had several hours to sail away from the coast, and thus possibly avoid the attack. This episode dramatically demonstrated the need for effective single management of communications.

**15 July 1967**

The Air Force Communications Service suffered its first battle casualty in the Vietnam War when SSgt David Fasnacht, AFSC 30750, assigned to the 1st Mobile Communications Group, Clark AB, Philippines, was killed. Sergeant Fasnacht was a passenger on a C-130 taxiing on DaNang AB runway after arrival from Phu Bai when the base came under mortar attack. He was 35 years old and had been in Vietnam three days.

**8 August 1967**

The Tactical Air Command Communications Region was redesignated the Tactical Communications Area.

**21 August 1967**

A new Total Energy System installed by AFCS personnel at Tinker AFB, Oklahoma, provided a continuous source of power for the Tinker Weather Relay Facility.

**9 September 1967**

A rocket attack hit transient barracks at Da Nang AB, South Vietnam, killing A1C Arlon D. Wall, Jr., age 25, and SSgt Marl W. McCutchen, Jr., age 23. Airman Wall and Sergeant McCutchen were assigned to the 1972d Communications Squadron at Da Nang, AFSC 30450, and were processing for PCS to the states following a one-year tour at Da Nang.

**2 October 1967**

The Air Force Communications Service completed and brought to operational capability the Apollo Launch Control Center at Patrick AFB, Florida. This center assisted in controlling Apollo missile tracking as well as the aircraft that supported the Apollo mission.

**21 October 1967**

The Automatic Digital Network (AUTODIN) Switching Center at Clark AB, Philippines, was the first of eleven overseas AUTODIN terminals to be activated.

**1 November 1967**

The Air Force Communications Service assumed maintenance responsibility for the base level supply computers (UNIVAC 1050-II) in Southeast Asia. This responsibility involved fifteen sites in Thailand and South Vietnam with forty-five AFCS computer maintenance technicians assigned. It was a unique AFCS responsibility because the UNIVAC 1050-II systems were not part of the Communications-Electronics Systems Program.

**1968**

**During 1968**

Air Force Communications Command's global air traffic control operations reached an all-time high handling 19,539,435 operations. Air traffic controllers at Bien Hoa, DaNang and Tan Son Nhut ABs, South Vietnam, routinely handled traffic exceeding that at America's busiest airport, the O'Hare Airport in Chicago.

**January 1968**

The first automatic switching center in Southeast Asia was accepted by AFCS at Korat AB, Thailand. The center was another link in the Air Force-operated portion of the Automatic Digital Network and was operated by personnel of the 1998th Communications Squadron.

**18 February 1968**

Sergeant Bruce L. Carey, AFSC 36254, assigned to the 1876th Communications Squadron, Tan Son Nhut AB, South Vietnam, died from wounds received during an early morning rocket attack on the base. Sergeant Carey was killed the day before his 24th birthday and records count him as on duty at the time of death.

**1 March 1968**

The Air Force Communications Service began expanding a unique radio system, the Sistema Internacional de Telecomunicaciones de las Fuerzas Aereas, which linked the United States Air Force with fifteen Latin American Air Forces.

**10 March 1968**

A rocket attack at Dang Hoa, South Vietnam, killed Sgt Francis X. Turbeut, AFSC 30450, assigned to the 1972d Communications Squadron, DaNang AB. Sergeant Turbeut was 21 years old and records indicate he was on duty at the time of attack.



*AFCS personnel work on a 60-foot parabolic antenna at Ko Kha, Thailand, part of the extensive communications network in south-east Asia, created in response to the Vietnam conflict.*



*As military operations increased in Southeast Asia, AFCS controllers often worked under fire to maintain control of aircraft traffic.*



*When the tropospheric scatter site at Dong Ha, Vietnam received a direct hit from an enemy 140mm rocket, the antenna of the Phu Bai main transmitter was virtually pulverized, as were the antennas on either side of the van.*





22 March 1968

The first Automatic Digital Network multimedia terminal became operational at Ramstein AB, Germany. This system linked more than 300 Air Force bases, materiel areas, depot, contractors, and other authorized agencies into a single communications network.

May 1968

Air Force Communications Service air traffic control operations (transmissions between air traffic controllers and/or air traffic control radars with aircraft) in Southeast Asia reached its peak with 80,549 operations monthly at DaNang AB, South Vietnam. This was an average of 2,595 operations daily. Five controllers per shift handled everything from routine flights to battle damaged aircraft, including Navy aircraft unable to return to their carriers. This count was the greatest known to have occurred at any airport in the world at this time.

Headquarters USAF approved the transfer of the operational responsibility and control of the Southeast Asia Military Altitude Reservation Facility (SEAMARF) from Thirteenth Air Force to the Pacific Communications Area. The SEAMARF facility was given responsibility and communications capability to perform all required coordination and obtain approval for altitude reservations in airspace that was controlled by foreign governments and United States counterparts throughout the Western Pacific.

8 July 1968

The European-African-Middle Eastern Communications Area was redesignated the European Communications Area.

9 August 1968

SSgt Vernon O. Gentry was awarded the Silver Star for valor while assigned to a detachment of the 1st Mobile Communications Group at Khe Sahn, South Vietnam. Sergeant Gentry was the first person assigned to AFCS to be awarded the Silver Star since AFCS became a separate command in 1961.

13 September 1968

The Office of the Secretary of Defense had requested a joint USAF-Federal Aviation Agency (FAA) review of the overseas flight inspection mission with the intent that AFCS reassume this responsibility. An Air Staff Ad Hoc committee had recommended that AFCS reestablish the capability to provide flight check for both contingency and combat operations worldwide. The Federal Aviation Agency countered with a proposal to let the Air Force take all Pacific operations while FAA retained continental United States and European responsibility. Headquarters USAF considered this unacceptable. The Federal Aviation Agency later agreed verbally to return all USAF flight check responsibility to AFCS except in the United States, its possessions and territories, and Central America. Any possible combat operations in Central America would be handled by AFCS.

8 November 1968

Tests by the 3d Mobile Communications Group proved the feasibility of a mobile ground satellite communications terminal (the AN/TSC-54). It had an 8,000-mile range for reception and transmission.

18 November 1968

The Automatic Digital Network Set Phase III, a new concept in Air Force base communications, was installed at Wright-Patterson AFB, Ohio.



## **1969**

**10 January 1969**

Sergeant Ronald K. Asada, AFSC 30450, assigned to the 1880th Communications Squadron, Binh Thuy AB, South Vietnam, died from shrapnel wounds received during an enemy attack on the base. Sergeant Asada was 22 years old and off duty at the time of the attack.

**17 January 1969**

A CH-3E helicopter crashed and burned in Laos killing Lt Col Wayne F. Bolton, AFSC 3016, age 53, assigned to the 1974th Communications Group, Udorn RTAFB, Thailand; TSgt George A. Kurtyka, AFSC 30471, age 44, assigned to the 1973d Communications Squadron, Udorn RTAFB, Thailand; and TSgt Juan A. Maldonado, AFSC 30451, age 31, assigned to the 1973d Communications Squadron, Udorn RTAFB, Thailand. Colonel Bolton and Sergeants Kurtyka and Maldonado were on duty and were enroute to an out-of-country site.

**23 January 1969**

The USS Pueblo, an intelligence gathering ship, was seized in international waters by North Korean forces. Had the communications system used by the Joint Chiefs of Staff been more responsive, American forces might have been able to intervene and foil the seizure. This lack of effective communications again demonstrated the need for effective single management of communications.

**15 April 1969**

The Air Force Communications Service placed the first of seventeen overseas switching centers planned for the Department of Defense Worldwide Automatic Voice Network into service at Wahiawa, Hawaii.

**19 April 1969**

The Air Force Communications Service assumed maintenance responsibility for twenty-four continental United States-based 1050-II systems located at Keesler AFB, Mississippi.

**11 June 1969**

After the successful completion of digital subscriber terminal equipment testing at Sheppard AFB, Texas, equipment installation began at seventeen overseas Air Force installations. This electronically controlled equipment would eventually eliminate teletype and data card terminal operations within the Automatic Digital Network, thereby speeding up the handling of communications traffic.

**16 June 1969**

Staff Sergeant Rudolph P. Munoz, AFSC 36251, assigned to the 1883d Communications Squadron, Phu Cat AB, South Vietnam, died from shrapnel wounds received during an enemy attack on the base. Sergeant Munoz was 32 years old and off duty at the time of the attack.

**1 July 1969**

The last Plan 55 communications relay center in Europe, the 2005th Communications Squadron, Siegelbach, Germany, was phased out.

**12 September 1969**

The only Air Force Very High Frequency (VHF) omnirange/tactical air navigation (combined VHF Omnirange and Tactical Air Navigation) in the continental United States was installed at Williams AFB, Arizona.

## October 1969

The first T-39 aircraft came into the AFCS inventory and was assigned to the 1866th Facility Checking Squadron at Scott AFB, Illinois. With the capabilities of this aircraft, the squadron was able to turn in three aging T-33s. In Europe, the 1868th Facility Checking Squadron at Wiesbaden AB, Germany, gained the use of a USAFE T-39. It could be used on Monday through Thursday on an as-available basis. Based on this part-time usage, and the AFCS request for permanent assignment of the aircraft, the 1868th turned in its three T-33s. The T-39s were originally intended for service evaluations and radar flight inspection. However, since assignment of the C-130s was subject to considerable delay, AFCS submitted a request in February 1970, to have the T-39 equipped with a flight inspection panel.

## 1 October 1969

With assumption of the United States Air Forces in Europe (USAFE) Central Notice to Airmen (NOTAM) Facility, Rhein-Main AB, Germany, AFCS became the single manager for the Air Force NOTAM system. The Air Force's other Central NOTAM Facilities were located in Washington DC; Panama; Fuchu AS, Japan; and Tan Son Nhut AB, South Vietnam.

## 31 October 1969

In ceremonies at Scott AFB, Illinois, the 1st Mobile Communications Group was awarded the Presidential Unit Citation. The Group thus became the first unit in AFCS to be awarded the citation in recognition of its mission performance. The award covered the period 1 January 1967 to 15 February 1968.

## 5 December 1969

The first Pacific Communications Area installation of digital subscriber terminal equipment was completed at Kimpo AB, South Korea.

# 1970

## 1970

The concept of a single manager for communications was reenforced by the Blue Ribbon Defense Panel's Report to the President and the Secretary of Defense on the Department of Defense (1970) which recommended a further merger of two large groups, the Strategic Air Command and the Ground Electronics Engineering and Installation Agency, that had not been brought under the single manager concept.

## 1 April 1970

The Ground Electronics Engineering and Installation Agency (GEEIA) was consolidated within AFCS. Henceforth, AFCS would not only furnish, manage, operate, and maintain communications-electronics, meteorological, and air traffic control equipment, but would also engineer and install equipment and facilities. The total resource savings, as a result of consolidating GEEIA into AFCS, was 1,910 manpower authorizations.

## 1 May 1970

The continental United States Central Notice to Airmen (NOTAM) Facility was relocated from Washington D.C., to Carswell AFB, Texas. This was the first step in an effort to provide a centralized, single Air Force NOTAM facility with worldwide responsibility. The selection of Carswell AFB was partially due to the projected installation of computers and automated communications, particularly those supporting the Automated Weather Network.

#### **1 May 1970**

The Northern Communications Area, Griffiss AFB, New York, and the Southern Communications Area, Oklahoma City AFS, Oklahoma, were activated. These new areas replaced the Eastern, Central, and Western Communications Regions and three Ground Electronic Engineering Installation Agency (GEEIA) regions.

#### **4 May 1970**

The most disastrous aircraft accident in the command's history occurred near Hamilton AFB, California, when a T-29 crashed, killing nine AFCS personnel—Col Eldridge G. Shelton, Maj Robert G. Ward, Cpts Ralph D. Knowles and George A. Burk, CMSgt Harvey C. Heichel, Jr., SMSgt Kenneth L. Yarger, MSgt Fred L. Adams, and TSgts Albert J. McCloud and Robert P. Prince.

#### **12 June 1970**

The transfer of Griffiss AFB, New York, from the Air Force Logistics Command to the Strategic Air Command meant that AFCS, for the first time in its history, would be operating a communications-electronics squadron in support of a Strategic Air Command wing.

#### **16 July 1970**

Headquarters AFCS moved from Scott AFB, Illinois, to Richards-Gebaur AFB, Missouri.

#### **21 July 1970**

Air Force Communications Service suffered the eleventh and final battle casualty in Vietnam when Sgt Richard Max Pearl, AFSC 36150, died from shrapnel wounds received during an enemy rocket attack on the base. Sergeant Pearl was 32 years old, assigned to the 1882d Communications Squadron, Phan Rang AB, South Vietnam, and was on duty at the time of the attack.

#### **11 September 1970**

Air Force Communications Service began a program to replace its outdated tube-type, air-to-ground radios with solid-state equipment. The project concluded in 1978.

#### **1 October 1970**

The Communications Computer Programming Center was established at Tinker AFB, Oklahoma, to provide HQ AFCS with the computer software programming capability required to support the designed automated communications systems.

#### **December 1970**

A joint flight inspection working group of the Federal Aviation Agency (FAA) and USAF representatives met in Washington, D.C., to discuss several new proposals. Among the initiatives tentatively adopted were the following: USAF would assume all flight check responsibility in the Philippines on 1 July 1971, and be responsible for all maintenance assistance inspections in the continental United States and Europe; FAA would be responsible for all mobile deployments in Korea, Japan, Alaska, and worldwide deployments that lasted in excess of ninety days.

**1 December 1970**

The last of the facility checking squadrons to activate was the 1860th Facility Checking Squadron at Richards-Gebaur AFB. The original plan was to deactivate both the 1866th at Scott and the 1869th at Tinker and transfer their resources and responsibilities to the 1860th. However, in keeping with a policy of preserving those unit designations with an illustrious history, the 1866th was transferred to Richards-Gebaur on 1 December 1971. The 1860th Facility Checking Squadron was deactivated that same day, exactly one year from its organization.

## **1971**

**1 January 1971**

The T-39 assigned to the United States Air Forces in Europe was permanently reassigned to the 1868th Facility Checking Squadron and was flown directly to the depot for maintenance and the installation of a temporary flight inspection panel.

**10 January 1971**

The Alaska Communications System was sold to RCA Global Communications, Inc., and its wholly owned subsidiary, RCA Alaska Communications, Inc. In exchange for the title to the Alaska Communications System property, RCA paid the full estimated sale price of \$31,460,519 to the United States Treasury.

**March 1971**

The price paid for the Alaska Communications System had been reduced by approximately \$100,000, but RCA Global Communications, Inc. (RCA GLOBECOM) felt the final price should be further adjusted to compensate for the inability of the company to operate the Cable Ship Colonel Basil O. Lenoir on the open sea. The argument of RCA GLOBECOM was that since the United States Coast Guard would only certify the Lenoir for operation within the inland waterways of Alaska, an adjustment in the ship's valuation was justifiable. RCA GLOBECOM, using its own appraiser, placed a value of \$150,000 on the ship. The Air Force felt that regardless of this appraisal, RCA GLOBECOM had agreed to pay \$443,297 for the Lenoir as part of the price paid for the Alaskan Communications System. The only reduction the government considered was a possible decrease in the value of the cable ship because it was no longer an ocean-going vessel. Negotiations between representatives of RCA GLOBECOM and John W. Perry, Deputy Assistant Secretary of the Air Force for Transportation and Communications, continued through June 1972 without resolution.

**1 April 1971**

Responsibilities for the Air Force Central Notice to Airmen (NOTAM) facility for Central and South America, Howard AFB, Canal Zone, were assumed by the Carswell AFB, Texas, facility, making the latter the NOTAM focal point for the entire Western Hemisphere. The center was redesignated the American Central NOTAM Facility to reflect more clearly its hemispheric responsibilities.

**1 July 1971**

The Air Force Communications Service assumed responsibility for the flight inspection of all United States military navigational aids in the Philippines from the Federal Aviation Agency.

**30 July 1971**

Headquarters USAF directed the transfer of Air Force radio frequency management responsibilities to AFCS.



**1 September 1971**

The 1869th Facility Checking Squadron inactivated, leaving only three facility checking squadrons in AFCS: one in Europe, one in Asia, and one in the United States.

**4 September 1971**

Air Force Communications Service obtained its first solid-state instrument landing system (AN/GRN-27). The AN/GRN-27 was installed at Travis AFB, California.

**1 December 1971**

The 1866th Facility Checking Squadron moved from Scott AFB, Illinois, to Richards-Gebaur AFB, Missouri, replacing the 1860th Facility Checking Squadron.

**1972**

**8 January 1972**

The Air Force Communications Service completed management of the largest communications-electronics military sales project in contemporary history with the turnover of a \$70 million aircraft control and warning network and connecting communications system to the nation of Iran. This project, dubbed Peace Ruby, became a managerial prototype for a series of major communications-electronics projects in the 1970s.

**1 May 1972**

The AFCS Noncommissioned Officer (NCO) Academy was officially established at Richards-Gebaur AFB, Missouri, under the command of Capt Henry J. Cyr, Jr. The academy was designed for noncommissioned, E-6 through E-9, officers. Because the academy was expected to meet a long recognized command need for development of effective leaders and managers, the curriculum included intensive training in human, race, and labor relations; effective speaking and writing; drug abuse; counseling; military studies; and world affairs.

**1 June 1972**

The Headquarters Alaskan Communications Region was inactivated and its subordinate units were assigned to the 1931st Communications Group.

**30 June 1972**

Headquarters United Kingdom, Central European, and Mediterranean Communications Regions were inactivated, with subordinate units being assigned directly to the European Communications Area.

**26 - 28 October 1972**

The Pacific Central Notice to Airmen (NOTAM) Facility was moved from Fuchu AS, Japan, to Hickam AFB, Hawaii. The Southeast Asia Central NOTAM Facility ceased operations and its functions were assumed by the facility at Hickam AFB.

**13 December 1972**

Headquarters USAF designated AFCS as the lead command for development of a concept for, and functional definition of, tactical communications control facilities.



## **1973**

### **1 January 1973**

The 1815th Test Squadron was designated and organized at Richards-Gebaur AFB, Missouri. The 1815th's specific mission was to: (1) Train communications personnel in the performance of wideband communications link evaluations; (2) Conduct on-site operational testing during the initial operational test and evaluation phase of new systems acquisition for all types of new equipment, including traffic control and landing systems, satellite communications, and mobile communications systems and equipment; (3) Collect data required to determine the achieved performance of links, networks, and systems as applied against established standards, objectives, goals, and theoretical potentials; and (4) Perform complete systems-equipment engineering and evaluation as applicable to transportable mobile communications facilities.

### **5 - 18 January 1973**

Capt Dick Burkard, Capt Richard DeKliene, 1st Lt Jerry Selby, MSgt Smith, MSgt Fred Pierce, MSgt Donald Ferguson, TSgt Walter Schuldt, SSgt Ed Burns, and SSgt Donald Svetlik of the 1868th Facility Checking Squadron performed the "First" Traffic Control and Landing Systems (TRACALS) Station Evaluation at Torrejon AB, Spain. This evaluation launched the world-wide TRACALS Evaluation Program.

### **12 February 1973**

The 1st Mobile Communications Group participated in Operation Homecoming, the repatriation of American prisoners of war held by the North Vietnamese. Living up to the command's motto of the first in and the last out, the group's personnel were on the first aircraft to land at Gia Lam Airport in Hanoi, North Vietnam, and were on the last aircraft to depart. Within ten minutes of the initial landing at Hanoi, the group established contact with Clark AB, Philippines, and the first C-141 medical evacuation aircraft was on its way to pick up the prisoners. Meanwhile at Clark AB, other AFCS combat communicators helped set up hundreds of telephone lines and circuits for the freed Americans to call their families and friends in the United States.

### **27 March 1973**

The last AFCS unit in South Vietnam, the 1964th Communications Group, moved without personnel and equipment from Tan Son Nhut AB, to Ramstein AB, Germany.

### **18 May 1973**

Maj Gen Paul R. Stoney authorized the formation of an AFCS NCO Leadership School at Richards-Gebaur AFB, Missouri, to fill the void of preparing selected sergeants and staff sergeants to assume supervisory positions.

### **September 1973**

The 2d Mobile Communications Group deployed to Karachi, Pakistan, to help support flood relief.

### **October - November 1973**

Air Force Communications Service mobile communicators deployed to Lod Airport in Tel Aviv, Israel, during the Middle East crisis (Yom Kippur War).

## **1974**

**4 March 1974**

The NCO Professional Military Education Center, under which the AFCS NCO Academy and the AFCS NCO Leadership School would be aligned, was created. The commander of the 1872d School Squadron would serve as the center's commandant, and each school would have an NCO deputy commandant.

CMSgt Nelson T. Cross became the first deputy commandant of the AFCS NCO Academy.

**28 June 1974**

The AFCS NCO Leadership School was formally dedicated at Richards-Gebaur AFB, Missouri, by Maj Gen Donald L. Werbeck, AFCS Commander.

**1 July 1974**

MSgt Nelson L. Duckworth was selected as the first deputy commandant of the NCO Leadership School.

The Interservice Radio Frequency Management School held its first class at HQ AFCS. The class included Air Force, Navy, and Army officers as well as NCOs and civilians from all services.

**21 November 1974**

Headquarters USAF announced its decision to disestablish AFCS as a major command, realign it as a service under the Military Airlift Command, and move it to Scott AFB, Illinois, during the summer of 1975. Richards-Gebaur AFB, Missouri, the location of HQ AFCS, would be phased down or closed. These actions were part of an overall Department of Defense plan to eliminate 11,600 civilian jobs and shift \$300 million a year from support functions to combat functions.

## **1975**

**7 February 1975**

The Long Range Radar-D System relocated from the United States to Europe. This entailed removing equipment from sites in the Western United States and transporting the equipment to departure points before airlifting to the European locations.

**12 March 1975**

Headquarters USAF approved an Air Traffic Control Badge for air traffic controllers. To be awarded the badge with a star (senior air traffic controller), one had to have a minimum of seven years experience. With fifteen years experience, one could be awarded a star and wreath of a master air traffic controller.

**3 April 1975**

Following a meeting of approximately two hundred and fifty HQ AFCS civilian employees, a complaint was filed in the United States District Court, Western District of Missouri, Western Division, seeking to restrain the Air Force from relocating HQ AFCS, pending compliance with the National Environmental Protection Act. The plaintiffs were Robert and Karen McDowell, HQ AFCS employees, representing HQ AFCS employees. Named defendants were the Secretary of Defense, James R. Schlesinger; Secretary of the Air Force, John L. McLucas; and USAF Chief of Staff, General David C. Jones.

**23 April - 1 May 1975**

During the evacuation of Saigon, South Vietnam, four AFCS men, TSgt Antoine A. Kristol, TSgt Benjamin F. Scott, SSgt George L. Pappas, and SSgt Stephen A. Blyler, with a radio-equipped jeep, provided communications for the United States Defense Attache Office. By 28 April, attacks on Saigon had become so heavy that the team was ordered to evacuate. Two of the men, Sergeant Kristol and Sergeant Blyler, volunteered to stay to support the US Marine guards. When Sergeants Kristol and Blyler were airlifted out by helicopter shortly after midnight on 1 May, they were the last Air Force personnel evacuated from South Vietnam.

**22 May 1975**

The trial, McDowell, et al., vs Schlesinger, et al., to stop the move of HQ AFCS from Kansas City, Missouri, to Scott AFB, Illinois, began in the United States District Court, in Kansas City, Missouri.

