THE HISTORY OF

SALT LAKE AIR ROUTE TRAFFIC CONTROL CENTER

Chief: Mr. William J. Decker Ass't Chief: Mr. Harold S. Greenleaf

HISTORICAL COMMITTEE

Chairman:	Mr. Chester Olsen
Narrative:	Mr. Erin S. Seely
Statistics:	Mr. Max Creer
Photography:	Mr. Jack Malin

BACKGROUND OF THE FEDERAL AVIATION AGENCY

"The Federal Aviation Act of August 23, 1958 created the Federal Aviation Agency as an independent branch of the United States Government charged with the safety and progress of American civil aviation. The new Agency emerged at a time of great technological change when civil jets were already in existence, supersonic transports in the planning and ultrasonic aircraft in the discussion stage. Electronic computers and automatic data processing equipment, well beyond the trial stage, were being considered for use in the control of air traffic.

"FAA began operating on December 31, 1958, consolidating the activities of the 20-year-old Civil Aeronautics Administration, the year-old Airways Modernization Board and part of Civil Aeronautics Board. From these elements a single organization was welded to meet the challenge of America's expanding wings.

"Today FAA is responsible for writing safety rules and regulations, for allocating and regulating airspace, for managing air traffic and for conducting research and development.

"Historically, the Federal Aviation Agency reaches back to the Air Commerce Act of 1926 which created the Aeronautics Branch (later the Bureau of Air Commerce) in the Department of Commerce. This was the first recognition by the Federal Government of the need, for some regulation of an infant industry--civil aviation. The Department was authorized to license pilots, develop air navigation facilities, promote flying safety and issue flight information. By the late 1930s the infant industry was maturing rapidly. Larger and faster aircraft appeared on the airways and passenger travel increased, soaring ten-fold from 1929 to 1939. Air transportation had become an integral part of American life and an adjunct of national defense. During this period of great expansion, the Bureau of Air Commerce carried on

its regulatory activities, the Post Office Department established air routes and awarded mail contracts and the Interstate Commerce Commission fixed the carrier rates. This system was obviously cumbersome.

"Change came with the enactment of the Civil Aeronautics Act of 1938, which created the independent Civil Aeronautics Authority, comprised of the Civil Aeronautics Board and the Civil Aeronautics Administration. The Civil Aeronautics Administrator was responsible for the enforcement of safety, the control of air traffic, the operation of the Federal airways communications system and the improvement of airports. The Board was charged with writing the Civil Air Regulations, investigating accidents, awarding routes and establishing mail and passenger rates. In 1940, the Act was amended. Although the functions were unchanged and the Board remained independent, the CAA was placed under the Department of Commerce.

"World War II gave a tremendous impetus to civil aviation. In the years immediately following, the number of civil aircraft doubled and it became apparent that the air traffic control capabilities of the CAA could not cope with the serious problem of our increasingly congested airspace. The enormity of the airways gap was identified by the White House Aviation Facilities Study Group in 1955. This was the year in which appropriations for Establishment of Air Navigation Facilities declined to $5,000,000 and the appropriation for Research and Development declined to $1,750,000. The President and the Congress moved toward a solution. One of the first and most important actions taken was the passage of the Airways Modernization Act of 1957, creating the Airways Modernization Board for the express purpose of speeding the necessary improvements. The ACT also specified that Congress would establish an independent Federal Aviation Agency. This was done in August 1958. The Federal Aviation Act of 1958 repealed the Air Commerce

Act of 1926, the Civil Aeronautics Act of 1938 and the Airways Modernization Act.

"Today, FAA's responsibilities and activities are worldwide. They encompass all of the United States and its possessions and touch upon the international areas in which our flag carriers operate, providing the around the clock services necessary to assure the safety and regularity of air travel."