**5 June 1975**

Judge Hunter announced his judgment for the plaintiffs, citing the proposed HQ AFCS move as a major Federal action requiring compliance with the National Environmental Protection Act. All actions were thus nullified and cancelled pending Air Force completion of an environmental impact statement, and then a decision on whether the move should take place would be made. Specific job offers were cancelled. Movement directives pertaining to HQ AFCS relocation to Scott AFB were cancelled; HQ USAF ordered the remanning of HQ AFCS; AFCS's Det 1, Advanced Echelon Team at Scott AFB was dissolved; and MAC/AFCS PPlan 75-8 was rescinded.

**12 July 1975**

One of the two T-39 aircraft of the 1868th Facility Checking Squadron in Germany transferred to the 1867th Facility Checking Squadron at Clark AB, Philippines.

**1976**

**13 February 1976**

An expanded and modernized National Military Command Center began operation.

**24 March 1976**

All AFCS mobile communications units were redesignated "Combat Communications" units.

**20 May 1976**

A proposal for restructuring the Area Headquarters was submitted to Headquarters USAF, Director of Manpower and Organization. This proposal called for the realignment of ninety-eight nonmanagement authorizations from Headquarters AFCS to operating units; the transfer of the personnel, comptroller, security, and safety functions from the Area staffs to Headquarters AFCS without any additional manpower; the consolidation of the command's Inspector General function at Headquarters AFCS with the transfer of ninety-six authorizations from the Areas to Headquarters AFCS; and the transfer of Civil Engineering functions and five authorizations from the Areas to Headquarters AFCS. The Areas would then be organized in an operational deputy structure, with a total manpower savings of 256 authorizations. This proposal was modified on 26 May 1977.

**25 May 1976**

The 27th Communications Squadron, Andersen AFB, Guam, transferred from the Strategic Air Command to the Pacific Communications Area (AFCS). The squadron's communications-electronics responsibilities and air traffic control services continued for all of Guam.

**30 June 1976**

The White Alice Communications System in Alaska was leased to the RCA Corporation, ending many years of Air Force maintenance for the commercial long-line communications in that state.

**1 July 1976**

The Air Force Communications Service assumed operations and maintenance responsibility for Strategic Air Command's, command and control and communications systems with the activation of the Strategic Communications Area. Strategic Air Command transferred 6,325 manpower authorizations and AFCS contributed 2,000 existing authorizations for a total of 8,325. The newly activated Area consisted of 8,000 slots, achieving a savings of 325 manpower authorizations.

**28 July 1976**

The American Central Notice to Airmen (NOTAM) Facility at Carswell AFB, Texas, was redesignated as the Air Force Central NOTAM Facility and made a direct reporting unit of AFCS.

**30 September 1976**

Headquarters European Communications Area moved from Lindsey AS, Germany, to Kapaun Barracks, Germany, to be nearer HQ USAFE which it supported. After the relocation, Headquarters European Communications Area was only nine kilometers from Ramstein AB and HQ USAFE, instead of seventy.

**1 October 1976**

Air Force Communications Service assumed responsibility for communications-electronics-meteorological maintenance at Air Training Command's four technical training centers: Keesler AFB, Mississippi; Lackland and Sheppard AFBs, Texas; and Chanute AFB, Illinois. This action involved the transfer of 423 manpower authorizations and saved the Air Force thirty-five authorizations.

**1 November 1976**

The Southern Communications Area initiated a test designed to evaluate the concept of regionalization of AFCS communications-electronics-meteorological and air traffic services management and maintenance. Under this concept, maintenance management (maintenance control, quality control, training management and maintenance analysis) for the 2015th Communications Squadron, Randolph AFB, Texas; 2065th Communications Squadron, Brooks AFB, Texas; and the 2082d Communications Squadron, Lackland AFB, Texas, would be handled by the 1923d Communications Group, Kelly AFB, Texas. Customer requirements necessitated that some work centers (all San Antonio air traffic control equipment maintenance: telephone, crypto, teletype, radio and TV workcenters at Randolph, the telephone workcenter at Brooks, and the TV and training equipment workcenters at Lackland) would continue with on-site maintenance personnel. In all other cases, maintenance would be handled by dispatching technicians.

**10 November 1976**

The Automatic Digital Network II, Phase I, contract was awarded to a consortium headed by Western Union, the prime contractor.



**18 November 1976**

The Air Force Central Notice to Airmen (NOTAM) Facility, Carswell AFB, Texas, assumed the functions of the European Central NOTAM Facility, Rhein-Main AB, Germany, which was inactivated.

**31 December 1976**

Most Military Affiliate Radio Systems stations manned by military personnel were converted to auxiliary status with a reduction in manpower of sixty AFSC 293X3s.

**1977**

**12 January 1977**

Headquarters USAF filed the final environmental impact statement on the move of AFCS from Richards-Gebaur AFB to Scott AFB with the President's Council on Environmental Quality and made it available to the public. The report stressed the importance of maintaining the nation's combat capability with fewer resources—relocating Headquarters AFCS, technical units, and the 1866th Facility Checking Squadron to Scott AFB, Illinois. The Air Force Communications Service would retain major command status, with certain nontechnical headquarters staff functions performed by Headquarters Military Airlift Command. Richards-Gebaur AFB would be retained as an Air Force installation, and the 1872d School Squadron would be transferred to Keesler AFB, Mississippi.



*AFCS Headquarters building at Richards-Gebaur AFB, Missouri.*



**14 January 1977**

Formal installation of the continental United States Meteorological Data System was completed. This system was a computer controlled weather data system which collected and disseminated weather and Notice to Airmen data to military and Department of Defense users in the continental United States.

**7 February 1977**

Jackson County, Kansas City, the State of Missouri, and thirteen other plaintiffs filed a suit against the Department of Defense and the Air Force seeking three distinct actions against the government on the move of Headquarters AFCS to Scott AFB. First, the suit asked the court to grant a temporary restraining order to prevent the Air Force from deciding on the proposed move until the allegedly deficient environmental impact statement could be corrected. Secondly, the suit asked for a declaratory judgment charging that the impact statement was insufficient under the 1969 National Environmental Policy Act. Finally, the suit filed a request for an injunction to bar any action on the proposed transfer until another statement was prepared.

**March 1977**

Maj Gen Rupert H. Burris, AFCS Commander, directed a significant change in the AFCS program management concept. Only those programs which met the exception criteria set forth in AFCS Regulation 500-40, C-E Program Management, as determined by the AFCS Chief of Staff would be managed by Headquarters AFCS.

**4 March 1977**

The Burroughs Corporation completed the terminal setups for the Improved Emergency Message Automatic Transmission System. Air Force Communications Service managed the implementation of the system which included seven sites: (1) National Military Command Center, (2) Alternate National Military Command Center, (3) Commander-in-Chief Strategic Air Command, (4) Commander-in-Chief Atlantic, (5) Commander-in-Chief Aerospace Defense Command, (6) Commander-in-Chief Pacific, and (7) Commander-in-Chief Europe. The Army purchased the remaining three terminals for use in the Selective Release Improved Program.

**April 1977**

The Air Staff cancelled the AN/TYC-7 mobile data terminal program because of escalating costs and the bankruptcy of the contractor.

The continental United States Meteorological Data System was expanded by installing fifty-three terminals in support of the Aerospace Defense Command. Subsequent deactivation of the Air Defense Tactical Weather Communications Network resulted in an annual savings of about \$208,000 to the Air Force.

**1 April 1977**

The two Central Notice to Airmen (NOTAM) facilities—Air Force Central NOTAM Facility at Carswell AFB, Texas, and the Pacific Central NOTAM Facility at Hickam AFB, Hawaii—comprising the USAF Notice to Airmen collecting and processing system were consolidated at Carswell AFB, Texas. This increased efficiency through reduced manpower requirements and centralized equipment utilization.

**28 April - 3 June 1977**

Exercise SOLID SHIELD 77 was the first major exercise to target and jam AFCS wideband troposcatter communications. This jamming was a small but necessary first step toward realistic electronic warfare training in exercises.

24 May 1977

The decision to close Richards-Gebaur AFB was finally announced to Congress and the general public. Secretary of the Air Force, Thomas C. Reed, had decided to close the base and report all but the facilities required for the 442d Tactical Airlift Wing, a reserve unit, to the General Services Administration for disposal and civilian reuse. Headquarters AFCS would transfer to Scott, but remain a Major Command. The Military Construction Bill of 1976 required that Congress be given sixty days to review any base closure. This announcement began that sixty-day period.

Headquarters USAF combined existing Tactical Satellite Communications ground equipment and the Gapfiller satellites with the Lincoln Experimental Satellite 8 and 9 research and development satellites to form the Scope Dawn project. Headquarters USAF designated AFCS as the implementing and operating command for Scope Dawn.

26 May 1977

An updated and modified version of the original 20 May 1976 proposal which sought permission to reorganize the Area Headquarters staffs was submitted to Headquarters USAF Director of Manpower and Organization. This proposal was expanded to include Strategic Communications Area, and suggested that the Strategic Communications Area, Pacific Communications Area, European Communications Area, and Tactical Communications Area, each of which supported a single major command, should have a small number of authorizations realigned into detachments from Headquarters AFCS. These detachments would contain minimum essential functions to perform management-type duties in support of their respective major commands. The detachments would be the communications-electronics staff for the major command and the remaining elements of the Area staff would be the hands-on, operational, nonmanagement Area Headquarters, retaining the Area title. The detachment would continue as an integrated part of the Area Headquarters with the Area Commander serving as Commander of both the Area and the Detachment.

22 June 1977

Kansas City, Jackson County, and seven other local and state government units filed suit in the United States District Court charging that the environmental impact statement was inadequate and asked for a restraining order, a temporary injunction, and a permanent injunction prohibiting the transfer of Headquarters AFCS to Scott AFB, Illinois.

23 June 1977

The Air Force launched the first satellite for the Navigation System Using Time and Ranging Global Positioning System.

27 June 1977

Headquarters USAF gave AFCS the responsibility for installing an injection system in ground stations to use with single channel transponders. Installation of the system was part of the Air Force Satellite Communications I program. Headquarters USAF also gave AFCS the responsibility of providing an installation plan and concept of operations for four transportable ground terminals.

An advanced echelon team was sent to Scott AFB, Illinois, for three weeks to facilitate the AFCS move to Scott. The team was sent on a temporary-duty status because of the requirement for the Air Force to take only revocable actions during the sixty-day congressional review period. The team was to review proposed facilities for AFCS at Scott, liaison with MAC, and initiate other preliminary planning actions as necessary.

**6 July 1977**

A joint MAC/AFCS Memorandum of Agreement, implementing the new and untried shared staff concept, was signed by Gen William G. Moore, Jr., and Maj Gen Rupert Burris, the two respective commanders. Under this arrangement, suggested by Headquarters USAF, elements of the MAC Deputy Chiefs of Staff or Special Staff would be dual-hatted and would be responsible for the preparation of data or support of projects and programs within the specified functional areas for both commands. The functional areas under the shared staff concept were Personnel, Comptroller, Administration, Plans and Resources, Staff Judge Advocate, and Surgeon.

**28 July 1977**

Judge William R. Collinson issued the desired twenty-day temporary restraining order which prevented the Air Force from taking any irrevocable actions on the AFCS relocation to Scott AFB until after 17 August.

**August 1977**

Installation of the European Facsimile Network Phase II was completed by AFCS.

**9 August 1977**

The USAF Director of Manpower and Organization, Maj Gen Jack I. Posner, gave his approval to establish AFCS management headquarters detachments to support the major commands and to restructure all Area headquarters as outlined in the 26 May 1977 proposal. These communications-electronics systems offices were more popularly known by their acronym CESO.

**18 August 1977**

Detachment 1, HQ AFCS, was activated at Scott AFB, Illinois, for assignment of permanent Advanced Echelon Team (ADVON) personnel. The Deputy Chief of Staff for Plans and Resources, Col Lloyd H. Watnee, Jr., was named ADVON Commander.

**23 August - 23 December 1977**

A Notice to Airmen (NOTAM) Automatic Response to Query was established. It indicated that the concept of providing NOTAM service from a computer data base was both feasible and desirable.

**1 September 1977**

The 3d Combat Communications Group, Tinker AFB, Oklahoma, deployed the first operational landing control system (AN/TPN-19) to March AFB, California.

Headquarters AFCS transferred management responsibility for the Air Force Satellite Communications Program I to the Headquarters Strategic Communications Area, collocated with the Strategic Air Command.

**30 September 1977**

The 4th Combat Communications Group, Altus AFB, Oklahoma, was inactivated; and its mission was transferred to the 2d Combat Communications Group, Patrick AFB, Florida.

### **30 September 1977**

As part of the relocation of HQ AFCS and the closure of Richards-Gebaur AFB, the 1872d School Squadron (NCO Academy/Leadership School) moved from Richards-Gebaur AFB, Missouri, to Keesler AFB, Mississippi, while the 2199th Computer Services Squadron, the 2000th Management Engineering Squadron, the 1801st Support Squadron, the 1866th Facility Checking Squadron, the 1815th Test Squadron, and the 1842d Electronic Engineering Group moved to Scott AFB, Illinois.

All military personnel were withdrawn from eleven of the thirteen Alaskan Aircraft Control & Warning Sites on schedule. At that time, 145 remote AFCS authorizations and eighteen overhead authorizations were deleted.

### **1 October 1977**

The 1840th Air Base Wing and its subordinate units were inactivated. Personnel, supplies, and equipment were transferred to the 1607th Air Base Group of the Military Airlift Command at Richards-Gebaur AFB.

The Air Force Communications Service transferred control of Richards-Gebaur AFB to the 442d Tactical Airlift Wing, a reserve unit. Because MAC would be the wartime gaining command of the 442d, they became the host command of the base.

Scope Creek School was transferred from the 1872d School Squadron to the 1815th Test Squadron. Its name was changed to C-E Systems Evaluation Training School. Operational control of the school remained with the Measurements Division of Headquarters AFCS.

Regionalization of AFCS communications-electronics, meteorological, and air traffic services was implemented in the San Antonio area on a permanent basis.

Air Force Communications Service assumed responsibility for maintenance of the Air Force's base weather gathering equipment from the Air Weather Service. Seven hundred and seventy-five authorizations were transferred to AFCS with a savings of ninety-one manpower authorizations.

### **November 1977**

The Air Staff designated AFCS as the Air Force office of primary responsibility for consolidating telecommunications centers.

### **1 November 1977**

Headquarters AFCS returned to Scott AFB, Illinois, from Richards-Gebaur AFB, Missouri, continuing as a major command. Of the seven hundred and thirty-four civilians eligible to transfer to Scott, only three hundred and eighty-three elected to do so.

The Shared Staff concept between Headquarters AFCS and Headquarters MAC was implemented. This concept proved to be unworkable and eventually all functions except the Surgeon General and graphics were returned to AFCC.

### **3 November 1977**

The operations section of the Joint Chiefs of Staff authorized the Improved Emergency Message Automatic Transmission System (IEMATS) to transmit messages up to the TOP SECRET level. This virtually ended AFCS involvement with IEMATS.



**19 December 1977**

Radar intelligence was transmitted by the Air Force Satellite Communications ground terminal to the appropriate Gapfiller satellite and was then received by a Strategic Air Command aircraft. This constituted the first operational use of the Air Force Satellite Communications System.

## **1978**

**January 1978**

Headquarters AFCS detachments were established to provide communications-electronics staff support for Headquarters Pacific Air Forces, Headquarters United States Air Forces in Europe, Headquarters Strategic Air Command, and Headquarters Tactical Air Command.

**April 1978**

The lease modification reached by AFCS and the RCA Alaska Communications, Inc., officials reduced the "A" Route sale price from \$775,000 to \$759,000.

**12 April 1978**

Headquarters USAF announced a major reorganization of its staff by realigning certain agencies and functions to various major commands and bases. With the elimination of the HQ USAF Assistant Chief of Staff for Communications and Computer Resources, Headquarters AFCS assumed fifty-four functions. Many of the new responsibilities simply augmented or expanded previous command functions. The transfers were phased over the course of fiscal year 1979.

**April - June 1978**

The 1st Combat Communications Squadron, Lindsey AS, Germany, deployed to Zaire to assist in a peacekeeping mission.

**15 April 1978**

The Strategic Communications Area obtained operational management of the Air Force Satellite Communications System and the payloads on satellites belonging to the Air Force's Satellite Data System Program from the System Program Office at the Space and Missile Systems Organization. The Air Force Communications Service had been responsible for the development of the operational concept and the system utilization plan as well as management of the terminal production contracts. The Strategic Communications Area gained the mission because of its close association with the Strategic Air Command who was the principal user of the system.

**16 June 1978**

The AFCS Commander, Maj Gen Robert E. Sadler, signed an agreement between the Air Force and the Canadian Department of National Defense outlining provisions for sharing costs associated with Air Force-owned tactical air navigation facilities. The government of Canada would reimburse the United States government for a proportionate share of the operation and maintenance costs of these facilities.

**29 June 1978**

Congress funded the Strategic Air Command Digital Information Network (SACDIN) after it had been rejected for several years due to excessive cost and size. The Air Force proceeded to negotiate the contract with International Telephone and Telegraph to design and produce SACDIN.



**30 June 1978**

The Air Force Data Automation Agency and its field units were redesignated from a separate operating agency to an organizational element of AFCS—transferring 2,172 manpower authorizations to AFCS. Following the redesignation, AFCS assumed responsibility for Air Force common user automatic data processing functions.

The Air Staff established the Air Force Data Systems Evaluation Center, Gunter AFS, Alabama, by expanding the size and scope of the Data Systems Evaluation Office of the former Headquarters Air Force Data Automation Agency. The center's personnel conducted independent quality assurance assessments of automatic data processing systems as their primary responsibility. The center's staff, which increased from eighteen to thirty-three manpower authorizations, acted as consultants to program managers of automatic data processing.

The Air Force Data Systems Design Center, Gunter AFS, Alabama, became an AFCS direct-reporting unit. The center (AFCS's largest) analyzed, designed, tested, implemented, and maintained assigned Air Force standard automatic data processing.

The Air Staff redesignated the Air Force Computer Acquisition Office as the Air Force Computer Acquisition Center and assigned command responsibility to AFCS. The center, located at Hanscom AFB, Massachusetts, was charged with the responsibility of acquiring automated data processing systems and elements of these systems for the Air Force and other government agencies. The center had ninety-one authorizations, with eighty-three positions assigned.

With the elimination of the Air Force Instrument Flight Center, Randolph AFB, Texas, AFCS became the Air Force single manager for flight standards and terminal instrument procedures.

**1 July 1978**

Air Force Communications Service assumed the communications-electronics maintenance functions at Goodfellow AFB, Texas, a former USAF Security Service base. These functions would be performed by approximately seventy people who transferred from the USAF Security Service to AFCS. Their responsibility would include airborne radio maintenance. In addition to the personnel, AFCS would assume responsibility for all bench stock, tools, and test equipment.

**19 July 1978**

The first AFCS Order of the Sword Award was presented to Maj Gen Rupert H. Burris (USAF, Retired), former AFCS Commander (22 August 1975 - 31 October 1977), at Tinker AFB, Oklahoma.

**September 1978**

Air Force Communications Service became responsible for the air traffic control portion of the command's aircraft launch and recovery program. The purpose of the program was to multiply combat power by increasing the number of each aircraft's daily sorties.

**1 October 1978**

All Traffic Control and Landing System evaluation teams in Europe were consolidated with the 1866th Facility Checking Squadron at Scott AFB, Illinois. The anticipated results included increased economies in size, improved training and standardization, and a possible cost savings of \$250,000.

**1 October 1978**

Air Force Communications Service published Programming Plan 14-78 to coordinate AFCS efforts pertinent to the Panama Canal Treaty and particularly to relocate the Curundu antenna site to the Fort Kobbe, Canal Zone site at an approximate cost of \$5.3 million.

**1 November 1978**

The Strategic Communications Area assumed management for the Air Force Satellite Communications System from HQ AFCS. This responsibility included control of payload operations, scheduling, and channel assignment for all tests and operations.

**10 November 1978**

The first Command and Control and Communications Programming Plan (C<sup>3</sup>P<sup>2</sup>), a consolidation of Air Force-wide requirements, was submitted to HQ USAF by AFCS planners.

**20 November 1978**

Five members of the 1978th Communications Group deployed to Jonestown, Guyana, to assist in cleanup operations where a mass suicide of over 900 American citizens had occurred.

## **1979**

**10 January 1979**

The 1913th Communications Squadron at Langley AFB, Virginia, went on standby due to deployment of the 94th Tactical Fighter Squadron to Saudi Arabia during the revolution that overthrew the Shah of Iran.

**15 January 1979**

Engineering and Installation troops of the 1923d Communications Installation Group received notice to proceed with their portion of installing the Nellis AFB, Nevada, AN/GPN-24 radar system. This was the first GPN-24 installed by the Air Force.

**1 February 1979**

Four communications squadrons, the 2112th, 2113th, 2114th and 2115th, were activated to provide the necessary operations and maintenance support to the USAF Security Service.

**4 March 1979**

All nine North Atlantic Treaty Organization command and control locations were successfully connected to the U.S. Automatic Digital Network system.

**1 April 1979**

The Air Force Communications Service assumed the operations and maintenance responsibilities for the United States Air Force Security Service telecommunications centers and associated secure voice facilities for a savings of 4,344 manpower authorizations; however, AFCS gained 403 authorizations.

AFCS assumed responsibilities for operating emergency satellite communications system centers and gained 400 authorizations.

#### **1 April 1979**

The Communications Computer Programming Center, Tinker AFB, Oklahoma, was redesignated the Air Force Communications Computer Programming Center.

#### **5 - 12 April 1979**

During BRAVE SHIELD 19, the 162d Combat Communications Group, North Highlands, California, became the first Air National Guard organization to serve as a lead communications unit in a major exercise.

#### **24 April 1979**

The installation of the first Air Force Satellite Communications System ground terminal, the AN/TSC-88, was completed at Offutt AFB, Nebraska.

#### **22 May 1979**

The Air Force Satellite Communications System (AFSATCOM) achieved Initial Operational Capability. The AFSATCOM system, an ultra high frequency, low data-rate, teletype communications system with keyboard input and seventy-five bits-per-second output was designed to provide worldwide command, control, and communications for Single Integrated Operational Plan uses: Emergency Action Message traffic, Joint Chiefs of Staff, Commander-in-Chief internetting, force direction, and force report back.

#### **19 June 1979**

Installation of the Air Force Satellite Communications System ground terminal, the AN/TSC-88, at Royal Air Force (RAF) Mildenhall, United Kingdom, was completed. It became operational the following day.

#### **20 June 1979**

The 1839th Engineering Installation Group completed the installation of the first Air Force AN/GRN-29 solid state instrument landing system.

#### **July 1979**

The Japan to Korea ninety-six-channel, line-of-sight, digital-microwave, bulk-encryption system was installed and became operational, linking Seburiana, Japan; to Tsushima Island, Japan; to Chungsan, Korea.

#### **5 July 1979**

Headquarters USAF transferred overall management of the Air Force Military Affiliate Radio System program to AFCS.



***The Electronic Systems Division turned over the first two AN/TSC-94 super high frequency satellite communications ground terminals to the Air Force Communications Service on 17 August 1979.***



***TSgt John Penne, a maintenance technician with the 1877 CS, Holloman AFB, polishes the crystal ball which is used to observe cloud cover during telescopic monitoring of the sun for solar flares. These flares can interfere with the operation of communication gear.***

**1 October 1979**

Headquarters USAF designated HQ AFCS as the Air Force Telecommunications Certification Office. This office planned, programmed, budgeted, and administered funds for the common user service, but only administered funding for the various separate operating agencies and major air commands' dedicated systems.

The Air Force Communications Service assumed responsibility for operating and maintaining former Aerospace Defense Command communications and command control facilities. With this added responsibility, AFCS gained one group, seven squadrons, ten detachments, and thirty operating locations. They also gained 1,764 manpower authorizations at fifty-five locations. One of the units was unique in the Air Force and performed all operational test and evaluations, commissioning, and modification testing of long-range radars and sensor systems. This unit, the 4754th Radar Evaluation Squadron, was redesignated the 1954th Radar Evaluation Squadron when it transferred to AFCS on 1 October.

**9 November 1979**

A major missile warning incident occurred within the 427M computer at the North American Air Defense Command's Cheyenne Mountain Complex in Colorado. It proved to be a false alarm, but the incident had national and international repercussions.

**15 November 1979**

President Jimmy Carter issued Presidential Directive 53, the National Security Telecommunications Policy, which defined the requirement for a national, survivable telecommunications system.

The Air Force Communications Service was redesignated the Air Force Communications Command on the forty-first anniversary of the establishment of the Army Airways Communications System.

The first AFCC female (joint spouse) reported to a remote assignment in Diyarbakir, Turkey.

**25 November 1979**

The 2015th Communications Squadron at Randolph AFB, Texas, accepted the first control tower console reconfiguration done in the Air Force.

**26 December 1979 - 15 January 1980**

Members of the Pacific Communications Area provided support to Secretary of Defense Harold Brown's visit to the People's Republic of China. The visit by Secretary Brown was the first visit to mainland China by a United States Secretary of Defense. This was the first time that Air Force communications personnel had been in mainland China since 25 April 1949, when AACS people had been withdrawn from Shanghai because of the Chinese Revolution.

**1980**

**1 February 1980**

Under the "Country Group" restructuring plan, the communications squadrons within each country reported to a Group rather than to the Area headquarters. This reduced the span of control of the European Communications Area Commander and increased the effective use of communications and air traffic control assets. The group in each country served as the single focal point for all such matters in the group's respective countries. The largest reorganization took place among the units in the United Kingdom.



#### **5 March 1980**

The Air Force's first landing control central (AN/GPN-24) was conditionally accepted at Nellis AFB, Nevada.

The AN/GPN-22, installed at Nellis AFB, Nevada, was the latest state-of-the art single channel solid-state radar system, replacing the older tube-type precision approach radar systems, such as the AN/FPN-16 or the AN/FPN-61.

#### **18 March 1980**

The first on-site Constant Watch scheme installation began. Constant Watch was a Pacific command and control complex, hardened tactical air control center located in Korea.

#### **1 April 1980**

The "Country Group" reorganization structure became effective in Spain and Italy.

Headquarters Tactical Air Command Communications Area assumed operational control of the 3d Combat Communications Group, the tactical functions from HQ AFCC Directorate of Tactical Operations, and operational management for all Air National Guard combat communications units. These units provided about seventy-five percent of the 10,000 people assigned combat communications duties.

Major General Robert T. Herres, AFCC Commander, approved the plan for an extensive headquarters reorganization resulting in the establishment of a Deputy Chief of Staff (DCS) for Operations, Plans and Readiness by combining the existing DCS for Operations and Readiness and the DCS for Plans and Resources functions and associated manpower. This reorganization trimmed AFCC's Operations and Plans staff from 414 people to 326. The remaining eighty-eight positions and their functions were aligned to other staff offices.

#### **5 May 1980**

The Air Force's first AN/GPN-T4 radar signal simulator was installed at Myrtle Beach AFB, South Carolina.

#### **11 May 1980**

Precision Approach Radar (AN/FPN-16) was decommissioned at Mountain Home AFB, Idaho. It was the first Tactical Air Command base to replace Precision Approach Radar service with an Instrument Landing System.

#### **14 May 1980**

A ribbon cutting ceremony was held at MacDill AFB, Florida, to open the first Air Force Automated Message Processing Exchange. The United States Readiness Command/J6, Brig Gen Frederick J. Maloy, cut the ribbon.

#### **20 May 1980**

When the Mount St. Helens volcano erupted, AFCC's 252d Combat Communications Group, Camp Murray, Tacoma, Washington, provided dedicated communications between Toledo, Washington, and the Washington State Military Department's Emergency Operating Command Post at Olympia, Washington.

#### **27 - 31 May 1980**

The first special recognition program, AFCC Outstanding Airmen of the Year Award, was held at Scott AFB, Illinois. It included active duty, reserve, and Air National Guard personnel.

✦

**27 August 1980**

The first Hickam Base Telecommunications Center Remote Information Exchange Terminal was placed on-line, but it could not handle the traffic load; therefore, the old UNIVAC U418II was put back on-line.

**27 - 28 September 1980**

The first AFCC Engineering Installation Team Shoot-out was held at Kelly AFB, Texas, hosted by the 1827th Engineering Installation Squadron. Teams were judged on wartime mobility capabilities of deploying Air National Guard teams and their ability to install communications-electronics equipment in a realistic environment. The 219th Engineering Installation Squadron from Oklahoma was the winner.

**1 October 1980**

The San Antonio Data Services Center at San Antonio, Texas, was activated in conjunction with the inactivation of Det 1, Air Force Data Services Center in San Antonio, Texas, and assigned to AFCC. The San Antonio Data Services Center carried on the detachment's mission by providing automatic data processing services to the Air Force, Department of Defense, and other federal agencies.

**12 November 1980**

A C-141 crashed during Exercise BRIGHT STAR while on approach to the Cairo West airfield in Egypt, killing thirteen crew members and passengers. SrA Geoffrey L. Galvin, A1C Karen L. Marti, SrA Martha M. Misko, and TSgt Robert S. Tuggle, of the 2d Combat Communications Group, Patrick AFB, Florida, were among the fatalities.

**1 December 1980**

A USAF contract was signed with Burroughs and UNIVAC corporations. This contract would completely replace base-level computers under the Phase IV Program.

**1981**

**1 January 1981**

Operating Location-A, 1815th Test Squadron, was activated at Wright-Patterson AFB, Ohio, to serve as the advance echelon for the 1815th's move there.

Detachment 10, HQ AFCC was activated to serve as the advance echelon for the future establishment of Airlift Communications Division at Scott AFB, Illinois, on 1 June 1981.

To upgrade communications readiness in the Pacific, HQ AFCC reactivated the 4th Combat Communications Squadron at Kwang-Ju, South Korea. Detachments and operating locations were activated at Osan, Taegu, Pusan, and Junsan AB, Korea, on the same date. On 15 February, a fifth unit was activated at Clark AB, Philippines.

The 1st Combat Communications Squadron, Lindsey AS, Germany, was elevated to group status.

**21 January 1981**

Five AFCC units in Germany provided a wide variety of communications, telephones, press centers, microwave links, public address systems, and special presidential links for use by the American hostages who had been held in Iran from 4 November 1979 to 21 January 1981.

**30 January 1981**

The 2137th Communications Squadron at Spangdahlem AB, Germany, accepted the first AN/GPN-T4 radar proficiency simulator in USAFE. This simulator provided realistic training for air traffic controllers.

**1 February 1981**

The 47th Communications Group was reassigned from the Strategic Air Command Communications Area (SACCA) to HQ AFCC. This unit was responsible for communications for the North American Air Defense Command Cheyenne Mountain Complex in Colorado Springs, Colorado. In a related action, HQ AFCC inactivated Det 1, SACCA (located in Colorado Springs) and reassigned its sensor site communications units directly to SACCA.

**20 February 1981**

Acting on a suggestion from Brig Gen Richard W. Pryor, Northern Communications Area (NCA) Commander, NCA reassigned its Deputy Chief of Staff for Engineering and Installation, and active Air National Guard engineering installation units to Southern Communications Area (SCA). At the same time, all SCA operation and maintenance units (except those on Military Airlift Command bases and the 1926th Communications Installation Group) transferred to NCA. These actions were in anticipation of a command reorganization on 1 June.

**4 March 1981**

The Tactical Communications Division was designated secondary alternate headquarters for AFCC. The Continental Communications Division continued as the primary alternate headquarters.

The first Joint Communication Commanders Conference (Army, Navy and Air Force) was held at Scott AFB, Illinois.

**7 March 1981**

The Automatic Digital Network terminal for the 5th Signal Regiment, 1st German Air Division at the Allied Tactical Operations Center, Mestetten, was activated.

**13 March 1981**

A \$70 million contract was signed with Northern Telecommunications Incorporated for the replacement of dial central office equipment with digital telephone switching systems at selected bases. Known as SCOPE DIAL, the modernization project would span five years.

**16 March 1981**

A fog-related crash of an RC-135 at Shemya AFB, Alaska, with the loss of six lives, prompted action for full implementation of a Microwave Landing System.

**27 March 1981**

The 2d Combat Communications Group, Patrick AFB, Florida, deployed 190 personnel for emergency rescue assistance to the site of a Cocoa Beach, Florida, condominium which collapsed during construction.

12 - 14 April 1981

The Air Force Communications Command provided air traffic control navigational and communications support to the National Aeronautics and Space Administration's Columbia space shuttle mission, manned by John W. Young, Commander, and Robert L. Crippen, pilot. On this historic mission, the space shuttle lifted off from launch pad 39-A at Kennedy Space Center, Florida. Two days and 36 orbits later it returned to earth and landed at Edwards AFB, California. Personnel from AFCC provided fixed and mobile tactical air navigation and communications support assisting the Columbia to a safe and successful landing.

1 May 1981

The 3d Combat Communications Group, Tinker AFB, Oklahoma, deployed personnel and communications equipment to Elf One in support of the 552d Airborne Warning and Control Wing E-3A aircraft at Riyadh, Saudi Arabia. The E-3A aircraft provided advance warning of Iranian attacks on Saudi oil fields.

1 June 1981

The Command officially completed the AFCC realignment. Subordinate "areas" were redesignated as "divisions" to correspond with other major commands' designations and inactivated the Southern and Northern Communications Areas. The inactivated areas' assets were divided between the newly activated Engineering Installation Center, Oklahoma City AFS, Oklahoma; Continental Communications Division, Griffiss AFB, New York; and Airlift Communications Division, Scott AFB, Illinois. The Engineering Installation Center consolidated the command's ten electronic engineering and installation units under its management. The 1842d Electronics Engineering Group, a direct reporting unit of HQ AFCC before the realignment, also became part of the Engineering Installation Center. Airlift Communications Division, collocated with HQ Military Airlift Command (MAC), would provide enhanced communications support for MAC's worldwide airlift mission and operational management of fifteen squadrons and groups located on MAC bases. In a related action, the 1815th Test Squadron, which tested communications and air traffic services equipment, officially moved from Scott AFB, Illinois, to Wright-Patterson AFB, Ohio. The 1931st Communications Group, Elmendorf AFB, Alaska, a HQ AFCC direct reporting unit, transferred to Continental Communications Division.

The Deputy Chief of Staff for Engineering and Installation and the 1843d Electronics Engineering Squadron of the Pacific Communications Division were consolidated to become the 1843d Engineering Installation Group, assigned to the Engineering Installation Center.

1 July 1981

Headquarters AFCC celebrated its twentieth anniversary as a major command.



*During the 20th anniversary activities in 1981, four former AFCC commanders and General Herres pause at the entrance to AFCC headquarters at Scott AFB, Illinois. Commanders are, clockwise from left, Maj Gen J. Francis Taylor, Jr., retired; Maj Gen Robert E. Sadler, retired; Maj Gen Robert T. Herres, AFCC Commander, Maj Gen Rupert H. Burris, retired; and Lt Gen Harold W. Grant, retired.*



During AFCC's twenty years as a major command, air traffic controllers saved 1,812 civilian and military aircraft, valued at \$2,233,571,710. A "save" is defined as the safe landing of an imperiled aircraft through extraordinary and timely application of air traffic knowledge, techniques, and procedures where there is reasonable doubt that the aircraft would have landed safely without such action. The lives of 6,981 people were saved as a direct result of these actions.

The 1954th Radar Evaluation Squadron, Hill AFB, Utah, a direct reporting unit of HQ AFCC before the realignment, joined the Engineering Installation Center.

### 3 August 1981

Unionized Federal Aviation Administration Air Traffic Controllers began a nationwide strike at 0700 eastern daylight time. Of the nation's 17,000 controllers, 13,000 participated in the strike. The Air Force Communications Command Air Traffic Controllers were immediately alerted according to previous contingency planning for such an event.



### **3 August - November 1981**

During the strike, controllers from all four of AFCC's Continental United States based divisions, in conjunction with Army and Navy personnel, participated in eight deployments to Federal Aviation Administration (FAA) facilities throughout the United States as well as overseas. The Air Force Communications Command deployed 612 of its controllers to 138 FAA locations; other services provided 412 controllers, bringing the total to 1,024.

### **26 August 1981**

Headquarters USAF assigned Air Force Systems Command program management responsibility for the Ground Launched Cruise Missile (GLCM) Program as a collateral function with the Joint Cruise Missile Project Office in Washington, D.C. Air Force Communications Command was assigned program management responsibilities for beddown communications at six overseas GLCM sites.

### **29 - 30 August 1981**

The second annual Engineering and Installation Shootout, the first to include active duty units, took place at Kelly AFB, Texas. The 1849th Electronics Installation Squadron won the competition.

### **September 1981**

The 485th Engineering Installation Group began engineering for the fixed communications beddown for the first Ground Launched Cruise Missile Site at RAF Greenham Common, United Kingdom.

### **11 September 1981**

The first Air Force Satellite Communications installation was completed at Altus AFB, Oklahoma, by the 1839th Engineering Installation Group.

### **25 September 1981**

Captain Joan R. Burg became the first female commander of a Strategic Communications Division unit, the 1983d Communications Squadron, Thule AB, Greenland.

### **12 - 14 November 1981**

The second shuttle flight of the Columbia was launched at 1010, on 12 November, from Kennedy Space Center. It was manned by Joseph H. Greene, shuttle commander and Richard H. Truly, pilot. The space shuttle landed safely after fifty-four hours and thirty-six orbits, at 1623, on 14 November at Edwards AFB, California, even though trouble developed in one of the fuel cells. Again, AFCC units supplied fixed and mobile tactical air navigation and communications support, and the 1877th Communications Squadron provided backup support at Northrup Strip, White Sands Missile Range as an alternate landing site.

### **20 November 1981**

A typhoon caused a commercial power failure at Andersen AFB, Guam, and demonstrated the value of base communications isolation planning.

### **15 December 1981**

The Air Staff approved the telecommunications center upgrade program and assigned ten major responsibilities including program management, engineering and installation support, training requirements definition, and the role of lead major command for operational acceptance testing to AFCC.

#### **16 December 1981**

Installation of the second and last Digital Subscriber Terminal Equipment in the Kadena Consolidated Communications Center was completed.

#### **19 December 1981**

The first Standard Remote Terminal Modular Automatic Digital Network (AUTODIN) Terminal Equipment Hickam Base Telecommunications Center was activated and homed to the Honolulu, Hawaii, AUTODIN Switching Center.

#### **31 December 1981 - January 1982**

Headquarters USAF deactivated the USAF Frequency Management Office, located at Buzzards Point in the District of Columbia, on 31 December 1981 and replaced it on 1 January 1982 with the activation of the USAF Frequency Management Center. The change, primarily an administrative procedure, involved no personnel move nor was there an increase in the size of the organization. Although the center was subject to AFCC on administrative, organizational, and personnel matters, it received most job taskings from HQ USAF's Directorate of Command, Control and Telecommunications, with responsibility for obtaining, assigning, and managing communications frequencies for the Air Force; providing the Air Force with technical services in frequency management matters; and implementing frequency management policy.

### **1982**

#### **1 January 1982**

Headquarters AFCC implemented several changes in the communications responsibilities in the Colorado Springs area. The 47th Communications Group assumed all crypto maintenance responsibilities for the Colorado Springs area, including those of the U.S. Air Force Academy which were previously performed by the 1876th Communications Squadron.

#### **4 January 1982**

The Interservice Radio Frequency Management School moved from Scott AFB, Illinois, to Keesler AFB, Mississippi, where it was integrated with the 1872d School Squadron.

#### **24 January 1982**

The Air Force's first Standard Remote Terminal Modular Automatic Digital Network Terminal Equipment became operational at Peterson AFB, Colorado.

#### **3 February 1982**

Installation of the Air Force Satellite Communications terminal at Blytheville AFB, Arkansas, was completed. It was the first to be installed in 1982.

#### **March 1982**

The lead base in the Third Air Force to install the telebrief launch control system was RAF Lakenheath, United Kingdom. This installation was part of the Airfield Survivability Measures Communications, a North Atlantic Treaty Organization program designed to provide survivable aircraft shelters, command posts and operational support facilities.

**22 - 30 March 1982**

Units of AFCC supported the third flight of the space shuttle Columbia with fixed and mobile TACANs and communications.

**1 April 1982**

The Air Force Communications Command accepted responsibility for administrative and personnel support of Detachment 12, HQ AFCC. The detachment did the research, analysis, planning, and coordination required to develop or change communications-electronics doctrine and policy.

Phase IV's Program Management Office located at Gunter AFS, Alabama, was redesignated Air Force Automated Systems Project Office to reflect its increased responsibilities.

**2 April 1982**

The Defense Communications Agency informed all agencies working on the Automatic Digital Network II (AUTODIN II) that the Assistant Secretary of Defense for Command, Control, and Communications had directed termination of AUTODIN II as quickly as possible. The AUTODIN II system failed primarily for two reasons: (1) It was not cost effective; and (2) There was little or no operational requirements for such a system.

**3 - 17 April 1982**

The first collocated operating base training was completed at Myrtle Beach AFB, South Carolina. It emphasized academics and, under field conditions, practical experience with combat communications equipment such as high frequency radios, Automatic Digital Network, and especially Tactical Record Communications Terminal Vans.

**13 April 1982**

The 3d Combat Communications Group, Tinker AFB, Oklahoma, received its first satellite communications terminals (AN/TSC-100). The formal turnover ceremonies were at 2d Combat Communications Group, Patrick AFB, Florida, on 22 June.

**17 May 1982**

The staff of the Deputy Commander for Data Automation was reorganized to form a separate Deputy Chief of Staff for Data Automation.

**11 June 1982**

The Air Force Automated Message Processing Exchange at Scott AFB, Illinois, became operational.

**15 June 1982**

Personnel and two mobile TACANs were deployed to Dakar, Senegal, to support the space shuttle flight on 27 June 1982.

**22 June 1982**

The Air Staff's Communications-Electronics Implementation Directive 2298 established HAMMER ACE. This document provided AFCC with \$560,000 to implement the HAMMER ACE project. HAMMER ACE was the Air Force's special communications element designed to provide adaptive communications support to activities such as aircraft accident investigations/recovery efforts, exercises, quick communications restoral, and real-world contingency operations. Within three weeks, HAMMER ACE was operational and ready to provide the Air Force with a range of specialized communications options.

**27 June - 4 July 1982**

The space shuttle Columbia was tested for the fourth and last time. Again, AFCC units, such as the 1925th Communications Squadron, 1877th Communications Squadron, 3d Combat Communications Group, 1st Combat Communications Group, 1866th Facility Checking Squadron, 2080th Communications Squadron, 1957th Communications Group, and the 1962d Communications Group furnished Tactical Air Navigation service to the space shuttle from fixed and mobile facilities. This also provided local communications support at Edwards AFB, California, and at contingency landing sites. AFCC provided communications specialists to operate and maintain an AN/MRC-107 (mobile communications vehicle) at Kennedy Space Center's Shuttle Landing Facility, which afforded a means for altering the contingency response forces.

**1 July 1982**

The Tactical Communications Division, Langley AFB, Virginia, was designated primary alternate headquarters for AFCC, vice Continental Communications Division, with an effective date of 12 November.

**16 July 1982**

HAMMER ACE, the Air Force's special communications element, engaged in its first operational deployment, the support of GLOBAL SHIELD 82.

**20 July 1982**

The AFCC Radar Evaluation School was established with the 1954th Radar Evaluation Squadron, Hill AFB, Utah. This new school provided radar evaluation training, both theoretical and practical, to selected engineers and technicians.

**15 August 1982**

Detachment 12, HQ AFCC was redesignated Air Force Communications-Electronics Doctrine Office and retained its sixteen authorizations.

**24 August 1982**

The Modified Final Judgment, handed down by District Court Judge Harold H. Greene, established the procedures by which the twenty-two Bell operating companies would be divested from the American Telephone and Telegraph organization. In the United States, the Air Force leased almost all of its communications from commercial companies; consequently, the process of deregulating the telecommunications service industry placed severe and unexpected strains on AFCC's 1981 and 1982 budgets.

**26 August 1982**

Headquarters Tactical Communications Division received the first CROMEMCO computer terminal which ushered in an era of mini-computer automation for the combat communicators.

**27 - 29 August 1982**

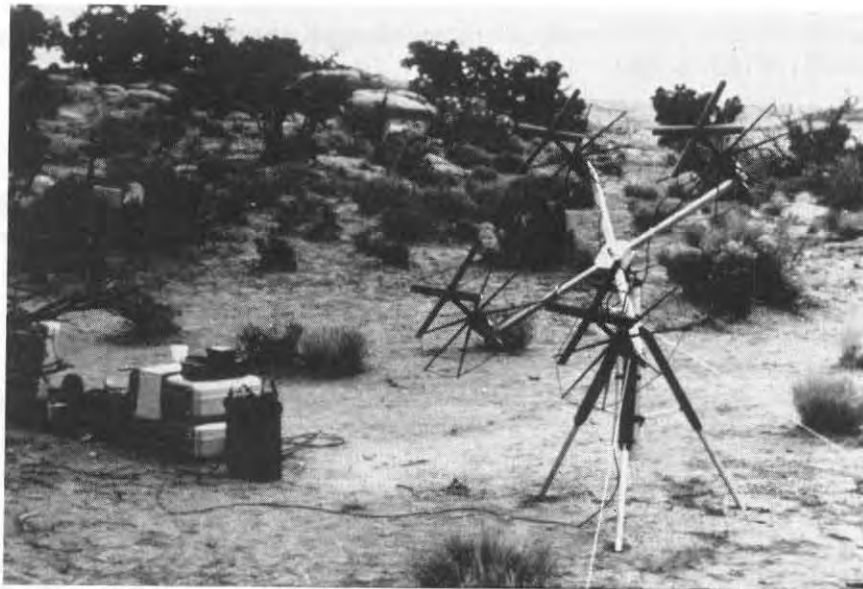
The Engineering Installation Center, Tinker AFB, Oklahoma, hosted the third annual Engineering and Installation shootout, the first to be held at the Center. The 214th Engineering Installation Squadron from New Orleans, Louisiana, won the competition.

**1 September 1982**

HAMMER ACE, for the first time, supported an aircraft accident/recovery effort in the mountains of Tennessee.