FACILITY CHIEFS SALT LAKE CITY AIR ROUTE TRAFFIC CONTROL CENTER

Edward A. Westlake CAF-10 $3,500.00
ARTC Manager 11-1-38 Chief 9-16-41 until 10-16-41

Lowell R. Wright CAF-10 $3,500.00
Chief 10-16-41 until 5-16-42 transfered to Los Angeles ARTCC

Lenn L. Middlecauff CAF-10 $3,500.00
Chief 6-1-42 until 12-16-43 transfered to Santa Monica

Richard G. Blakeslee CAF-10 $3,500.00
Chief 12-16-43 until 5-1-45 transfered to Oakland ARTCC

Harold Howard CAF-10 $3,500.00
Chief 5-1-45 until 12-30-45

Leonard N. Morris CAF-10 $4,190.00
Chief 12-30-45. Returned from military leave and relieved Harold Howard as Chief. Resigned 6-7-46.
(Harold Howard Asst. Chief)

Harold Howard GS-12
Chief 6-7-46 Resigned 8-25-59 GS-12
(Harold S. Greenleaf Asst. Chief)

Harold S. Greenleaf GS-13
Acting Chief 3-7-59 until 8-17-59 and 8-25-59 until 11-23-59

Robert B. Mayo GS-14
Chief 11-23-59 until 5-30-64 Transfered to Seattle ARTCC
(Harold S. Greenleaf Asst. Chief)

Harold S. Greenleaf GS-13
Acting Chief 5-30-64 until 8-16-64

William J. Decker GS-14
Chief 8-16-64
(Harold S. Greenleaf Asst. Chief)

On December 17, 1903, the Wright Brothers made the first flight in a power-driven, heavier than air machine, near Kitty Hawk, North Carolina. This flight lasted 12 seconds and covered 120 feet.

Men of vision understood the promise of that December day in 1903, but it was the demands of war that nurtured the infant aviation and sped its growth. During the latter part of World War I, the idea of using aircraft for air mail, and transportation was realized. "One of aviation's now historic dates was May 15, 1918 when the Post Office initiated the first airmail route between Washington and New York. The circumstances surrounding the occasion, more than the event, point up the incredible progress of aviation from those days. Appropriate to its significance, President Wilson, the Postmaster General, other cabinet members and dignitaries assembled at the airfield in Washington prior to take-off. But happy anticipation turned into anguish when it was discovered that the mechanics had forgotten to fill the fuel tanks. Nor was there any fuel readily available. A supply was finally drained from the tanks of other aircraft and amid cheers the plane took off, the pilot however, missed the route and headed rapidly in the wrong direction, eventually landing on a farm in Southern Maryland."

Prior to 1920, there were no problems with airspace and with navigational systems. All flying was by visual contact with the ground; in 1921, the first transcontiental night flight was made with obliging farmers lighting bonfires to serve as beacons. The first aids to navigation were light beacons located between New York and Chicago, low-frequency radio range stations were introduced in the thirties.

It was, however, the idea of moving passengers through the air that most captured public fancy. On April 17, 1926, the first commercial air transport passenger, in the United States and perhaps the world, as such departed the Salt Lake Airport on Western Air Express and thus was instituted a new industry

and a new form of travel. In the few intervening years it has grown to be an industrial giant and the hub of many associated component industries, employing hundreds of thousand of people and contributing billions in payroll annually.

Larger and faster aircraft appeared on the airways and passenger travel increased, soaring ten fold from 1929 to 1939. There was a great need for traffic regulation and safety, t is was the birth to our present Federal Aviation Agency.

Air Traffic Control was born in the early thirties as an airline-financed private venture, "Air Traffic Control, Inc." This was to make the airways safe for the airlines. The first center was a dingy office under the tower cab at Newark Airport.

When IFR operations were discovered by other civil users of the airways as well as the military, the Corporation volunteered its services to Government. And on July 6, 1936, the Federal Government officially took over Air Traffic Control, Inc.'s operations, including the ten controllers.

The Salt Lake City Air Route Traffic Control Center was officially commissioned on April 1, 1939, as part of the Civil Aeronautics Authority. The first operating space was located on the third floor of the Municipal Airport Administration Building, space totaled approximately 300 square feet. Control of the entire center area was from one control sector. At the time the Center was commissioned in 1939, there were only nine other Centers in the United States and only two others (Los Angeles and Oakland) west of the Mississippi.