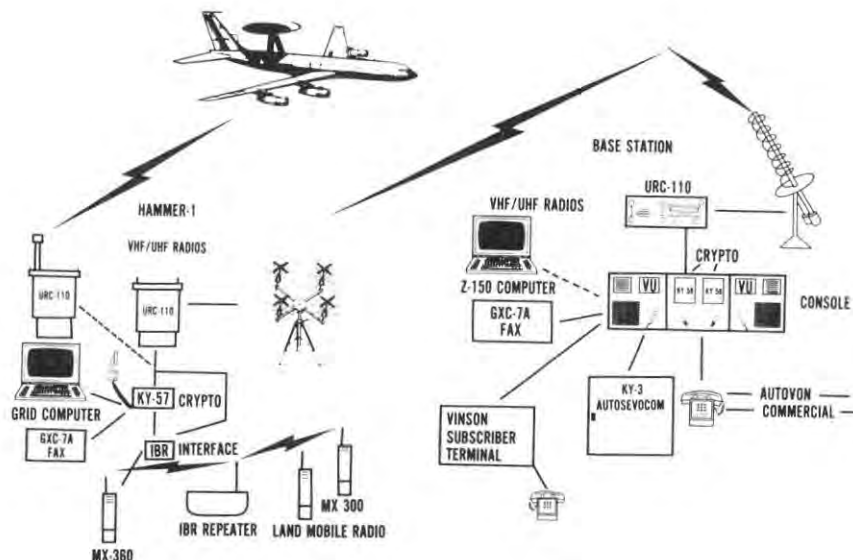
**7 - 9 October 1982**

HAMMER ACE supported its first VIP Conference, CORONA FALL 82, with secure and unsecure voice communications.



*HAMMER ACE's portable phased-array satellite antennas are lightweight and easily aligned. They compactly fold into small, suitcase-like containers.*





***HAMMER ACE offers the customer a variety of UHF and VHF radio communications services, including secure and unsecure voice, private local-area net, secure and unsecure data record, and secure and unsecure facsimile.***

**26 October 1982**

The 1st Combat Communications Group deployed two mobile TACANs and personnel to Dakar, Senegal, to support a space shuttle launch. The equipment was then put into storage in Dakar for future support missions.

**11 - 16 November 1982**

The Columbia performed its first operational flight. The Air Force Communications Command supplied much of the same support it had provided during the four earlier tests.

**22 November 1982**

Air Force Communications Command's request to implement the Aircraft Surge, Launch, and Recovery program procedures at selected bases for the fighter commands (Tactical Air Command, Pacific Air Forces, and United States Air Forces in Europe) was approved verbally by HQ USAF. These procedures would double the normal rate of aircraft takeoffs and landings. During tests at Clark AB, Philippines, a record recovery rate of eighty-five aircraft per hour was achieved. Headquarters USAF gave written approval to implement the program on 14 December.

## **1983**

### **1 January 1983**

Deregulation and divestiture caused considerable turmoil and change within the telecommunications industry. Various decisions by the Federal Communications Commission deregulated some services and opened them to increased competition. The most important of these was the Computer Inquiry II decision which removed all restrictions on merging communications and computer technology by individual service providers.

The Space Communications Division was activated in Colorado Springs, Colorado, to support the new Space Command.

### **7 January 1983**

The formal activation ceremony for the Space Communications Division was held in front of the Ent Building, Peterson AFB, Colorado.

### **28 March 1983**

President Reagan designated Strategic, Tactical, and Relay communications as projects of the "highest national priority," emphasizing the administration's continuing support for the modernization of communications as well as weapons systems.

### **28 April 1983**

A1C Rodney Hamann, 1st Combat Communications Group, was wounded during the bombing of the U.S. Embassy in Beirut. He was later awarded the Joint Services Commendation Medal.

### **5 - 10 May 1983**

HAMMER ACE employed its dual-mission capability at exercise NUWAX 83.

### **31 May 1983**

The first Aircraft Surge, Launch, and Recovery certified USAFE base was RAF Bentwaters, United Kingdom.

### **1 June 1983**

Headquarters USAF reorganized to merge communications electronics with data automation, creating an Assistant Chief of Staff for Information Systems.

### **30 June 1983**

The Federal Aviation Administration released the last of AFCC's controllers. These controllers had been working in civilian control towers since 3 August 1981, after President Reagan fired striking members of the Professional Air Traffic Controller Organization.

### **5 July 1983**

The 2d Combat Communications Group, Patrick AFB, Florida, received its first piece of Joint Tactical Communications Program Office equipment, an AN/TYC-39 automatic message switch. The AN-TYC-39 group of circuit and message switches was an automatic modular, hybrid (analog and digital), transportable, tactical telephone switch with a dual configuration.

**9 - 25 August 1983**

HAMMER ACE provided secure and unsecure voice and record communications support during its first real-world contingency operation, ARID FARMER. This also marked HAMMER ACE's first deployment outside the continental United States.

**23 August 1983**

Moody AFB, Georgia, was the first Tactical Air Command base certified to use the new Aircraft Surge, Launch, and Recovery Program procedures.

**1 September 1983**

A Soviet fighter plane shot down Korean Airlines Flight 007, an unarmed Boeing 747 aircraft which flew through Soviet airspace on a flight from New York to Seoul, Korea. This incident intensified the awareness of the need for a secure telephone unit to increase secure voice capabilities.

**1 October 1983**

Headquarters USAF recreated the USAF Instrument Flight Center. AFCC would transfer responsibilities for flight standards and terminal instrument procedures to the Center. The Air Force Communications Command lost fifteen manpower authorizations with this transfer.

**23 October 1983**

Terrorists exploded a truck bomb which leveled U.S. Marine Corps Headquarters in Beirut, Lebanon, and killed 241 marines and sailors. Simultaneously, another truck was blown up, demolishing the French peacekeeping force headquarters and killing fifty-four men.

**26 October - 12 November 1983**

HAMMER ACE supported the Joint Chiefs of Staff with secure voice communications during URGENT FURY, the Grenada rescue operation.

**1 November 1983**

The first base to convert to standard remote terminal military maintenance of overseas equipment was RAF Upper Heyford, United Kingdom.

**18 November 1983**

Headquarters AFCC transferred its responsibilities to Headquarters Tactical Communications Division as the alternate headquarters for three hours during a bomb threat.

**1 December 1983**

Communications and data automation merged at the unit level for the first time. Resources from the 1974th Communications Group and the 2199st Computer Services Squadron were combined into a single organization, the 1974th Teleprocessing Group.

**6 December 1983**

The Engineering Installation installers completed installations in the AN/GRN-29 instrument landing system replacing the last two AN/MRN 7 and 8 ILSs in the AF inventory at Osan AB, Korea, and Zaragoza AB, Spain.

**13 December 1983**

General Jerome F. O'Malley made official his decision to merge Data Automation and Communications in the Pacific Air Forces.

## **1984**

**1 January 1984**

Divestiture, involving the corporate division of American Telephone and Telegraph and its twenty-two local Bell Operating Companies affecting both long-haul and local communications, took place.

The 2135th Communications Squadron, Florennes AFB, Belgium, was designated and activated in support of the ground launched cruise missile program.

**5 January 1984**

The Air Force Vice Chief of Staff, Gen Larry D. Welch, directed the integration of communications, data automation, and office automation throughout the Air Force with AFCC as "the implementor, operator, and maintainer of Air Force standard information systems." In addition, AFCC would "operate and maintain command-unique systems as deemed appropriate by each command."

**14 January 1984**

The AFCC Commander, Maj Gen Robert F. McCarthy, dedicated the Nellis Air Traffic Control Facility. It was the first military use of a fully automated air traffic control system, both terminal and enroute.

**31 January 1984**

Working closely with HQ AFCC, the USAF Assistant Chief of Staff for Information Systems quickly developed a draft program action for the integration of communications and data automation and began coordination of the plan at Air Staff.

**1 February 1984**

A HAMMER ACE Team provided secure emergency communications during recovery operations following the crash of an F-16A aircraft at Wildcat Mountain Range, Hill AFB, Utah.

**5 February 1984**

The 1882d Information Systems Squadron, Bergstrom AFB, Texas, was the first Tactical Air Command base to complete installation of leased dictaphone voice recorders which replaced the GSH 34/35 model voice recorders.

**16 March 1984**

Air Force Communications Command's DCS/Teleprocessing was renamed DCS/Information Systems.

**22 March 1984**

The first base of the Pacific Air Forces to become certified to use Aircraft Surge, Launch, and Recovery Program procedures was Osan AB, South Korea.

**22 - 24 March 1984**

A HAMMER ACE team provided secure emergency communications during recovery operations following the crash of a T-38 aircraft near Bear Creek, Alabama.

**11 April 1984**

The program action directive to integrate Air Force communications, data automation, and office automation with AFCC as the single manager was published by HQ USAF.

**16 April 1984**

Phase I of the Berlin Radar Replacement Program was completed. It consolidated Air Traffic Control operations at the Berlin Air Route Traffic Control Center, providing full radar coverage of the Berlin southern corridor and eliminated the need for an air traffic control cell at Doebraberg, Germany.

**1 May 1984**

The Air Force Data Services Center was inactivated; and its mission and assets were merged with the 2044th Communications Group, which was redesignated the Teleprocessing Services Center (later, redesignated 1st Information Systems Group; 7th Communications Group), at Washington, D.C. This merger/redesignation was structured to result in a more responsive, centralized organization to support and implement communications/automated data processing requirements for the Pentagon community.

**8 May 1984**

Headquarters USAF activated the Air Force Teleprocessing Center (AFTPC) at Gunter AFS, Alabama. Three data automation centers, formerly reporting to HQ AFCC, became direct reporting units of the AFTPC. Along with the realignment, these centers were redesignated. The Air Force Data Systems Design Center and the Air Force Automated Systems Project Office, both located at Gunter AFS, Alabama, became the Data Systems Design Office and The Automated Systems Program Office, respectively. The Air Force Communications Computer Programming Center at Tinker AFB, Oklahoma, became the Command and Control Systems Office. The Air Force Data Systems Evaluation Center at Gunter AFS, Alabama, was inactivated. The mission of AFTPC was to provide specified communications and computer acquisition, design, development, and life-cycle management at bases and major commands worldwide.

**8 - 15 May 1984**

Former members of the 1946th Airways and Air Communications Service Squadron gathered at Berlin, Germany, to mark the thirty-fifth Anniversary of the Berlin Airlift.

**June 1984**

The Digital European Backbone IIA segment was completed in Germany. It stretched from Stuttgart to Kaiserslautern.

**1 June 1984**

The Continental Communications Division was redesignated as the alternate headquarters for AFCC, vice the Tactical Communications Division. The final transition was effective 1 September 1984.



#### **1 July 1984**

As the first major phase of integrating data automation and communications within the Air Force, HQ AFCC redesignated its divisions as "information systems" organizations (Pacific Air Forces did not change until 1 August), and the Strategic, Tactical, and Alaskan Air Commands established a new Deputy Chief of Staff for Information Systems. Communications squadrons and groups supporting the four commands were redesignated as information systems units as the data processing installations merged with them. A total of 3,470 manpower authorizations were transferred to AFCC; 104 from Alaskan Air Command, 468 from Pacific Air Forces, 1,708 from Strategic Air Command, and 1,190 from Tactical Air Command.

Pacific Air Forces implemented its program to integrate its communications and data automation under AFCC and established a new Deputy Chief of Staff for Information Systems. Pacific Air Forces transferred 468 manpower authorizations to AFCC.

The first Aerospace Communications Group was elevated to Wing status. This was the first Wing in the command since 1957.

#### **25 - 27 July 1984**

The 2d Combat Communications Group, Patrick AFB, Florida, received its first two Joint Tactical Communications Program automatic circuit switches (AN/TTC-39).

#### **August 1984**

Phase II of the Berlin Radar Replacement Program was completed. It replaced the AN/FPS-67D long range radar and the AN/FPS-90 height finder with the three-dimensional AN/FPS-117 long range radar system.

#### **2 August 1984**

In its first overseas deployment, the HAMMER ACE team provided secure emergency operations following the crash of a C-141B aircraft near Sigonella NAS, Italy.

#### **22 August 1984**

The first collocated Data Processing Installation/Telecommunications Center became operational at Peterson AFB, Colorado. The objective of this program was to test and evaluate the results of collocating Data Processing Installations and Telecommunications Centers to see if collocating would save the Air Force resources while maintaining or improving service to users.

#### **24 August 1984**

The first test of Aircraft Surge, Launch, and Recovery in Strategic Air Command occurred at Wurtsmith AFB, Michigan.

#### **1 October 1984**

The United States Air Forces in Europe implemented the Phase I integration of data automation and communications. The European Communications Division became the European Information Systems Division. With this integration, 905 manpower authorizations were transferred to AFCC.

With the trend of eliminating the term "teleprocessing" from unit nomenclatures and to establish information systems units, AFCC redesignated the Teleprocessing Services Center as the 1st Information Systems Group.

**1 December 1984**

As part of the efforts to integrate communications and data automation within the Air Force, the Airlift Communications Division absorbed the data automation assets of the Military Airlift Command with the transfer of 993 manpower authorizations to AFCC.

**7 December 1984**

Headquarters Airlift Communications Division was redesignated Headquarters Airlift Information Systems Division.

**28 December 1984**

General Larry D. Welch tentatively approved the inactivation of the Continental Communications Division and the creation of three divisions by AFCC to support the Air Training Command, Air Force Systems Command, and Air Force Logistics Command. General Welch's approval rested on concurrence of the three major commands involved.

**1985**

**23 January - 21 February 1985**

HAMMER ACE employed data record service for the first time while deployed to Honduras for an aircraft accident investigation and recovery effort.

**1 February 1985**

The third and final phase of the SCOPE DIAL installation occurred at Lackland and Kelly AFBs, Texas.

**2 February 1985**

During 1985, several terrorist incidents affected AFCC personnel. One incident was the explosion at a popular disco in Athens which injured seventy-eight people, seventy of whom were U.S. servicemen. Thirteen U.S. service members and wives were severely burned. Of those thirteen, five were AFCC members, and two were wives of AFCC members.

**4 February 1985**

The restructure necessary to create AFCC divisions to support the Air Training Command, Air Force Logistics Command, and Air Force Systems Command and the inactivation of the Continental Communications Division was publicly announced as part of the President's fiscal year 1986 budget.

**25 February 1985**

The Engineering Installation Center, Tinker AFB, Oklahoma, was designated as primary alternate headquarters for AFCC replacing the Continental Communications Division which was scheduled for inactivation on 31 December 1985. Later, on 1 March, the Center was designated as the Engineering Installation Division.

All USAFE bases in the United Kingdom and Germany were Aircraft Surge, Launch, and Recovery certified.

**1 March 1985**

The Air Force Teleprocessing Center at Gunter AFS, Alabama, became the Standard Information Systems Center. The phrase "Air Force" was causing confusion for the rest of the Air Force.

**1 April 1985**

The 2185th Information Systems Support Group was activated at Robins AFB, Georgia, to replace Detachment 5, HQ AFCC, and the 2300th Computer Services Squadron, Air Force Reserves. The new unit's commander was dual-hatted as the Air Force Reserve Deputy Chief of Staff for Information Systems. The Air Force Reserve was the first separate operating agency to integrate communications and data automation. There were eighty-four manpower authorizations transferred to AFCC in this integration.

The 1973d Information Systems Group was activated at Maxwell AFB, Alabama, to support Headquarters Air University as well as serve as the base information systems unit for Gunter AFS and Maxwell AFB. This integration included a transfer of 107 manpower authorizations to AFCC.

The National Guard Bureau did not prepare a joint integration Programming Plan with AFCC for the integration of data automation and communications, but did it unilaterally. An "Information Systems" was formed from in-house National Guard Bureau authorizations, and no AFCC organizations were involved. No portion was dual-hatted.

**30 April 1985**

One of the results of the rapid changes in technology and the integration of communications and data automation was the merger of specialty codes for enlisted members and officers. On the enlisted side, one of the major mergers involved the telecommunications center operator (291X0), the automatic digital switch operator (295X0), and the computer operator (511X0) into one new skill: information systems operations (491XX). The 291X0s and the 295X0s converted to information systems operators (491X1); while 511X0s, automated systems program technicians (D295/291), and automated functional applications analysts (W295-291) became information systems programmers (491X2).



*These men are charging up the batteries in the Elmendorf's cloud fog dispersal system, which is one of only two such operational systems in the world. This system is used to direct safe aircraft landings during emergencies.*

*The SRT's punch card reader alleviated the need to retype messages. Instead, a typed message is just fed into the SRT optical scan unit.*



*SSgt Mark S. Kelly is changing the magnetic tapes on the Sperry 1100-60 system located within the DPI facility at the 2037 ISS at Luke AFB, Arizona.*





*Computer tape librarian, Diane Biancardi retrieves one of thousands of tapes maintained by the 1960th Communications Squadron at Kirtland AFB, New Mexico.*

#### May 1985

The 1931st Information Systems Wing, Elmendorf AFB, Alaska, which supported the Alaskan Air Command, transferred from the Continental Communications Division to HQ AFCC.

The AFCC Commander, Maj Gen Gerald L. Prather, created a working group to move and realign selected existing data automation and telecommunications contracting and program management functions and resources under the Standard Information Systems Center at Gunter AFS, Alabama. This effort was nicknamed "White Paper II."

#### 1 May 1985

During the information systems integration, Headquarters Electronic Security Command's DCS/Communications became the 2100th Information Systems Support Group, reporting directly to HQ AFCC, with its commander dual-hatted as the Electronic Security Command's DCS/Information Systems. As a result of this integration, one hundred manpower authorizations were transferred to AFCC.

Tactical Air Command transferred its tactical and special purpose computer systems from its 4501st Computer Systems Squadron to AFCC's newly activated 1912th Information Systems Support Group. This transfer included a total of 379 manpower authorizations.

#### 16 May 1985

The AFCC Commander, Maj Gen Gerald L. Prather, directed the Engineering Installation Division to begin programming for the fiber optic operational testbed to be located at Scott AFB, Illinois.



22 May 1985

A special HQ AFCC Tiger Team commissioned by Maj Gen Gerald L. Prather, AFCC Commander, published its review of program management within AFCC. The study concluded that historically, AFCC had followed a strategy of highly decentralized management, and consequently, the command was not organized "in a manner conducive to broad scale use of program management as a strategy or technique." To correct this deficiency, the team recommended moving program management functions from HQ AFCC, establishing formal policy and procedures for program management, and eventually reorganizing the Engineering Installation Division, located at Tinker AFB, Oklahoma, and the Standard Information Systems Center, located at Gunter AFS, Alabama, into a single organization at Gunter AFS. Once program management was removed from HQ AFCC, its role would be to provide long-range planning, strategic programming, oversight, and interface with HQ USAF and other major commands.

3 June 1985

A navigational aids installation team from the 1827th Electronics Installation Squadron deployed to Palmerola AB, Honduras, to install a variable omnirange radio. Power problems prevented installation completion.

5 June 1985

The 485th Engineering Installation Group, Griffiss AFB, New York, assumed overall management of the automated graphics system.

10 June 1985

The 1878th Information Systems Squadron, Moody AFB, Georgia, became the first Tactical Air Command base which completed collocation of the telecommunications center and data processing installation to form an information processing center.

1 July 1985

The 1803d Communications Squadron, the 1804th Communications Squadron, and the 1805th Communications Squadron at Randolph AFB, Texas; Andrews AFB, Maryland; and Wright-Patterson AFB, Ohio, respectively, were activated to serve as the advance echelon for the new Air Training, Logistics, and Research and Acquisition Information Systems Divisions and to absorb functions from Continental Communications Division and advance personnel.

Headquarters Electronic Security Command's (ESC's) DCS/Computer Resources was added to the DCS/Information Systems to provide a single manager for information systems. As part of Phase I of integration at ESC, AFCC also moved the Air Force Computer Security Program Office with twenty authorizations from Gunter AFS, Alabama, to Kelly AFB, Texas, to centralize the information systems security responsibility at one location.

The resources of the U.S. Air Force Academy Director of Computer Resources were merged with the 1876th Communications Squadron to form the 1876th Information Systems Support Group which became a direct reporting unit of AFCC. In this merger, sixty-four manpower authorizations were transferred to AFCC.

2 July 1985

Headquarters USAF approved the plan for three new divisions: Air Training Information Systems Division, Logistics Information Systems Division, and Research and Acquisition Information Systems Division.

### 1 August 1985

The 1859th Information Systems Support Squadron was activated at Kirtland AFB, New Mexico, as a direct reporting unit to provide information systems support to Headquarters Air Force Operational Test and Evaluation Center. This transfer involved twenty-nine manpower authorizations.

The 1802d Information Systems Squadron was established at Bolling AFB, D.C., to provide information systems services to the Air Force District of Washington.

The 1885th Information Systems Support Squadron was activated at Bolling AFB, D.C., to support the Air Force Intelligence Service. This activation included the transfer of nineteen manpower authorizations to AFCC.

### 15 September 1985

The Federal Computer and Evaluation Simulation Center (FEDSIM) at Alexandria City, Virginia, was inactivated as an Air Force organization. The General Services Administration assumed responsibility for all interagency agreements between FEDSIM and its customer agencies and for providing contracting officer support for FEDSIM contracts.

### 19 September 1985

Mexico City and the surrounding areas were devastated by a major earthquake which took thousands of lives. The Military Affiliate Radio System (MARS) operators of the 1923d Communications Group at Kelly AFB, Texas, were notified of the disaster by MARS personnel of the 1926th Information Systems Squadron at Robins AFB, Georgia. The 1923d established contact with the American Embassy in Mexico City and, through the embassy, the United States State Department coordinated relief efforts.



*One of approximately 3,000 volunteer affiliates at work. These MARS members are licensed radio amateurs who use their own equipment to augment military stations to provide twenty-four hour radio coverage on radio frequencies assigned for MARS use. Colonel Ronald G. Martin, (USAF retired) shown here, operates vibroplex on a continuous wave telegraph in his radio station at his home in Napa, California.*

### **23 September - 10 October 1985**

The 5th Combat Information Systems Group, Robins AFB, Georgia, provided eight radio technicians, four high frequency radios, and four base stations with fifty Intra-Base Radios in support of the U.S. disaster relief for earthquake victims in Mexico City.

### **1 October 1985**

The 1858th Information Systems Support Squadron was activated at Kelly AFB, Texas, to provide information systems support to Headquarters Air Force Commissary Service. This activation included the transfer of thirty manpower authorizations to AFCC.

The Headquarters Engineering Installation Division officially assumed the role of alternate headquarters for AFCC.

Now that the Aircraft Surge, Launch, and Recovery program was in operation and out of the test phase, HQ USAF named Tactical Air Command as the executive agent for the program vice AFCC. The Air Force Communications Command became the office of collateral responsibility.

The Space Communications Division and its units were renamed, and the 2163d Information Systems Squadron, Peterson AFB, Colorado, was reorganized as Phase I of the Space Command automated data processing/communications merger. The merger transferred ninety-two manpower authorizations to AFCC.

### **4 - 6 October 1985**

The sixth annual Engineering and Installation Shootout competition, won by the 1827th Electronics Installation Squadron, took place at the Headquarters Engineering Installation Division.

### **10 October 1985**

Digital European Backbone Phase IIB was placed into operation providing digital service from Kaiserslautern to Schoenfeld, Germany, (Pruem AS) which is located close to the Belgian border.

### **1 November 1985**

The 1860th Information Systems Support Squadron was activated at Norton AFB, California, to provide information systems support to the Air Force Inspection and Safety Center. This activation included the transfer of twenty-six manpower authorizations to AFCC.

Detachment 1 of the 1842d Electronics Engineering Group (the Telephone Systems Program Management Office) was inactivated and replaced with the 2026th Information Systems Support Squadron. Still located at Scott AFB, Illinois, the 2026th reported directly to HQ AFCC with operational control through HQ AFCC DCS/Engineering, Programs and Acquisition. Planning called for the 2026th to eventually become the core of the Base Information Digital Distribution Systems Program Office.

The Air Force Accounting and Finance Center (AFAFC) was reluctant to integrate information systems. Only the AFAFC/Information Systems (SI) position was dual-hatted under AFCC as OL-K, Headquarters AFCC. Subordinate manpower authorizations would remain in AFAFC, under the SI's operational control.

### **29 November 1985**

All primary USAF Command Posts in Korea were linked by STU-II secure telephones for the first time making an initial operating capability a reality, although the program had a long way to go before completion.

**1 December 1985**

HQ AFCC was restructured. Four Deputy Chief of Staff (DCS) offices were replaced with three (DCSs for Operations, Plans and Programs, and Personnel). Operations was created using some of the assets from the DCSs for Air Traffic Services, Combat Communications, and Information Systems. Plans and Programs was established using the remainder of these assets with the assets from the DCSs for Engineering, and Programs and Acquisition plus some of the Manpower and Personnel assets. Personnel was established with the remainder of the Manpower and Personnel assets. In addition to the restructuring of the four Deputy Chief of Staff offices, the Directorate of Intelligence, which would report directly to the AFCC Chief of Staff, was also created.

During the information systems integration, the one manpower authorization assigned to the Headquarters Air Force Service Information and News Center (AFSINC) was transferred to Headquarters AFCC to establish a link with Headquarters AFCC under the dual-hat concept. The authorization was reflected on the manpower document of the 1923d Communications Group as the Information Systems Support Office servicing HQ AFSINC.

**11 December 1985**

Over AFCC's objections, HQ USAF approved the request by the Air Force Office of Special Investigation for a waiver to the USAF requirement to dual-hat its data automation and communications under AFCC management.

**31 December 1985**

The Continental Communications Division was deactivated and its resources were transferred to three new divisions created on 1 January 1986. The division's lineage and honors transferred to the Air Training Information Systems Division.

**1986**

**1986**

Air Force Communications Command personnel helped support a Meteor Burst Communications test for the U.S. Army Space Program Office and the Defense Intelligence Agency by installing a very high frequency radio master station at Scott AFB, Illinois, for testing radio links to Texas.

**1 January 1986**

The Air Reserve Personnel Center created an Information Systems Division by merging its Personnel Systems Division with part of its Administration Division. The new division became part of the Directorate of Personnel Data Systems Division. The chief of the Information Systems Division was dual-hatted and attached to AFCC's 1987th Communications Squadron, but reported to HQ AFCC. The Air Reserve Personnel Center retained three data automation authorizations.

The restructure of the AFCC Inspector General function became effective, forming inspection teams at all divisions. The division teams inspected squadrons and groups including those belonging to the Air National Guard and Air Force Reserves and performed management effectiveness, operational readiness, and mission capability inspections as appropriate. Each division established a special staff office for the Inspector General.

Headquarters AFCC activated the Logistics Information Systems Division at Wright-Patterson AFB, Ohio, to support Air Force Logistics Command (AFLC) following the merger of some of its data automation assets with AFCC. This was only a partial merger, and only thirty-seven of AFLC's 260 data automation positions transferred to AFCC.



#### 1 January 1986

Headquarters AFCC activated the Research and Acquisition Information Systems Division at Andrews AFB, Maryland, to support Air Force Systems Command following the merger, of some of its data automation assets with AFCC. This was only a partial merger, and only 235 of its 1,229 data automation authorizations transferred to AFCC.

The Air Training Information Systems Division was activated at Randolph AFB, Texas, to support the Air Training Command following the total merger of its data automation assets with AFCC. Air Training Command transferred 496 positions to AFCC as part of this merger.

As part of a transfer of personnel who provided command-unique communications support to Air Force Space Command, AFCC transferred 175 spaces to Space Command.

Upon the request of the Electronic Security Command Commander, HQ AFCC transferred an additional twenty-six manpower authorizations to the Electronic Security Command to support the Computer Security Program Office which AFCC had transferred to Electronic Security Command along with twenty authorizations in May 1985. Another three spaces would transfer during 1988.

#### 7 January 1986

The Air Force Council acknowledged AFCC as one of the three acquisition commands in the Air Force. The other two were Air Force Systems Command and Air Force Logistics Command. The acquisition mission of AFCC focused on acquiring standard communications and computer systems and selected command-unique systems that did not require research and development.

#### 12 - 18 January 1986

Air Force Communications Command provided major ground recovery support for the Space Transportation System mission 61-C, referred to as the Orbiter Columbia, at Patrick AFB, Florida; Edwards AFB, California; Holloman AFB, New Mexico; Moron AB; and Andersen AB, Guam. Columbia successfully landed at Edwards' Runway 22 on 18 January after a six-day flight.

#### 17 - 28 January 1986

HAMMER ACE personnel deployed to Morocco, to support the flight of the National Aeronautics and Space Administration's Space Shuttle *Challenger*.

#### 2 - 15 February 1986

A fifteen-man contingent from Detachment 3, 4th Combat Information Systems Squadron, deployed to Manila and other Philippine sites to support U.S. Congressional observers of the Philippine presidential election.

#### 26 February 1986

Scott AFB, Illinois, was the first Air Force base to cut over to the Defense Commercial Telecommunications Network.



#### **1 March 1986**

Headquarters USAF changed the name of its Assistant Chief of Staff for Information Systems to Assistant Chief of Staff for Systems for Command, Control, Communications and Computers. Under the terms of the Goldwater-Nichols legislation that reorganized the Department of Defense, information management was to be a secretariate level responsibility while command and control was to remain an Air Staff responsibility. The term "Information Systems" implied information management, and HQ USAF feared that the entire HQ USAF Assistant Chief of Staff for Information Systems would be dissolved and its responsibilities assumed by the Secretariate. Consequently, HQ USAF changed the name of the function to reflect better the actual functions being performed. Although a few major commands followed the HQ USAF example, AFCC did not change the name of any of its units to emulate HQ USAF.

#### **1 April 1986**

To comply with Air Staff direction to merge data automation and communications under AFCC, the Air Force Technical Applications Center merged one of its 122 data automation authorizations with AFCC. This officer was assigned to AFCC's 2179th Communications Group as an information systems support officer with dual-hat responsibilities.

The 4th Combat Communications Squadron moved from Kwang Ju AB, South Korea, to Yokota AB, Japan. A detachment remained at Kwang Ju.

#### **5 April 1986**

A terrorist bomb exploded near the entrance of the Labelles Disco in the American Sector of West Berlin. The blast killed one and injured more than a hundred others. Among the injured were two AFCC personnel assigned to the 1946th Information Systems Squadron, Templehof AB, Germany.

#### **10 April 1986**

The Digital European Backbone link between Kaiserslautern and Donnersberg, Germany, was completed.

#### **May 1986**

HAMMER ACE established Hammer Fist, the unit's combat mission.

The AFCC Commander, Maj Gen Gerald L. Prather, modified his proposal for consolidating the acquisition at Gunter AFS, Alabama. He now proposed renaming the Air Force Computer Acquisition Center and assigning it to the Standard Information Systems Center rather than moving it to Gunter AFS. Under this proposal, the 2026th Information Systems Support Squadron (formerly the Telephone System Program Management Office) would also remain in place, but report to the Standard Information Systems Center. This new strategy was nicknamed Hammer Acquisition and replaced the White Paper II efforts initiated in May 1985.

#### **30 May 1986**

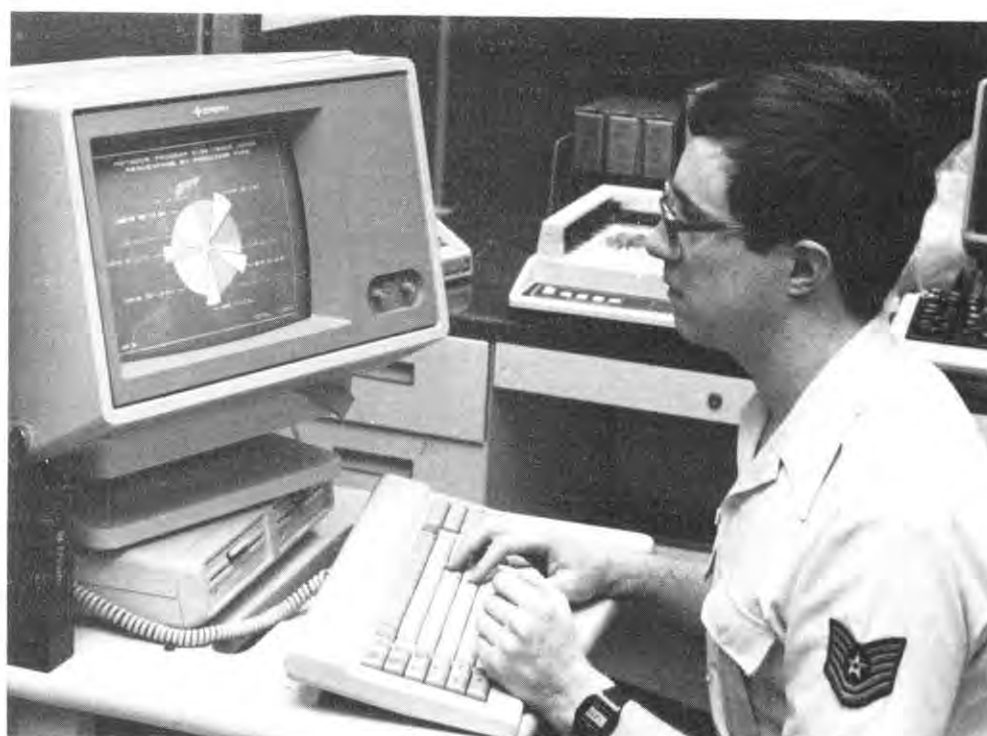
The Air Force Communications Command personnel completed what had become the largest data automation acquisition effort in Air Force history with the implementation/conversion of the last Phase IV computer system at Wright-Patterson AFB, Ohio.

#### **10 - 23 June 1986**

Headquarters AFCC personnel participated in exercise PRESENT ARMS 86. This was the first time headquarters personnel had directly participated in a major exercise in nearly two years.

July 1986

Brig Gen Donald L. Moore, AFCC Vice Commander, turned off the last operational Air Force Burroughs 3500 computer. The Burroughs equipment had completed eighteen years of service to the Air Force. General Moore had helped turn on the very first one in the Air Force inventory at Langley AFB, Virginia in October 1968.



*The 1912 ISSG works with software of the future. Sophisticated graphs and charts can be produced using the MAPPER, such as the one displayed by TSgt Richard Ireland. MAPPER provides state-of-the-art info handling that is easily learned and user-oriented.*

1 July 1986

Air Force Communications Command celebrated its twenty-fifth anniversary as a major air command.

The third increment of the integration with Air Force Space Command was completed. This increment involved the transfer of mission-unique communications assets, radars, computers, and satellite backup systems at the Space Command sensor sites. Thirty-six positions at Woomera AS, Australia, were transferred to Air Force Space Command from AFCC. A thirty-seventh position transferred on 1 January 1987.

To comply with Air Staff direction to merge data automation and communications under AFCC, the Air Force Engineering and Services Center transferred three 49XX slots to AFCC to become Operating Location A, 2021st Information Systems Squadron. The Center retained twelve data automation authorizations.

European Communications Division (ECD) underwent a major restructuring. Headquarters ECD transferred several operation and maintenance responsibilities to its wings. The number of units reporting directly to HQ ECD went from twenty-six to nine. The objective was to align the ECD wings and subordinate units to create a peacetime structure which would closely mirror their wartime structure and functions.

15 July 1986

The Joseph B. Duckworth Award, an annual award for the most significant contribution to the art or science of aerospace instrument flight during the previous year, was presented to the Headquarters AFCC's Terminal Instrument Procedures (TERPS) Division. The 1986 award was presented by Maj Gen Gerald L. Prather at the worldwide TERPS conference at Scott AFB, Illinois. The Division earned the award for reducing the time involved in designing instrument approach procedures, while increasing safety through the development of a TERPS computer graphics design program.

The 1842d Electronics Engineering Group was realigned from the Engineering Installation Division to Headquarters AFCC, and the mission expanded to encompass four major areas: (1) Provide a quick response capability to design, develop, acquire, and implement solutions to pressing near-term Air Force problems; (2) Investigate new technology, equipment, and systems for application to Air Force requirements; (3) Provide a systems engineering capability to AFCC for Air Force programs; (4) Continue to provide support to the Engineering Installation Division and Headquarters AFCC standards programs.



*An 1835th Electronics Installation Team wraps up a long day as the sun sinks slowly on the coast at Vandenberg AFB, California. Personnel from the 1835th routinely deploy around the world to install, relocate, fabricate, test, and assemble ground communication-electronic equipment. The engineering-installation troops call themselves the "Road Runners."*

*SSgt Lonnie Purdy checks the newest heavy-duty trencher in the Engineering Installation Division's inventory during a cable installation at Hahn AB. The 1836th "road warriors" use more than 220 general and special purpose vehicles, such as the one pictured above, to install vital communications systems for their customers throughout Europe.*



**18 August 1986**

In response to a study by the National Academy of Science, a study group consisting of representatives from HQ USAF's Directorates of Architecture and Technology and Command, Control and Mission Support Systems met to determine the basic problems in Air Force integration management of base-level systems for command, control, communications and computers environment. The group was expanded to include representatives from HQ AFCC and became known as the Leesburg Study Group.

**26 August 1986**

The new Air Force Chief of Staff, Gen Larry Welch, directed that the functional area and career field would change from "information systems" to "communications-computer systems." General Welch also directed that the AFCC units would be changed back to communications units since "communications" was a generic term that encompassed transmission, storage, and dissemination of information and better described the AFCC mission.



## **September 1986**

The AFCC Chief of Information Systems School was renamed the AFCC Chief of Operations School.

## **1 October 1986**

The Hammer Combat Office, a special office at HQ AFCC created by Maj Gen Gerald Prather in January 1985 to survey commercially available equipment, was abolished by Maj Gen John T. Stihl, and the functions were assumed by the 1842d Electronics Engineering Group's Project Management Office.

The 2111th Information Systems Support Squadron was activated at Kelly AFB, Texas, as a subordinate unit to the 2100th Information Systems Support Group. This was part of the merger of the Electronic Security Command's data automation with AFCC's communications.

The name of AFCC's units were changed from "information systems" back to "communications." The first AFCC units to make the change were the five combat communications units.

## **1 November 1986**

The remaining AFCC units changed their designations from "information systems" back to "communications."

At the direction of Maj Gen John T. Stihl, AFCC Commander, the Standard Information Systems Center was reorganized as a part of a plan to evolve the center into a product division. The center changed from a headquarters with four units to the Standard Systems Center with one unit. The Data Systems Design Office, Automated Systems Program Office, and the Standard Systems Support Office, all at Gunter AFS, Alabama, were deactivated; and the Standard Systems Center absorbed the people and functions. The Command and Control Systems Office, located at Tinker AFB, Oklahoma, continued to report to the new center. The single, combined organization would focus on acquisition rather than maintenance and modification.

## **1 December 1986**

The AFCC Commander, Maj Gen John T. Stihl, established a program called "Excellence in Action" geared toward streamlining the way the command did business and eliminating as many bureaucratic barriers to efficiency as possible.

The AFCC Commander, Maj Gen John T. Stihl, reorganized Headquarters AFCC to streamline and focus acquisition management responsibility within one deputy chief of staff office. General Stihl created a new DCS/Acquisition and Integration and reestablished a DCS/Air Traffic Services.

## **14 - 23 December 1986**

Military Affiliate Radio System stations supported the flight of Voyager, the first aircraft to fly around the world without refueling.

# **1987**

## **Early 1987**

The Ground Wave Emergency Network (GWEN) Program Management Directive was amended, creating a new funding profile for GWEN and bringing it into line with the President's FY88 budget submission to Congress.





*GWEN maintenance center.*

**January 1987**

Air Force and the contractor agreed to a revised equipment delivery schedule for the ground network portion of the Special Air Mission communications part of the Mystic Star upgrade.

The Army and Air Force Exchange Service (AAFES) and the Air Force Welfare Board accepted a Memorandum of Agreement for contracting pay telephones. Initially, Air Force Morale, Welfare, and Recreation (MWR) had deferred the management and contracting of pay phones to AAFES. However, as a result of the 1986 MWR acute funding problems, the revenue generated through the pay phone service became an enticing source of income. When some commands began to by-pass AAFES and contract for their own pay phones, AAFES offered to acquire and manage pay phone services as an addition to their existing operations. The AAFES share would be 20 percent of gross revenue and MWR would glean 80 percent, which would be distributed to the bases where the money was generated. In March 1987, AAFES awarded a five-year contract to AT&T to provide, install, and maintain over 17,500 pay phones on 139 Army and Air Force installations in the continental U.S.

**1 January 1987**

The Federal Communications Commission's (FCC's) ruling which deregulated inside wiring became effective. This meant the Air Force, as a facility owner, was responsible for the maintenance and installation of inside wiring; however, the FCC declined to determine the ownership of the wiring, and did not address the status of building cable. Instead, each state's commission made that decision; therefore, policies and tariffs varied for each base, depending on the state in which it was located.

**15 January 1987**

The Strategic Air Command's (SAC's) Giant Talk High Frequency stations would no longer pass SAC's Emergency Action Messages (EAMs) to the Global Command Control System (GCCS) stations. After this date, only Joint Chiefs of Staff EAMs would be passed to the GCCS stations.

**15 January 1987**

The Air Force concurred on a joint action which approved the Defense Communications Agency's FY 1988-1993 Defense Switched Network (DSN) Program Plan. The DSN was an umbrella program designed to replace the existing automatic voice network (AUTOVON) with new switching and transmission systems. It would provide economical service to lower-priority users on a noninterference basis. The program involved three plans, the worldwide plan with three theaters, the Pacific, European, and Western Hemisphere; the theater network cutover plan; and a site-specific cutover plan. Key initiatives in the approved plan included procedures for collecting and managing user requirements, continued integration of secure voice services, and a proposed architecture and acquisition strategy in the western hemisphere.

**27 January 1987**

Phase I, Increment 3, of the Japan Reconfiguration and Digitization started operation, with the exception of wideband secure voice circuits, which began operating in February. This 3-phase program would replace the existing analog troposcatter system in Japan with a modern, highly capable digital system. It would provide for the digitization of fifteen microwave links and reconfiguration of circuit connectivities to a new switch location at Yokota AB.

**30 January 1987**

Headquarters United States Air Forces in Europe's staff concurred with AFCC's schedule for transferring United States Central Command's terminal instrument procedures design responsibility to the European Communications Division.

The control tower at Minot AFB, North Dakota, caught fire. The fire was caused by rodents stripping insulation from wiring within the airfield lighting power harness. The power riser acted as a chimney, and doors left open in haste by personnel hunting a telephone to summons help enabled the fire to completely gut the tower. Damage cost \$299,000 in equipment and \$200,000 to the structure including cabling. Three airmen sustained minor injuries. On 2 February, the Tactical Communications Division airlifted a TSW-7 mobile tower (a combat comm asset) to Minot AFB, along with five personnel, to install the equipment and train Minot's 2150th Communications Squadron personnel on the operation and maintenance of the mobile tower. As a result of the fire, air traffic controllers began to review evacuation procedures for control tower maintenance. In June, a new design guide incorporating life safety and fire protection improvements was published.

**February 1987**

Headquarters AFCC directed the Air Force Computer Acquisition Center to take the lead in Base Information Digital Distribution System Control Subsystem acquisition.

The communications-electronics commanders from the Air Force, Army, and Navy established a National Airspace and Air Traffic Control Programs Management Panel to review the existing and planned air traffic control programs of the Federal Aviation Administration and Defense Department.

The U.S. Government accepted the Automated Weather Distribution System Product Driver Subsystem. It was a subsystem of the Automated Weather Distribution System and would produce products at the Air Force Global Weather Central for dissemination to the base weather stations.



*The FPQ-21 can detect precipitation as small as one-hundredth of an inch per hour. This solid-state electronic equipment will allow weather forecasters to calculate the intensity and precise location of a storm, detect how severe the storm will be and how long it will last.*



*In spite of modern technology, this solid brass ML-17 rain gauge, one of the oldest Air Force weather instruments which originally belonged to the U.S. Army Air Corps, is not scheduled for replacement. SrA. Raymond C. Corethers, a 1974th Communications Group weather equipment technician, is shown adjusting the instrument.*

#### **February 1987**

The Torrejon AB, Spain, Weather Intercept Control Unit (WICU) switch installation was completed. Following completion, the switch was tested and declared operational on 9 March. It was the third, and last, WICU installed. The WICU system functioned as a message concentrator which, in the event of circuit failure, would store and forward combined data emanating from weather intercept sites to the Automated Weather Distribution System.

#### **9 February 1987**

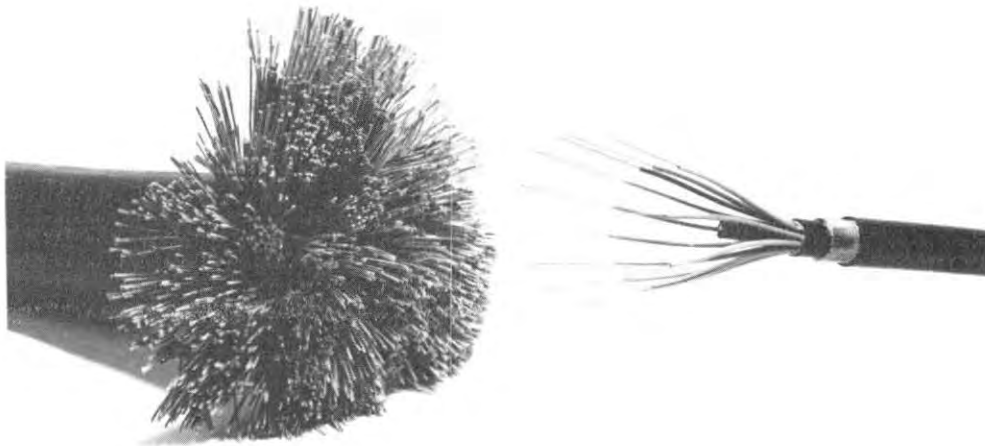
Colonel Roscoe M. Cougill, AFCC Chief of Staff, directed the consolidation of long haul and base commercial communications responsibilities into a single focal point under HQ AFCC's Deputy Chief of Staff/Comptroller's Directorate of Telecommunications Certification Operations. This action was a direct result of the merging of computer and communications technologies.

#### **11 February 1987**

The Sacramento Air Logistics Center completed system acceptance for the Dial Central Office Management Information System (DCOMIS) at Vandenberg AFB, California. It was the fourth of eight sites to be completed. Originally, DCOMIS was created as an addendum to Scope Dial delivery orders. The system provided computerized data collection and processing functions to assist in the daily operation and management of Air Force telephone systems. Communications planners designed the system to support telephone equipment service and spare parts accountability as well as cable administration and directory assistance operations, but became dissatisfied with it.

#### **25 February 1987**

The Air Staff agreed to accept the lead military department role for the Defense Communications System Mediterranean Improvement Program (DMIP), once the Defense Communications Agency acquired the commercial leased satellite portion of the program. In April, DMIP participants signed an interim agreement assigning specific Air Force actions and responsibilities. Later, on 20 April, the United States Air Force and the Defense Communications Agency signed an interim agreement which said that the Defense Communications System Mediterranean Improvement Program would be cost-shared through the communications service industrial fund. In May, the Turkish prime minister approved the Defense Communications System Mediterranean Improvement Program, and European Command representatives initiated discussions with the Italian Postal Telephone and Telegraph Command. On 5 June, Col Raymond L. French, AFCC's Deputy Chief of Staff for Acquisition and Integration, signed the charter transferring program management to AFCC's European Communications Division. DMIP was an improvement program that would replace a twenty-five-year-old, single-threaded system which was operating at near-maximum capacity using outdated analog technology.



***An older type of existing communications wire, left, compared to replacement lightguide fiber optic cable. Fiber optic transmissions move along at a speed of 186,000 miles per second. The messages are transmitted by tiny lasers that flash on and off 400 million times per second.***



***Vince Hipp of the 47th Communications Group Consolidated Intermediate Maintenance Facility splices a fiber optic cable.***





*Personnel from the 1827th Electronics Installation Squadron's radio section at Kelly AFB, Texas. The everyday task of amphenal splicing becomes a challenge during their annual chemical warfare Task Qualification Training.*

25 - 26 February 1987

Headquarters AFCC's Deputy Chief of Staff/Acquisition and Integration hosted a Base Information Digital Distribution System (BIDDS) prioritization meeting to discuss funding cuts and their impact on the BIDDS schedule, and to review other general aspects affecting BIDDS' implementation. During the meeting, Air Staff changes and funding cost were applied to the 1986 schedule. The result was an elongation of the previous schedule with fewer bases being done in each fiscal year, but with the sequence of bases only slightly modified. BIDDS would replace outdated analog telephone systems in the field, which relied on 1940's technology, with state-of-the-art digital systems. On 8 May, the Office of the Assistant Secretary of the Air Force for Acquisition signed the final Acquisition Action Approval for BIDDS; and on 29 May, the program plan was published.

March 1987

The Instrument Flight Center informally agreed to take management responsibility from AFCC for the Department of Defense (DOD) Notice to Airmen (NOTAM) system once the DOD-Federal Aviation Administration NOTAM integration was complete.

A Technical Report on the Concepts, Requirements, and Design Analysis for Automated Tactical Aircraft Launch and Recovery System (ATALARS) documented the results of the ATALARS study and provided future planning information. The ATALARS was an advanced systems concept for performing military terminal area air traffic control in the post-2000 time period. It would reduce the requirement for unique equipment in support of air traffic control, and greatly increase the ability of the system to provide the support that was required in wartime. AFCC provided \$200,000 in July 1986, and an additional \$100,000 on 14 August 1987, to the Electronic Systems Division to continue the proof-of-concept study.

The Scott AFB, Illinois, Programmable Indicator Data Processor (PDIP) became operational.

#### **1 March 1987**

High Frequency (HF) Volume Meteorological (VOLMET) Broadcast Service from all Global Command Control System (GCCS) stations resumed. The service began on 1 October 1985 as a six-month trial service. At the end of the test period, results were inconclusive and the tests were extended to the end of the year. The 1987 draft final report pointed out that the initial operational problems had been resolved, and approximately ninety percent of all broadcasts were being transmitted in a timely manner. On 23 September 1987, the HF VOLMET broadcast service was instituted as a permanent part of the services provided by the GCCS stations.

To reflect its expanding mission in the areas of information security, site security, computer security, and anti-terrorism, the HQ AFCC Security Police (AFCC/SP) was redesignated Directorate of Security (AFCC/DS).

#### **2 March 1987**

The Air Force Central Notice to Airmen (NOTAM) Facility stopped editing Federal Aviation Administration NOTAMs to make them look like Defense Department NOTAMs. By no longer changing the FAA NOTAMs, Air Force Notice to Airmen Facility (AFCNF) customers could recognize the FAA formats and abbreviations which would eliminate manual intervention to discern which of the two NOTAMs was correct. It would also help retain pilot's confidence in the credibility of the system and reduce the potential for errors involving flight safety. The NOTAM system, administered by AFCC, furnished aircrews with current information about conditions such as closed runways, failed navigational aids, and changes to instrument approach procedures at bases worldwide.

#### **4 - 18 March 1987**

Headquarters AFCC participated in Exercise WINTEX-CIMEX.

#### **11 March 1987**

Headquarters USAF Directorate of Manpower and Organization made a formal proposal to the USAF Chief of Staff to review the mission and structure of AFCC. Three options were considered. The first option would have transferred the majority of AFCC's units to the major commands and AFCC would have become a separate operating agency. The second option considered transferring AFCC's combat communications units to other commands and leaving the rest of AFCC intact. The third option would leave AFCC in its present structure. As a result of this review, which lasted nearly a year, AFCC retained its major command status, but lost its flight check mission (and the command's last six aircraft) as well as its long range radar evaluation mission.

#### **27 March 1987**

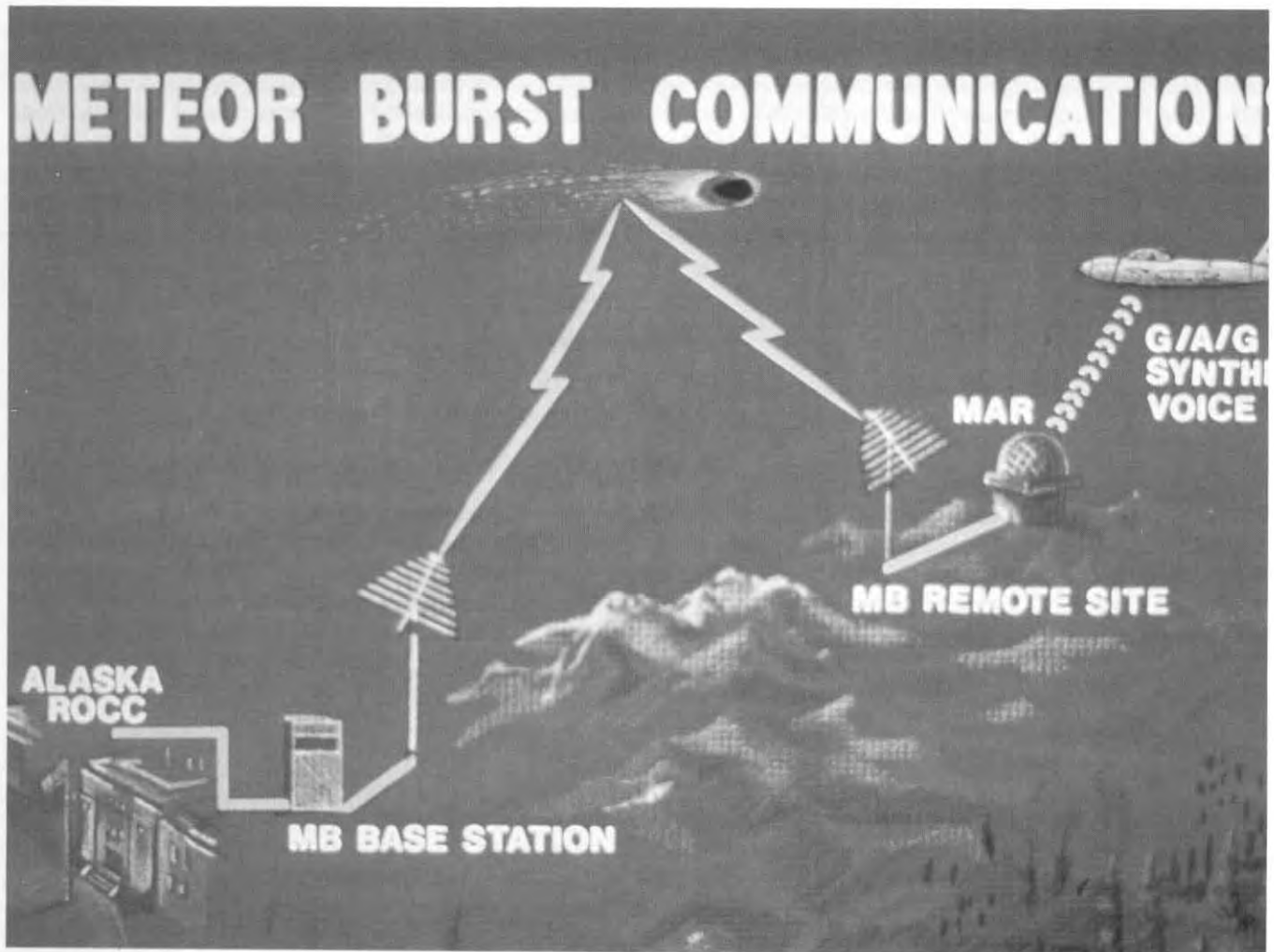
Headquarters AFCC submitted its Acquisition Streamlining Action Plan to HQ USAF. The plan contained twenty-two action items to include command-unique issues such as program management expertise, a management information system, and civil engineering functions related to acquisition. The streamlining plan was a result of legislation passed in 1986 which redefined the scope of acquisition under which AFCC operated.

#### **1 April 1987**

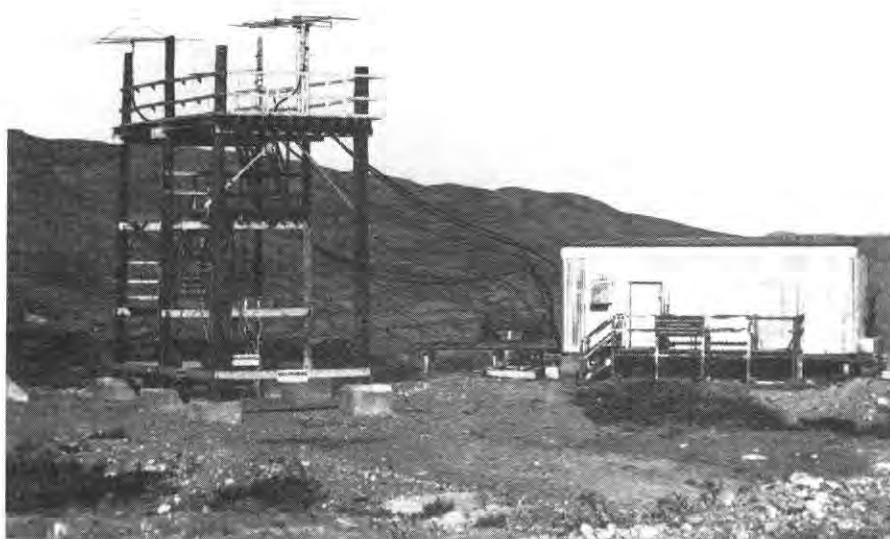
As part of the review of AFCC's mission, Maj Gen John T. Stihl, AFCC Commander, offered to return the command-unique data automation positions to the major commands and separate operating agencies. Of the twenty-two commanders queried, only eight wanted their authorizations returned. Between 1 April and 1 October, AFCC returned 118 authorizations of the 3,151 authorizations that provided command-unique data automation support. On 1 April, AFCC inactivated its 1858th Computer Systems Squadron and returned thirty authorizations to the Air Force Commissary Service. The next transfer took place on 1 July.

9 April 1987

Alaskan Air Command officially placed a Meteor Burst Communications (MBC) System on-line as the primary back-up command and control communications system for the Alaskan theater. MBC was the technique of using meteor induced ionization trails as passive relay mechanisms for directing radio frequency signals to intended receivers. The system's ability to operate during heavy sunspot activity and its resistance to being intercepted or jammed combined with state-of-the-art computer technology made it a viable and survivable system under the worst of conditions.



*Meteor Burst Communications at work. Meteor Burst Communications is the technique of using meteor induced ionization trails as passive relay mechanisms for directing radio frequency signals to intended receivers.*



*Meteor Burst Site.*

**10 April 1987**

The Base Information Digital Distribution System (BIDDS) Systems Program Office asked AFCC's Deputy Chief of Staff/Comptroller to modify the cable plant, Integrated Services Digital Network, and BIDDS Base Distribution System modules of the BIDDS cost model.

**12 April 1987**

Brigadier General Charles W. Bartholomew, AFCC Vice Commander, issued a letter to the AFCC staff and direct reporting units recinding the 1986 mandatory urinalysis policy, saying it had been a temporary measure to call attention to the importance of security. The recinding of the policy was not to deemphasize security, but simply to allow managers to shoulder the responsibility for security disciplinary actions within the guidelines of the regulation.

**13 April 1987**

Colonel Roscoe M. Cougill, AFCC Chief of Staff, established the AFCC policy for the procurement of base-level telephone equipment, associated wiring, and services. The new policy advised base contracting offices to purchase telephone equipment from centrally awarded purchase of telephones and services contracts. This would ensure standardization of telephone equipment and maintenance support.

**15 April 1987**

The Jam Resistant Secure Communications south terminal (AN/GSC-52) was activated at Falcon AFS's Consolidated Space Operations Control facility. It was officially dedicated on 7 May and, by mid-summer, was fully operational. This constituted the Air Force's first use of the GSC-52 terminal.

**17 April 1987**

The Harris Corporation was awarded a contract for High Frequency Regional Broadcast radios. The cost was less than half the estimated price; however, the contract was for radios only. It did not include spares, maintenance, technical documents, or training.



23 April 1987

The Air Staff briefed the Air Staff Board and outlined its first draft development of a consolidated Air Force Plan for the National Airspace System Plan (NASP) integration. The briefing contained AFCC and other major commands' inputs on their operational and training requirements considering current Federal Aviation Administration (FAA) National Airspace System planning efforts. The briefing became the USAF input to be combined with the other services in developing a combined Department of Defense (DOD) plan for NASP integration. The NASP originated in 1981: its purpose was to consolidate more than 200 control facilities into less than thirty, incorporate high levels of automation to improve safety, increase fuel efficiency, and increase air traffic control capacity. It specified improvements needed to be made to Air Traffic control facilities and equipment to meet the nations projected air transportation demands till the year 2000. In 1986, FAA asked Air Force for an input because Air Force traffic made up twenty percent of the national airspace. On 18 May 1987, DOD informally presented a proposed architecture to FAA; however, at the end of 1987, there was no agreement on a final military integrated NASP.

May 1987

The commanders of AFCC United States Army Information Systems Command, and the Naval Telecommunications signed the organizational charter for the Joint Services Telecommunications Working Group.

The rising support construction costs of cable for new Marine Corps buildings led the Air Force to ask the Marines to provide or pay for their own telephone support on Okinawa.

Headquarters AFCC Land Mobile Radio (LMR) systems manager decided there should be just one family of LMR assets used to meet both the combat deployable and base support needs. Combat deployable and base support radios referred only to how the equipment was used operationally, not to different types of equipment. However, at the same time, he also declared he believed the long-term solution for LMRs lay in a trunked system. A trunked system was specifically designed to accelerate and enhance the efficient shared use of a minimum number of radio frequencies among a maximum number of diversified net users without the loss of individual communications requirements.

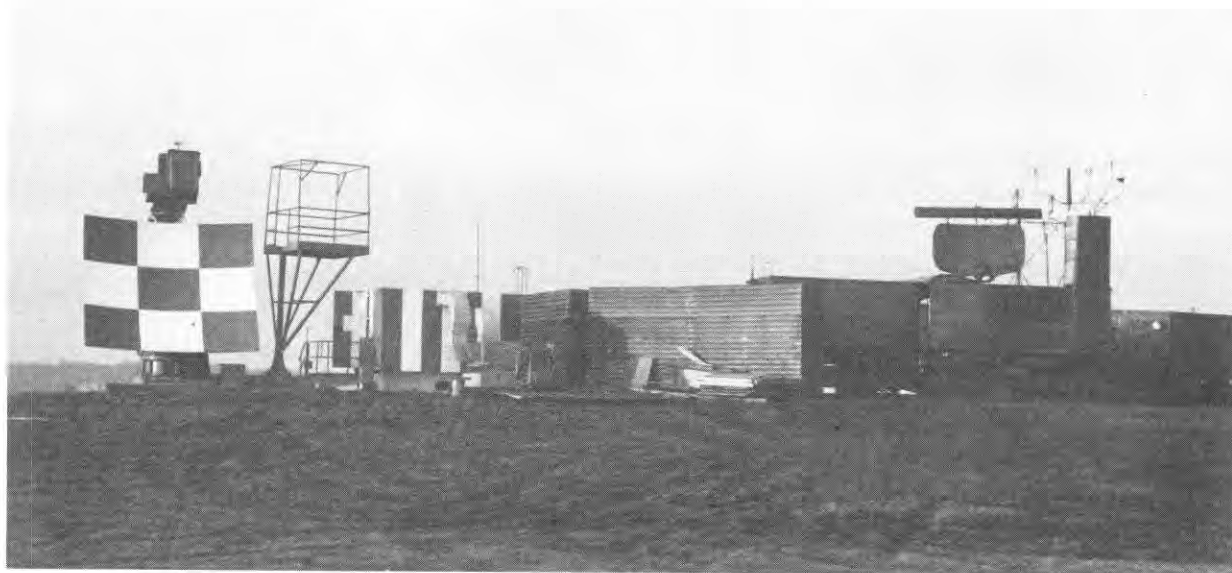
21 May 1987

Major General John T. Stihl directed a productivity analysis of the 2d Computer Systems Group. He believed that it was not economically feasible to continue the group and was considering abolishing it. The HQ AFCC Studies and Analysis Office conducted the review and concluded that the unit was cost effective.

21 - 22 May 1987

The Air Force Space Command (AFSPACECOM) and AFCC staffs met with Danish Civil Aviation Administration (DCAA) representatives to finalize a draft memorandum of agreement, cost figures, and phase-in schedule for the transfer of the air traffic control mission at Sondrestrom AB, Greenland, to DCAA. The transfer supported AFSPACECOM's goal to reduce USAF's presence at Sondrestrom, its management responsibilities, its terminal instrument procedures support by AFCC's Training Communications Division, and its liability for accidents. In June, AFCC reduced the number of air traffic controllers at Sondrestrom from thirty to eighteen. Then, on 25 August 1987, Maj Gen Maurice C. Padden, Air Force Space Command Commander, approved the transfer of Sondrestrom AB, Greenland, air traffic control responsibilities to DCAA. AFSPACECOM would fund the transfer and subsequent operation by the Danes. The transfer would save AFCC approximately \$500,000 each year in operations and maintenance costs.





*The old and the new. On the left is the new AN/GPN-22, on the right is the old MPN-13. Unlike the old radar control system which used tubes, the new system uses solid state technology which makes maintenance easier, has a more spacious work area, and can maintain an ideal temperature for man and machine.*

**29 May 1987**

Air Force Chief of Staff, Gen Larry Welch, informed AFCC Commander, Maj Gen John T. Stihl, by telephone that AFCC would not be dissolved, but left open the possibility of the combat communications units being transferred to other commands.

**12 June 1987**

Chief Master Sergeant Jeremiah T. Hayes retired after thirty years of service. Chief Master Sergeant Walter D. McLain, formerly the commandant of the AFCC Noncommissioned Officer Professional Military Education Center, became the new AFCC senior enlisted advisor.

**15 June - 11 September 1987**

Automated Weather Distribution System (AWDS) Initial Operational Test and Evaluation was conducted at Eglin AFB, Florida. The test was to evaluate AWDS operational effectiveness and suitability, while also identifying deficiencies or enhancements which needed to be made before AWDS entered full-scale production. The test team found the design to be a major step forward, with capabilities never before approached in the operational weather support environment; but, there were some system software deficiencies which impaired the operator's ability to perform base weather station tasks. Therefore, the team concluded that when the validated problems were corrected, AWDS would meet the users requirements and would upgrade Air Force and Army weather support.

**16 June 1987**

The AFCC's role in the Milstar Program Management Directive was defined. On 17 July, Air Staff promulgated a second Milstar Program Management Directive further defining AFCC's role in the project.

## July 1987

The initial and revised concept of a Transportable Automated Weather Distribution System (TAWDS) satellite test was distributed. TAWDS was a critical part of the Automated Weather Distribution System development area. It had to interoperate with tactical communications equipment, be able to transmit and receive in a secure mode, communicate with other TAWDS and tactical weather equipment, and receive satellite weather data directly.

The Sacramento Air Logistics Center changed the procedures for ordering telephone service so that everything would be covered by the Air Force Regulation 700 series for Communications-Computer Systems.

## 1 July 1987

The next series of transfers of command-unique data automation positions occurred. AFCC inactivated its 1859th Computer Systems Squadron and returned thirty-nine authorizations to the Air Force Operational Test and Evaluation Center. Also, AFCC inactivated its 1860th Computer Systems Squadron and returned twenty-six authorizations to the Air Force Inspection and Safety Center. In a similar action, AFCC transferred one colonel position from its 2179th Communications Group back to the Air Force HF Technical Application Center and inactivated its Operating Location K at Lowry AFB, Colorado, and returned a colonel authorization to the Air Force Accounting and Finance Center. The next series of transfers occurred on 1 October.

## 7 July 1987

Headquarters Military Airlift Command withdrew its cosponsorship from the mobile microwave landing system, because of weight requirements. They chose an alternate system instead.

## August 1987

The 1842d Electronics Engineering Group published an Economic Analysis for Automated Weather Distribution System modems, finding it more cost effective to purchase rather than lease.

A groundbreaking ceremony was held for a new Headquarters AFCC building at Scott AFB, Illinois.

## 2 August 1987

Headquarters AFCC personnel asked all Global Command Control Stations to evaluate the merits of continued Ultra High Frequency (UHF) radio support. Only Albrook AB, Panama, and Thule AB, Greenland, stated a need. Ultra High Frequency radio equipment was a carry-over from old aeronautical stations; it was used for transmission of aircraft departure reports and for special communication support during air traffic control missions. However, air traffic control was no longer a mission of the GCCS system; but, further study indicated there was a need for the UHF capability for some classified missions. Therefore, on 29 December 1987, AFCC announced that stations with a UHF capability would retain it, but stations without it were not required to establish the capability.

## 7 August 1987

The Global Command Control System (GCCS) station at Scott AFB, Illinois, closed. The Scott station no longer had a mission. The loss of the air traffic control mission had reduced the GCCS station traffic load. In addition, stations in Maine, California, and Florida provided ample high frequency coverage of the continental United States. Command planners estimated that the station closing would save in excess of \$1 million a year.

**10 August 1987**

Headquarters AFCC authorized the arming of Engineering and Installation personnel who would deploy in time of crisis.

**28 August 1987**

The Defense Communications System Station Schoenfeld Digital European Backbone, IVC segment was activated. The activation would provide more reliable service to thousands of users throughout Europe. The DEB upgrade was an Air Force, Army, and Navy effort to replace existing systems with a modern U.S.-Owned transmission system. However, in September, the Electronic Systems Division reported that the Army FY 1988-1992 budget slashes would affect the Digital European Backbone program dramatically. As a result, Air Force segments of DEB IV Rheinberg and DEB IV Kalkar could not be implemented.

**September 1987**

The Air Force Communications Command awarded a multimillion dollar contract to American Telephone and Telegraph to develop a prototype at Mather AFB, California, combining communications and computer systems into an integrated system to serve all base functions. In December, Air Force planners reviewed the critical design for the model base program. The model base program would become a demonstration site for several AFCC programs and Air Force functional user prototype computer systems before they were implemented throughout the Air Force. Originally, the Systems for Command, Control, Communications, and Computers (SC4) Model Base Program was to furnish an operational environment to quickly evaluate information systems initiatives being considered for Air Force application. However, in 1986, Maj Gen John T. Stihl wanted to expand the program to use shared communications and computer resources to support functional system integration and move toward a standard base-level C4 system configuration.

**20 September 1987**

Headquarters AFCC was awarded the Air Force Organizational Excellence Award for exceptionally meritorious service for the period 1 July 1986-30 June 1988.

**October 1987**

The Turkish General Staff and the United States agreed to negotiate Turkish involvement in the process to integrate the total DCS Mediterranean Improvement Program system requirements and replace the aging troposcatter and line-of-sight microwave links throughout the Southern Region.

**1 October 1987**

AFCC's units in Turkey reorganized to provide a clear, uncomplicated command line. The 2003d Communications Group Commander became the senior Air Force communicator for Turkey.

AFCC transferred positions providing command-unique support back to the Air Force Service Information and News Center and the Air Reserve Personnel Center. In each case, one officer authorization transferred from the local communications unit to the respective separate operating agency. This was the last of the command-unique positions returned to the major commands and separate operating agencies in 1987.

The DOD revoked the security clearances of all non-US citizens.

## 1 October 1987

While AFCC lost some mission elements as a result of the spring Air Staff review, it gained an important new mission. The acquisition of nonstandard communications-computer systems by major commands and separate operating agencies to meet their specific operational requirements had led to a proliferation of noninteroperable systems at base level. To correct this problem, HQ USAF created an Air Force Communications Computer Systems Integration Office, and gave the mission to AFCC. This new office, created on 10 October at HQ AFCC, would be the Air Force single overall manager of the base-level automation environment.

The Strategic Air Command transferred management responsibility for the Defense Special Security Communications System at Eielson AFB, Alaska; RAF Mildenhall, England; and Barksdale AFB, Louisiana, to AFCC. AFCC gained twenty-nine manpower authorizations.

The cutover from military to contractor personnel occurred at AFCC's 486L tropospheric scatter radio relay sites in Turkey, Greece, and Italy. Fourteen remote sites of the Defense Communications System were involved. This effort would save an estimated \$2 million annually; it would save 350 military positions and alleviate unfavorable rotation index problems. Eventually sites in Spain would be contracted out.

The 1999th Communications Squadron transferred from the Research and Acquisition Communications Division to the Space Communications Division because Onizuka AFS, California, where the unit was located, transferred from Air Force Systems Command to Air Force Space Command.

The 2151st Communications Squadron at Little Rock AFB, Arkansas, transferred from the Strategic Communications Division to the Airlift Communications Division, concurrent with the deactivation of the 308th Ballistic Missile Wing and its Titan II missiles.

Because of AFCC's expanding acquisition role, Col Roscoe M. Cougill, AFCC Chief of Staff, elevated the HQ AFCC contracting function from a directorate within DCS/Logistics to a special staff office.

Five authorizations as well as the Small Computer Technical Center transferred to the 1974th Communications Group, thereby completing the transfer of the HQ AFCC office information system to the group. This left only policy and planning for the system at HQ AFCC.

As a result of the Air Staff review of AFCC in spring 1987, minor mission adjustments occurred. AFCC transferred its 1954th Radar Evaluation Squadron, Hill AFB, Utah, to the Tactical Air Command. Also, AFCC transferred the performance analysis by continuous evaluation program to the Tactical Air Command along with fourteen manpower authorizations. At the direction of the HQ USAF Chief of Staff, AFCC transferred its six aircraft and their associated flight inspection mission to the Military Airlift Command. AFCC had performed this mission since 1942. AFCC's 1866th and 1868th Facility Checking Squadrons were inactivated, and the 1867th Facility Checking Squadron was redesignated the 1467th Facility Checking Squadron. Because of the illustrious wartime accomplishments of the 1867th, its lineage transferred to the new 1467th Facility Checking Squadron. AFCC transferred seventy-six authorizations to the Military Airlift Command.

## 6 October 1987

Major General John T. Stihl approved the Hammer Acquisition II initiatives which called for realigning the missions of the Standard Systems Center and the Engineering Installation Center along the lines of (1) computer systems and (2) air traffic control and communications systems.



### **9 October 1987**

In an amendment to a Communications-Computer System Directive, the Air Staff gave its approval for the interim replacement of the three Automatic Digital Weather Switch (ADWS) computer systems, Carswell AFB, Texas; RAF Croughton, United Kingdom serving Europe; and Hickam AFB, Hawaii, serving the Pacific. AFCC was given the responsibility for life-cycle planning and annual program budgeting. The existing ADWS was close to a catastrophic failure, and the deteriorated condition of the overseas ADWS hardware placed the automated weather network at risk.

### **November 1987**

Departments of Commerce, Defense, and Transportation representatives signed a memorandum of understanding for Joint Interagency Integrated Support of the Next Generation Weather Radar system. This system would double an operator's ability to detect severe weather while reducing the false alarm rate by more than sixty percent. On 1 December, UNISYS Corporation was selected as the contractor for a limited production of ten Next Generation Weather Radar units.

### **1 November 1987**

Brigadier General Julio L. Torres replaced retiring Brig Gen Richard A. Northrup as mobilization assistant to the commander.

To improve the efficiency of its contracting efforts, AFCC transferred the contracting functions from its 7th Communications Group and the Pacific Communications Division to the 1100th Contracting Squadron and the 15th Air Base Wing Contracting Center respectively. A total of twelve people transferred.

### **2 November 1987**

As a result of the 1987 budget reduction, \$10.1 million was cut from the Base Information Digital Distribution System European switch project. The switches would be installed, but the upgrade/replacement of the distribution systems would be deferred.

### **17 November 1987**

Headquarters, United States Air Force's Assistant Chief of Staff/Command, Control, and Mission Support staff initiated a program decision package change to transfer program management responsibility for the Mission Effective Information Transmission System from the Air Force Systems Command to the Air Force Communications Command.

### **23 November 1987**

The House Armed Services Committee restored \$5 million for the tower restoral vehicle/surveillance restoral vehicle program.

### **December 1987**

The staff at the United States Air Forces in Europe (USAFE) requested AFCC's air traffic services staff to evaluate the USAFE Aircraft Surge, Launch, and Recovery proposal, and assist in making the proposal an Air Force procedure. The proposal designed procedures to be compatible with NATO plans and operating procedures which were tailored to wartime and peacetime airspace environments.



#### **December 1987**

The Air Force Facilities Panel approved the concept for a Scope Command military construction program. This program would avoid a piece-meal approach to the replacement of the current high frequency systems. Otherwise, various vendors providing different equipment could result in interoperability problems and increased training, logistics, and personnel costs.

#### **8 December 1987**

The Army agreed to the Air Staff's request to transfer eighteen enlisted and twenty-one foreign national direct hire civilian authorizations from the Army to the Air Force in association with the transfer of operations and maintenance responsibilities in Korea.

#### **21 December 1987**

Air Force Communications Command received a message from Chief of Staff of the Air Force directing the formulation of plans to comply with Intermediate Nuclear Forces Treaty obligations.

#### **22 December 1987**

Air Force Communications Command promulgated its new computer security regulation, AFCCR 205-5.

#### **23 December 1987**

The U.S. Government accepted the Thin Line Connectivity Capability portion of the Ground Wave Emergency Network system.

#### **Late 1987**

Brigadier General Charles W. Bartholomew, AFCC Vice Commander, approved the microwave landing system baseline to enhance program stability and control cost growth.



*August 1987 groundbreaking ceremony for the future Headquarters Air Force Communications Command building at Scott AFB, Illinois. The new building is scheduled for completion in 1989. Dignitaries sit on the reviewing stand waiting for the ceremonies to begin. From left: Maj Gen John T. Stihl, AFCC Commander; Gen Duane H. Cassidy, Commander-in-Chief, Military Airlift Command; Sen Alan J. Dixon, D-Ill; and Rep Melvin Price, D-Ill. Behind them are members of the AFCC Honor Guard.*

# APPENDIX 1

## LINEAGE OF AIR FORCE COMMUNICATIONS COMMAND

### Action

The Army Airways Communications System established in the Directorate of Communications of the Division of Training and Operations, Office of the Chief of the Air Corps, effective 15 November 1938.

The Army Airways Communications System placed under the Operations Division, the Directorate of Communications, Headquarters Army Air Forces, effective 23 April 1942.

Field Branch of the Directorate of Communications proposed to be known as the Office of Army Airways Communications System. It was to be located in Philadelphia, Pennsylvania. In preparation for the move, a headquarters was established at Bolling Field, Washington D.C., effective 27 March 1943. This was the first separate headquarters of the Army Airways Communications System. However, General H. H. Arnold decided on 26 March 1943, to place the Army Airways Communications System under the new Flight Control Command rather than establish a field branch.

The Army Airways Communications System Wing was constituted and assigned to the Flight Control Command on 13 April 1943, and was activated effective 26 April 1943. The history of AFCS as a unit begins with this action. Before this, it was merely a function/staff office, not a unit.

The Army Airways Communications System closed its office at Bolling Field, Washington, D. C., at 0814, 3 May 1943, and reopened in Asheville, North Carolina, under the name of Headquarters Army Airways Communications System Wing, Flight Control Command, effective 0815, 3 May 1943.

The Army Airways Communications System Wing reassigned from the Flight Control Command to Headquarters Army Air Forces "under the immediate supervision and jurisdiction" of the Assistant Chief of Air Staff, Operations, Commitments and Requirements, effective 14 July 1943.

### Authority

Ltr, Adjutant General's Office, War Dept, to Commanding Generals of all Corps Areas, *et al.*, subj: "Establishment of the Army Airways Communications System and Constitution of 1st, 2d, and 3d Communications Squadrons," 3 Nov 38; Army Regulation 95-200 "Organization, Operation, Control, and Maintenance of AACS," 1938.

Army Air Force Regulation 100-3.

Memo, Maj Gen George E. Stratemeyer, Chief of Air Force, to Director of Technical Services, subj: "Office of the Army Airways Communications System," 17 Feb 43; Memo, Maj Gen George E. Stratemeyer, Chief of Air Force, to Gen H. H. Arnold, subj: "Creation of the Army Air Forces Flight Control Command," 26 Mar 43; Hist of AACS, 1938-1945, pp. 932-33; Memo, Director of Technical Services, Army Air Forces, subj: "Office of the Army Airways Communications System," 6 Mar 43.

Ltr, Adjutant General's Office, War Dept, to Commanding Generals of the Army Air Forces, subj: "Activation of the AACS Wing, Flight Control Command," 13 Apr 43.

Ltr, Adjutant General, Headquarters Army Air Forces, to Commanding Generals of all Air Forces *et al.*, subj: "Address of Army Airways Communications System Wing, AAF," 30 Apr 43.

Ltr, Adjutant General, Headquarters Army Air Forces, to Commanding Generals of all Air Forces, *et al.*, subj: "Reassignment of Certain Army Air Forces Units," 14 Jul 43.

## Action

The Army Airways Communications System Wing reassignment to Headquarters Army Air Forces was amended by eliminating the phrase "under the immediate supervision" of the Assistant Chief of Air Staff, effective 13 October 1943. It was now running its own organization.

The Army Airways Communications System Wing dropped the "Wing" designation and was given separate command status, effective 26 April 1944. The command underwent a complete reorganization, effective 15 May 1944.

The Army Airways Communications System was redesignated Air Communications Service and reassigned as a subcommand to Air Transport Command, effective 13 March 1946.

Air Communications Service was redesignated Airways and Air Communications Service, effective 11 September 1946. The change was made to retain the AACCS symbol.

The Airways and Air Communications Service reassigned to Military Air Transport Service, effective 1 June 1948.

The Airways and Air Communications Service was relieved from assignment to Military Air Transport Service, redesignated Air Force Communications Service, and designated a major command, effective 1 July 1961.

The Air Force Communications Service was redesignated Air Force Communications Command, effective 15 November 1979.

## Authority

Ltr, Adjutant General, Headquarters Army Air Forces, to Commanding Generals of all Air Forces, *et al.*, subj: "Reassignment of Certain Army Air Forces Units," 13 Oct 43.

Ltr, Adjutant General, Headquarters Army Air Forces, to Commanding Generals of all Air Forces, *et al.*, subj: "Redesignation and Disbandment of Certain Units, and Allotment of Personnel to Army Airways Communications Service, Army Air Forces," 25 Apr 44.

Ltr, Adjutant General's Office, War Dept, to Commanding Generals *et al.*, subj: "Redesignation and Assignment of the Army Air Forces Weather Service and the Army Airways Communications System, Establishment of Certain Army Air Forces Activities," 13 Mar 46.

Hist of AACCS, 3 Sep 1945-Jun 1946, Foreword.

Air Transport Command SO G-26, 14 May 43; Military Air Transport SO G-2, 1 Jun 48.

Ltr, HQ USAF Directorate of Manpower and Organization to Joint Chiefs of Staff *et al.*, subj: "Designation of the Air Force Communications Service as a Major Air Command," 10 May 61.

AFCC SO G-252, 15 November 1979; DAF/MPM letter 283g, 15 November 1979.

## SUMMARY

<u>NAME</u>	<u>EFFECTIVE DATE</u>
Army Airways Communications System	15 November 1938
Army Airways Communications System Wing	13 April 1943
Headquarters Army Airways Communications System Wing, Flight Control Command	3 May 1943
Army Airways Communications System	26 April 1944
Air Communications Service	13 March 1946
Airways and Air Communications Service	11 September 1946
Air Force Communications Service	1 July 1961
Air Force Communications Command	15 November 1979



## APPENDIX 2

### AACS/AFCS/AFCC HEADQUARTERS LOCATIONS

<u>DATE</u>	<u>LOCATION</u>
27 March 1943*	Bolling Field, Washington, D.C.
3 May 1943	Municipal Building, Asheville, North Carolina
17 December 1945	Langley Field, Virginia
12 December 1946	Gravelly Point, Virginia (Adjacent to Washington National Airport)
19 November 1948	Andrews AFB, Maryland
15 January 1958	Scott AFB, Illinois
16 July 1970	Richards-Gebaur AFB, Missouri
1 November 1977	Scott AFB, Illinois

\*The original HQ AACS was established on 27 March 1943. Since its activation on 15 November 1938, AACS had been operated as a field command by the Directorate of Communications, Headquarters United States Army Air Forces.

## APPENDIX 3

### AACS/AFCS/AFCC COMMAND SECTION

#### AACS/AFCS/AFCC COMMANDERS

	<u>FROM</u>	<u>TO</u>
Col Lloyd H. Watnee	27 Mar 1943	11 Nov 1943
Brig Gen Ivan L. Farman	11 Nov 1943	12 Mar 1946
Maj Gen Harold M. McClelland*	12 Mar 1946	9 Sep 1948
Brig Gen Wallace G. Smith	9 Sep 1948	31 Aug 1951
Maj Gen E. Blair Garland	31 Aug 1951	31 Aug 1954
Maj Gen Francis L. Ankenbrandt	1 Sep 1954	28 Jul 1955
Maj Gen Dudley D. Hale	28 Jul 1955	14 Jan 1958
Maj Gen Daniel C. Doubleday	14 Jan 1958	30 Jun 1961
Maj Gen (later Lt Gen) Harold W. Grant	30 Jun 1961	15 Feb 1962
Maj Gen Kenneth P. Bergquist	15 Feb 1962	30 Jun 1965
Maj Gen J. Francis Taylor, Jr.	30 Jun 1965	18 Oct 1965
Maj Gen (later Lt Gen) Richard P. Klocko	18 Oct 1965	2 Jul 1967
Maj Gen Robert W. Paulson	15 Jul 1967	31 Jul 1969
Maj Gen Paul R. Stoney	31 Jul 1969	31 Oct 1973
Maj Gen Donald L. Werbeck	31 Oct 1973	22 Aug 1975
Maj Gen Rupert H. Burris	22 Aug 1975	31 Oct 1977
Maj Gen Robert E. Sadler	31 Oct 1977	21 Jun 1979
Maj Gen (later Gen) Robert T. Herres	21 Jun 1979	27 Jul 1981
Maj Gen Robert F. McCarthy	27 Jul 1981	31 May 1984
Maj Gen Gerald L. Prather	1 Jun 1984	28 Aug 1986
Maj Gen John T. Stihl	28 Aug 1986	29 Mar 1988
Maj Gen James S. Cassity, Jr.	29 Mar 1988	16 May 1989
Maj Gen Robert H. Ludwig	16 May 1989	

\*Effective 12 Nov 1947, as part of an extensive Air Transport Command reorganization, the headquarters of Air Transport Command and its subordinate services (AACS, Air Weather Service, Air Transport Service, Air Rescue Service, and Flight Service) were integrated, and each service commander was assigned the additional function of Deputy Commander, Air Transport Command. On 1 June 1948, upon the formation of the Military Air Transport Service (MATs), Deputy Commanders for Services and Air Transport were established at HQ MATs. General McClelland became the Deputy Commander, Services, but continued to command AACS as an additional duty until the arrival of General Smith in September.

**AACS/AFCS/AFCC  
DEPUTY COMMANDERS/VICE COMMANDERS**

	<u>FROM</u>	<u>TO</u>
Col (later Maj Gen) Wendell W. Bowman (Additional Duty)	8 Jun 1944	2 Jan 1946
Col (later Lt Gen) Gordon A. Blake	3 Jan 1946	9 Mar 1947
Col (later Maj Gen) Raymond C. Maude	10 Mar 1947	Sep 1948
Col Daniel B. White	Sep 1948	16 Sep 1951
Col Wilbur W. Bailey (Acting)	17 Sep 1951	15 Apr 1952
Col Charles W. Bagstad	16 Apr 1952	20 May 1954
Col Forrest W. Donkin	21 May 1954	31 May 1957
Brig Gen (later Maj Gen) Daniel C. Doubleday	1 Jun 1957	13 Jan 1958
Col Harold L. Hughes (Acting)	14 Jan 1958	1 Sep 1958
Brig Gen Harold L. Smith	2 Sep 1958	30 Jun 1960
Col David M. Crabtree, Jr.	1 Jul 1960	30 Jun 1961
Brig Gen (later Maj Gen) Donald P. Graul	1 Jul 1961	31 Mar 1963
Maj Gen Sam W. Agee	1 Apr 1963	31 Jul 1963
Vacant	1 Aug 1963	30 Aug 1963
Maj Gen Wendell W. Bowman	31 Aug 1963	31 Jul 1964
Vacant	1 Aug 1964	21 Nov 1964
Maj Gen (later Lt Gen) Gordon T. Gould, Jr.	22 Nov 1964	10 Jul 1965
Vacant	11 Jul 1965	24 Jul 1965
Brig Gen Douglas E. Williams	25 Jul 1965	18 Oct 1965
Maj Gen J. Francis Taylor, Jr.	19 Oct 1965	14 May 1966
Vacant	15 May 1966	4 Jul 1966
Col (later Maj Gen) Paul R. Stoney	5 Jul 1966	31 Jul 1969
Brig Gen (later Maj Gen) Albert R. Shiely, Jr.	1 Aug 1969	26 Oct 1971
Brig Gen (later Maj Gen) Donald L. Werbeck	27 Oct 1971	31 Oct 1973
Brig Gen (later Maj Gen) William R. Yost	1 Nov 1973	28 Feb 1974
Brig Gen (later Maj Gen) Robert E. Sadler	1 Mar 1974	30 Jul 1974
Brig Gen William W. Gilbert	31 Jul 1974	30 Jun 1975
Brig Gen (later Maj Gen) Rupert H. Burris	1 Jul 1975	24 Aug 1975
Col Alvers I. Singleton (Acting)	25 Aug 1975	11 Jul 1976
Brig Gen (later Maj Gen) William R. Yost	12 Jul 1976	15 Jun 1978
Brig Gen (later Maj Gen) William G. Mac Laren, Jr.	16 Jun 1978	18 Jun 1979
Brig Gen (later Maj Gen) Robert F. McCarthy	28 Jun 1979	26 Jul 1981
Brig Gen Charles B. Jiggetts	27 Jul 1981	29 Oct 1982
Brig Gen Duncan W. Campbell	29 Oct 1982	1 Jul 1984
Brig Gen Donald L. Moore	1 Jul 1984	30 Sep 1986
Brig Gen Charles W. Bartholomew	10 Oct 1986	24 Jul 1988
Brig Gen Wayne E. Schramm	24 Jul 1988	1 Aug 1989
Brig Gen Frederick A. Zehrer	1 Aug 1989	

**AACS/AFCS/AFCC  
CHIEFS OF STAFF**

In the years 1944-1949, the Chief of Staff and Deputy Commander positions were often synonymous. On 1 February 1955, the Chief of Staff position was replaced by an Executive Officer; however, the Chief of Staff position was reinstated on 27 September 1955.

	<u>FROM</u>	<u>TO</u>
Maj Arthur H. Schroeder	5 Oct 1943	13 Jan 1944
Col (later Maj Gen) Wendell W. Bowman	14 Jan 1944	14 Sep 1945
Lt Col Francis T. Fogarty	15 Sep 1945	12 Mar 1946
Col Albert J. Mandelbaum	13 Mar 1946	25 Aug 1946
Lt Col (later Lt Gen) Gordon T. Gould	26 Aug 1946	9 Mar 1947
Col (later Maj Gen) Raymond C. Maude	10 Mar 1947	Late Aug 1948
Col Daniel B. White (Acting)	Late Aug 1948	Mid-Sep 1948
Lt Col John Crawford (Acting)	Mid-Sep 1948	Late Dec 1948
Col Daniel B. White (Acting)	Late Dec 1948	24 Apr 1949
Col Ernest S. Moon	25 Apr 1949	9 Oct 1951
Lt Col C. R. Pomaville, Jr.	10 Oct 1951	19 May 1953
Lt Col Dorsey F. Burke	20 May 1953	16 Aug 1953
Lt Col C. R. Pomaville, Jr.	17 Aug 1953	29 Sep 1954
Lt Col (later Col) Forrest W. Donkin (Acting)	30 Sep 1954	1 Feb 1955
Col Harold L. Hughes	27 Sep 1955	16 Aug 1959
Col David M. Crabtree, Jr.	17 Aug 1959	1 Mar 1961
Vacant	2 Mar 1961	30 Jun 1961
Brig Gen William T. Smith	1 Jul 1961	30 Jun 1963
Col (later Brig Gen) Harry A. French	30 Jun 1963	1 Jul 1964
Vacant	2 Jul 1964	9 Aug 1964
Brig Gen Douglas E. Williams	10 Aug 1964	25 Jul 1965
Vacant	26 Jul 1965	18 Oct 1965
Brig Gen Douglas E. Williams	19 Oct 1965	1 Jun 1966
Col James C. Selman	2 Jun 1966	7 Mar 1968
Col Philip R. Obley	8 Mar 1968	31 Mar 1969
Col Hugh C. Moore	1 Apr 1969	31 Jan 1970
Col Julian W. Parker	1 Feb 1970	15 Jul 1970
Col (later Maj Gen) Jack B. Robbins	16 Jul 1970	31 Jul 1971
Col (later Maj Gen) Donald L. Werbeck	1 Aug 1971	26 Oct 1971
Col Herman J. Hicks	27 Oct 1971	11 Jan 1972
Col Alan D. Campen	12 Jan 1972	15 Apr 1973
Col (later Maj Gen) William R. Yost	16 Apr 1973	31 Oct 1973
Col Ralph G. Backes	1 Nov 1973	31 Mar 1974
Col Glen L. McSparran	1 Apr 1974	31 Jul 1974
Col Hollis O. Hall	1 Aug 1974	20 Jul 1975
Col Alvers I. Singleton	21 Jul 1975	24 Aug 1975
Col (later Brig Gen) Donald J. Bowen	25 Aug 1975	16 Aug 1976
Col (later Maj Gen) Richard W. Pryor	17 Aug 1975	24 Jan 1978
Col Charles E. Shepherd	25 Jan 1978	31 Mar 1979
Col David B. Bartholomew	1 Apr 1979	31 Mar 1980
Col (later Brig Gen) Robert O. Petty	1 Apr 1980	31 May 1981
Col Clifford O. C. Henning, Jr.	1 Jun 1981	16 Jun 1982
Col John C. Elliott	17 Jun 1982	1 Jun 1983
Col (later, Brig Gen) Victor S. Stachelczyk	17 Jun 1983	31 Aug 1984
Col Allen W. Gray	1 Sep 1984	22 Aug 1985
Col Stancil L. Dilda, Jr.	23 Aug 1985	25 Aug 1986
Col Roscoe M. Cougill	27 Sep 1986	16 Apr 1988
Col Stephen E. Kelley	16 Apr 1988	

**APPENDIX 4**  
**COMMUNICATIONS-ADP INTEGRATION EFFORTS**  
**1984 - 1988**

<u>ORGANIZATION</u>	<u>ADP MANPOWER TRANSFERRED TO AFCC</u>	<u>ADP MANPOWER RETAINED</u>	<u>DATE</u>	<u>UNIQUE ADP RETURNED TO MAJCOM</u>	<u>DATE</u>
Alaskan Air Command	104	0	1 Jul 84		
AF Audit Agency	0	8			
AF Accounting & Finance Center	1	323	1 Nov 85	1	1 Jul 87
AF Commissary Service	30	17	1 Oct 85	30	1 Apr 87
AF Engineering and Services Center	3	12	1 Jul 86	3	1 Oct 88
AF Intelligence Service	19	23	1 Aug 85	19	1 Jan 88
AF Inspection & Safety Center	26	4	1 Nov 85	26	1 Jul 87
AF Legal Services Center	0	66			
AF Logistics Command	37	223	1 Jan 86		
AF Management Engineering Agency	0	24			
AF Military Personnel Center	0	518			
AF Office of Special Investigations	0	78			
AF Office of Security Police	0	1			
AF Operational, Test, and Evaluation Center	29	0	1 Aug 85	39	1 Jul 87
AF Reserve	84	0	1 Apr 85		
AF Systems Command	235	994	1 Jan 86		
AF Service Information and News Center	1	4	1 Dec 85	1	1 Oct 87
AF Space Command	92	426	1 Oct 85	175 36 1	1 Jan 86 1 Jul 86 1 Jan 87



<u>ORGANIZATION</u>	<u>ADP MANPOWER TRANSFERRED TO AFCC</u>	<u>ADP MANPOWER RETAINED</u>	<u>DATE</u>	<u>UNIQUE ADP RETURNED TO MAJCOM</u>	<u>DATE</u>
AF Technical Applications Center	1	121	1 Apr 86	1	1 Jul 87
Air Reserve Personnel Center	1	3	1 Jan 86	1	1 Oct 87
Air Training Command	496	0	1 Jan 86		
Electronic Security Command	100	160	1 May 85		
Air University	107	0	1 Apr 85		
Military Airlift Command	993	24	1 Dec 84		
Pacific Air Forces	468	0	1 Jul 84		
Strategic Air Command	1,708	0	1 Jul 84		
Tactical Air Command	1,190	0	1 Jul 84		
USAF Academy	64	65	1 Jul 85		
USAF Europe	905	0	1 Oct 84		
TOTALS	6,694	3,094		333	

## APPENDIX 5

### AFCC PERSONNEL

#### PERCENTAGE OF TOTAL AIR FORCE MANNING

1938 - 1987

<u>YEAR</u>	<u>AIR FORCE STRENGTH</u>	<u>AACS/AFCS/AFCC ASSIGNED STRENGTH</u>	<u>PERCENT</u>
1938*	21,089**	199**	.9***
1939	23,455**	278**	1.2***
1940	51,165**	428**	.8***
1941	152,125**	2,049**	1.3***
1942	764,415**	8,803**	1.2***
1943	2,197,114**	11,087**	.5***
1944	2,372,292**	27,681**	1.2***
1945	2,282,259**	49,400**	2.2***
1946	455,515**	8,635**	1.9***
1947	305,827**	13,263	4.3
1948	387,730**	17,110	4.4
1949	588,305	14,556	2.5
1950	565,730	14,681	2.6
1951	1,049,109	20,382	1.9
1952	1,283,137	25,102	1.9
1953	1,279,900	27,741	2.2
1954	1,243,515	28,820	2.3
1955	1,272,022	28,692	2.3
1956	1,258,188	29,225	2.3
1957	1,260,161	36,158	2.9
1958	1,186,962	36,975	3.1
1959	1,153,901	30,365	2.6
1960	1,122,201	28,734	2.6
1961	1,124,527	30,058	2.7
1962	1,190,206	36,480	3.1
1963	1,166,413	47,336	4.1
1964	1,145,624	48,328	4.2
1965	1,112,965	47,377	4.3
1966	886,350**	46,245**	5.2***
1967	1,226,205	53,996	4.4
1968	1,227,511	51,675	4.2
1969	862,352**	46,723**	5.4***

<u>YEAR</u>	<u>AIR FORCE STRENGTH</u>	<u>AACS/AFCS/AFCC ASSIGNED STRENGTH</u>	<u>PERCENT</u>
1970	791,349**	49,629**	6.3***
1971	753,896**	48,402**	6.4***
1972	724,333**	45,137**	6.2***
1973	691,194**	42,911**	6.2***
1974	643,792**	40,774**	6.3***
1975	895,277	45,960	5.1
1976	847,007	44,748	5.3
1977	828,791	50,053	6.0
1978	823,740	42,689	5.2
1979	806,713	48,338	5.9
1980	804,505	48,731	6.1
1981	816,505****	48,488	5.9
1982	830,145****	50,500	6.1
1983	835,100****	52,321	6.3
1984	849,900****	53,173	6.3
1985	858,500****	58,457	6.8
1986	867,000****	58,782	6.8
1987	872,000****	58,012	6.6

\* 1977-Present Data for Air Force Assigned Strength A/O 30 September; AFCC Assigned Strength A/O 30 June.

\*\* Does Not Include Civilians.

\*\*\* Percentage Based on Air Force Military Strength; Does Not Include Civilians.

\*\*\*\* Rounded.

SOURCE: Air Force Statistical Digest, 1938-1985 and AFCC Annual Histories, 1986 and 1987.

## APPENDIX 6

### AFCC PERSONNEL TOTALS

#### AUTHORIZED/ASSIGNED

1938 - 1987

<u>AS OF</u>	<u>AUTHORIZED</u>	<u>ASSIGNED</u>	<u>AS OF</u>	<u>AUTHORIZED</u>	<u>ASSIGNED</u>
Dec 1938	303*	199	Dec 1954	29,554	29,015
Apr 1939	533*	278*	Jun 1955	28,935	28,692
Jan 1940	N/A**	428*	Dec 1955	30,587	27,473
Dec 1941	N/A	2,049*	Jun 1956	32,486	29,225
Dec 1942	N/A	8,803*	Dec 1956	32,865	33,279
May 1943	N/A	11,087*	Jun 1957	33,214	36,158
Oct 1943	N/A	15,676*	Dec 1957	32,100	35,505
Dec 1943	N/A	19,176*	Jun 1958	31,220	36,975
Jul 1944	40,817*	27,681*	Dec 1958	29,723	33,792
Dec 1944	48,801*	37,197	Jun 1959	27,330	30,365
Aug 1945	52,550*	49,400*	Dec 1959	30,015	30,790
Jun 1946	13,691*	8,635*	Jun 1960	30,270	28,734
Dec 1946	17,290*	12,426*	Dec 1960	30,761	28,990
Jun 1947	15,320	13,263	Jun 1961	40,432	30,058
Dec 1947	15,361	14,618	Dec 1961	32,903	32,013
Jun 1948	16,403	17,110	Jun 1962	41,370	36,480
Dec 1948	16,075	14,661	Dec 1962	47,075	45,267
Dec 1949	15,023	14,556	Jun 1963	46,674	47,336
Jun 1950	14,983	14,681	Dec 1963	45,399	50,149
Dec 1950	16,667	19,148	Jun 1964	46,430	48,328
Jun 1951	20,331	20,382	Dec 1964	48,687	46,807
Dec 1951	23,225	22,831	Jun 1965	49,594	47,377
Jun 1952	25,692	25,102	Dec 1965	50,664	49,368
Dec 1952	25,490	24,548	Jun 1966	52,403	52,171
Jun 1953	25,728	27,741	Dec 1966	53,969	53,705
Dec 1953	26,089	29,191	Jun 1967	54,359	53,996
Jun 1954	27,975	28,820	Dec 1967	52,873	54,422

<u>AS OF</u>	<u>AUTHORIZED</u>	<u>ASSIGNED</u>	<u>AS OF</u>	<u>AUTHORIZED</u>	<u>ASSIGNED</u>
Jun 1968	53,151	51,675	Dec 1977	45,365	47,722
Dec 1968	N/A	N/A	Jun 1978	39,840	42,689
Jun 1969	52,010	52,327	Dec 1978	46,981	48,034
Dec 1969	50,264	51,522	Jun 1979	47,438	48,338
Jun 1970	57,385	58,825	Dec 1979	49,090	47,580
Dec 1970	N/A	N/A	Jun 1980	49,025	48,731
Jun 1971	54,524	55,870	Dec 1980	49,363	48,066
Dec 1971	53,086	54,855	Jun 1981	48,713	48,488
Jun 1972	50,129	52,248	Dec 1981	49,420	48,825
Dec 1972	48,913	50,501	Jun 1982	50,112	50,500
Jun 1973	47,028	49,549	Dec 1982	50,643	50,917
Dec 1973	47,174	49,519	Jun 1983	51,185	52,321
Jun 1974	45,898	47,576	Dec 1983	51,456	52,902
Dec 1974	44,825	47,201	Jun 1984	51,391	53,173
Jun 1975	44,243	45,960	Dec 1984	55,532	56,967
Dec 1975	43,385	45,061	Jun 1985	57,211	58,457
Jun 1976	41,480	44,748	Dec 1985	57,724	57,695
Dec 1976	47,471	51,154	Jun 1986	57,281	58,771
Jun 1977	47,501	50,053	Dec 1986	58,788	58,782
			Jun 1987	56,575	55,208
			Dec 1987	55,659	54,847

\* Does Not Include Civilians.

\*\*Not Available.

SOURCE: AFCC Annual Histories.



## APPENDIX 7

### COMMAND MANNING BY GRADE/FUNCTIONAL AREA/CAREER FIELD

#### OFFICER/ENLISTED

1966 - 1987

#### OFFICER MANNING

<u>YEAR</u>	<u>COMMS</u>		<u>COMM SYS/ COMPUTER SYS</u>		<u>ATC</u>		<u>SUPPORT</u>	
	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>
FY66	1,630	1,643			542	509	531	480
FY67	1,574	1,596			521	498	612	464
FY68	1,618	1,694			547	543	569	521
FY69	1,662	1,714			556	541	579	551
FY70	1,936	1,898			525	550	594	627
FY71	1,770	1,852			465	541	832	775
FY72	1,591	1,608			443	506	695	687
FY73	1,648	1,596			465	478	584	565
FY74	1,670	1,565			591	462	579	571
CY75	1,568	1,600			540	523	492	444
CY76	1,818	1,839			499	510	482	536
CY77	1,832	1,663			489	454	346	320
CY78	1,826	1,713			391	367	735	719
CY79	1,953	1,801	334	308	430	319	446	431
CY80	2,002	1,907	374	356	421	384	446	441
CY81	1,969	2,058	376	372	424	389	465	461
CY82	2,063	2,025	414	394	426	405	466	478
CY83	2,052	2,060	447	406	378	391	501	490
CY84	2,058	2,057	1,261	989	375	369	659	626
CY85	3,507	3,476	375	349	655	634		
CY86	3,588	3,545	353	364	676	662		
CY87	3,471	3,382	336	329	653	634		

FY (Fiscal Year) dates are as of 30 June.

CY (Calendar Year) dates are as of 30 December.

# ENLISTED MANNING

YEAR	COMMS				ATC				SPT/OTHER		COMP/SYS	
	OPS		MAINT/SPT		OPS		MAINT		AUTH	ASS	AUTH	ASS
	AUTH	ASS	AUTH	ASS	AUTH	ASS	AUTH	ASS				
FY66	13,809	14,069	15,148	16,079	6,216	5,850	3,233	3,328	5,168	4,292		
FY67	13,857	13,664	16,300	18,340	6,415	6,389	2,224	2,346	2,543	2,480		
FY68	14,291	14,423	17,247	17,937	6,952	6,471	2,461	2,308	4,487	4,530		
FY69	13,573	13,733	15,768	15,828	6,289	6,554	2,302	2,145	5,598	5,684		
FY70	12,322	12,993	18,127	18,318	6,496	6,529	2,589	2,574	6,693	5,759		
FY71	11,007	11,602	17,727	17,828	6,110	6,805	2,489	2,553	6,474	6,518		
FY72	6,852	9,925	16,377	16,890	5,732	6,735	2,489	2,553	5,945	6,478		
FY73	7,998	8,971	15,062	16,450	5,803	6,015	2,490	2,377	5,872	6,459		
FY74	7,422	8,282	13,919	15,445	5,875	5,411	2,415	2,629	6,411	6,543		
CY75	6,076	6,752	13,091	14,226	5,728	5,782	2,411	2,734	5,565	5,759		
CY76	7,774	8,196	15,964	18,402	5,687	5,991	2,372	2,862	4,924	5,352		
CY77	7,482	7,743	16,378	18,123	5,406	6,006	2,280	2,596	4,055	4,145		
CY78	7,325	7,828	16,613	17,541	5,490	5,554	2,261	2,258	4,777	5,021		
CY79	7,724	8,473	17,728	17,921	5,492	5,103	2,352	2,217	4,423	4,469	583	636
CY80	7,686	8,015	17,460	17,620	5,436	5,208	2,343	2,157	4,389	4,532	642	668
CY81	7,681	7,884	17,835	17,744	5,451	5,225	2,339	2,283	4,404	4,641	667	686
CY82	7,960	7,796	18,287	19,022	5,413	5,586	2,319	2,478	4,641	4,705	679	723
CY83	8,047	8,220	18,976	19,437	5,418	5,569	2,273	2,421	4,752	4,859	716	742
CY84	8,034	8,385	19,299	20,073	5,319	5,582	2,225	2,470	5,122	5,158	3,394	3,900
CY85	1,510	1,496	19,722	19,783	5,255	5,520	2,182	2,311	5,005	5,709	10,040	10,541
CY86	12,199	12,320	15,301	15,527	5,148	5,381	2,773	2,858	5,175	5,422	3,940	4,031
CY87	12,166	11,997	14,646	15,675	5,124	5,267	2,746	2,890	4,975	5,168		

FY (Fiscal Year) dates are as of 30 June.

CY (Calendar Year) dates are as of 30 December.

## APPENDIX 8

### AFCS/AFCC

#### COMMAND MANNING BY GRADE

1961 - 1987

<u>YEAR</u>	<u>OFFICER</u>		<u>ENLISTED</u>		<u>CIVILIAN</u>		<u>CMD TOTAL*</u>	
	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>	<u>AUTH</u>	<u>ASS</u>
1961	2,127	2,008	25,812	25,784	2,493	2,266	30,432	30,058
1962	2,362	2,272	34,398	29,691	4,610	4,517	41,370	36,480
1963	2,469	2,571	37,564	38,770	6,329	5,939	46,362	47,280
1964	2,546	2,685	36,251	40,938	5,922	5,971	44,719	49,594
1965	2,685	2,596	40,938	39,010	5,965	5,924	49,588	47,530
1966	2,703	2,632	43,574	43,618	6,126	5,926	52,403	52,176
1967	2,707	2,558	45,820	45,362	6,076	6,076	54,603	53,996
1968	2,828	2,870	45,438	45,669	5,911	6,006	54,177	54,545
1969	2,797	2,806	43,530	43,944	5,705	5,604	52,032	52,354
1970	3,055	3,075	46,227	46,049	8,002	8,196	57,284	57,320
1971	2,993	3,076	45,088	45,867	7,677	7,657	55,758	56,600
1972	2,732	2,797	40,357	42,340	7,040	7,111	50,129	52,248
1973	2,697	2,639	37,225	40,272	7,106	6,638	47,028	49,549
1974	2,840	2,598	36,042	38,310	7,130	6,802	46,012	47,710
1975	2,600	2,567	32,871	35,253	7,914	7,241	43,385	45,061
1976	2,799	2,885	36,721	40,803	7,951	7,360	47,471	51,048
1977	2,667	2,437	35,601	38,613	7,097	6,591	45,365	47,641
1978	3,066	2,840	36,466	38,202	7,585	7,160	47,117	48,202
1979	3,193	2,928	38,355	38,767	7,585	6,911	49,133	48,606
1980	3,243	3,088	37,982	38,175	7,674	6,894	48,899	48,159
1981	3,234	3,280	38,396	38,444	7,790	7,037	49,420	48,761
1982	3,369	3,302	39,343	40,266	7,922	7,364	50,643	50,932
1983	3,378	3,324	40,208	41,222	7,807	6,840	51,371	51,386
1984	4,188	4,041	43,028	45,062	8,316	7,781	55,532	56,884
1985	4,537	4,459	43,958	44,859	9,229	8,377	57,724	57,695
1986	4,617	4,571	44,627	45,448	9,519	8,762	58,763	58,781
1987	4,459	4,386	43,516	44,951	9,386	8,675	57,361	58,012

## APPENDIX 9

### AFCS/AFCC AIRCRAFT INVENTORY 1961 - 1987

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
AC-47A	2	2							
AC-47D	21	21							
AC-54D	6	6							
AT-29C	10	10							
B-47B	1	1							
C-47A		3	2						
C-47D	9+	4	3				1		
*VC-47A		1							
C-54G	1	1	1						
C-135A									
C-140A			4	4	4	4	4	4	4
EC-47D			17	3	3	3	3	3	3
EC-54D			5					1	1
ET-29C			6					2	3
RC-130A									
T-33A	9	9	9	9	9	10	11	10	10
T-39A									
*VC-118A									
*VT-29B									
*VT-39A									
TOTAL	59	58	47	16	16	17	19	20	21

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975-1986</u>	<u>1987</u>
AC-47A							
AC-47D							
AC-54D							
AT-29C							
B-47B							
C-47A							
C-47D							
*VC-47A							
C-54G							
C-135A					1		
C-140A	4	4	4	4	4	4	
EC-47D	3	3	1				
EC-54D							
ET-29C	5	5	3	3			
RC-130A		4	4	4	4		
T-33A	4						
T-39A	1	2	2	2	2	2	
*VC-118A		1	1	1	1		
*VT-29B		3	2	2	2		
*VT-39A		1	1	1	1		
TOTAL	17	23	18	17	15	6	0

\* Support Aircraft.

+Combined Total of C-47A, C-47D, VC-47A.

SOURCE: AFCC Histories 1961-1986.



## APPENDIX 10

### AFCS/AFCC

#### TOTAL OPERATING BUDGET

FY 1962 - FY 1987

<u>FISCAL YEAR</u>	<u>OPERATING BUDGET</u>
1962	\$ 213,383,150
1963	298,437,000
1964	281,221,200
1965	247,942,000
1966	234,202,000
1967	259,062,700
1968	249,132,650
1969	263,073,000
1970	264,710,000
1971	345,393,000
1972	348,060,000
1973	355,888,000
1974	363,820,000
1975	364,790,000
1976	355,766,000
1977	386,020,000
1978	364,776,000
1979	442,120,000
1980	487,566,000
1981	571,509,000
1982	653,917,000
1983	721,104,000
1984	805,295,000
1985	938,199,000
1986	1,025,431,000
1987	999,801,000

## GLOSSARY

AACS	Army Airways Communications System
AAFES	Airways and Air Communications Service
AB	Army and Air Force Exchange Service
ACS	Air Base
ADVON	Alaska Communications System
ADWS	Advanced Echelon Team
AFAFC	Automatic Digital Weather Switch
AFB	Air Force Accounting and Finance Center
AFCC	Air Force Base
AFCS	Air Force Communications Command
AFLC	Air Force Communications Service
AFS	Air Force Logistics Command
AFSATCOM	Air Force Station
AFSPACECOM	Air Force Satellite Communications System
AFSC	Air Force Space Command
AFSINC	Air Force Specialty Code
AFTPC	Air Force Service Information and News Center
AIRCOMNET	Air Force Teleprocessing Center
AIROPNET	Air Communications Network
ARDC	Air Communications Network
AS	Air Operational Network
ATALARS	Air Research and Development Center
AUTODIN	Air Station
AUTOVON	Automated Tactical Aircraft Launch and Recovery System
AWDS	Automatic Digital Network
BIDDS	Automatic Voice Network
BMEWS	Automated Weather Distribution System
CAA	Base Information Digital Distribution System
COMLOGNET	Ballistic Missile Early Warning System
CSAF	Civil Aeronautics Administration
DCAA	Combat Logistics Network
DCOMIS	Chief of Staff of the Air Force
DCS	Danish Civil Aviation Administration
DEB	Dial Central Office Management Information System
DMIP	Deputy Chief of Staff
DOD	Digital European Backbone
DSN	Defense Communications System Mediterranean Improvement Program
EAM	Department of Defense
ECD	Defense Switched Network
EMS	Emergency Action Message
ESC	European Communications Division
FAA	Emergency Mission Support
FCC	Electronic Security Command
FEDSIM	Federal Aviation Agency
GCA	Federal Aviation Administration
GCCS	Federal Communications Commission
GEEIA	Federal Computer and Evaluation Simulation Center
	Ground Controlled Approach
	Global Command Control System
	Ground Electronic Engineering Installation Agency

GLCM	Ground Launched Cruise Missile
GLOBECOM	Global Communications System
GWEN	Ground Wave Emergency Network
HF	High Frequency
HQ	Headquarters
HURCOM	Hurricane Communications
IBM	International Business Machine
IEMATS	Improved Emergency Message Automatic Transmission System
LMR	Land Mobile Radio
LORAN	Long Range Navigation
MAC	Military Airlift Command
MARS	Military Amateur Radio System
	Military Affiliate Radio System
MATS	Military Air Transport Service
MBC	Meteor Burst Communications
MEITS	Mission Effective Information Transmission System
MWR	Morale, Welfare, and Recreation
NAFIS	Navigational Aid Flight Inspection System
NASP	National Airspace System Plan
NATO	North Atlantic Treaty Organization
NAVAID	Navigational Aid
NCA	Northern Communications Area
NCO	Noncommissioned Officer
NOTAM	Notice to Airmen
PACAF	Pacific Air Forces
RAF	Royal Air Force
SAC	Strategic Air Command
SC4	Systems for Command, Control, Communications, and Computers
SACCA	Strategic Air Command Communications Area
SACDIN	Strategic Air Command Digital Information Network
SCA	Southern Communications Area
SEAMARF	Southeast Asia Military Altitude Reservation Facility
SI	Information Systems
TAC	Tactical Air Command
TACAN	Tactical Navigation
	Tactical Air Navigation
TAWDS	Transportable Automated Weather Distribution System
TERPS	Terminal Instrument Procedures
TRACALS	Traffic Control and Landing Systems
UHF	Ultra High Frequency
USAF	United States Air Force
USAFE	United States Air Forces in Europe
VHF	Very High Frequency
VIP	Very Important Persons
VOLMET	Volume Meteorological
VOR	Visual Omni-Directional Range
WAC	Women's Army Corps
WAF	Women in the Air Force
WICU	Weather Intercept Control Unit

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