The first controllers Salt Lake Air Traffic Control Center:

Edward A. Westlake	11-1-38	Chief Controller
Claude R. Brand	11-1-38	Controller
Orland R. Pope	11-1-38	Controller
Charles H. Jones	11-1-38	Controller
Robert B. Hurley	11-4-38	Assistant Controller
C. B. Whitney	12-5-38	Assistant Controller
James D. Odom	10-1-39)	First Trainees
Glenn D. Kelly	11-20-39)	

In the early years, traffic control was a primitive science, the tools of air traffic control were some telephones, a blackboard, and a table map with "Shrimpboats" representing aircraft. Even before the use of blackboards in the Center, the ETA's over fixes or airports were merely written out as they became available and the controller had to memorize the sequence. There were no interphones connections between the early Centers, nor was there direct pilot controller communications.

Reliance was placed on a radio operator, miles away, relaying reports from pilot to Center controllers. Pilot reports and estimates were the only source of information available to the controller to pinpoint the locations of flights under his control jurisdiction. It was a time-consuming and airspace wasting operation; however, with few aircraft at relatively slow speeds this system was satisfactory.

In November 1942, operating quarters were remodeled, an additional control sector was added, and the personnel complement at this time consisted of Chief, one senior controller, four controllers, six assistant controllers.

In 1944, Operating space consisted of 500 square feet plus administrative office for the Chief Controller and secretary: There were now three control sectors.

After World War II, military aviation increased a hundred fold, the number of civil aircraft doubled. The omnirange was developed utilizing static-free frequencies, the first VOR airway was along the New York-Chicago-Salt Lake-San Francisco Route. Later, many VORTAC facilities were added to the VOR airways. The airways and all the navigational and communication equipment form a "common system" to be used by the small plane flyer, the commercial carrier and the military.

In September 1948, operating quarters were moved to the Air Training Command Annex. The three sectors were retained but operations space was increased to 1080 square feet. Staff now consisted of Chief, three senior

controllers, ten controllers and ten assistant controllers.

In September 1949, the Salt Lake Center had an authorized staffing of Chief, four senior controller, fourteen air route traffic controller, fourteen assistant controllers, and one stenographer.

Chief Air Route Traffic Controller
Harold C. Howard

Senior Controllers
Allen D. Carter
William B. Duncan
Harold S. Greenleaf
William F. Zauche, Jr.

Center Stenographer
Gayle H. Grainger

Controllers
William O. Allen
George R. Ames
Grover R. Austad
Milton H. Behrens
Wayland H. Campbell
George H. Durand
Stuart Halsey
Stillman J. Harding
Owen S. Love
Hart H. Mark
Sylvester L. McElroy
Florence G. Petersen
Harry A. Suffron
Edward M. Waggoner

Assistant Controllers
Glen M. Allen
Dale F. Backman
George A. Brinton
Joseph C. Dillon
Harlee M. Hansley
Herbert L. Harbertson
Harry M. Hempy
Robert E. Kelly
Charles J. May
Edgar V. Walkington
Robert E. Weir
Dwight J. Williams
William G. Work
A. Earl Worthen

The first basic Center direct pilot communications network was installed in January 1951, located atop Coon Peak southwest of Salt Lake City. The installation of this radio frequency was the beginning of a wide network of radio facilities eventually totaling 83 frequencies, that enables the pilot and controller to communicate directly in any sector of the Salt Lake City Center's control area. These transmitter/receiver sites, are controlled and operated through the use of telephone lines and micro-wave repeaters.

In March 1957, operations space was doubled and seven sectors were activated. On December 1, 1957, the jet routes were designated, and four high altitude sectors were added to make a total of 11 sectors. The personnel complement was four senior controllers, 20 controllers, 20 assistant controllers,

plus 50 trainees in a crash--training program. The Salt Lake Center had officially entered the jet age, the multi-million-dollar peripheral radio system was installed, and millions of dollars appropriated for installation of long range radar facilities.

Aviation continued to grow at a phenomenal rate, each month set new records in the number of aircraft the Salt Lake Center handled. The airways became increasingly congested with planes of all sizes and shapes, speeds and purposes.

In July 1959, radar information from the Francis Peak radar site, fifteen miles Northeast of Salt Lake City was brought into the Center and radar service was provided for the first time.

The Francis Peak ARSR-1 was commissioned on July 29, 1959, this was the first radar used by Salt Lake Center. The site is located fifteen miles northeast of the Center on a graded peak at 9,500 feet MSL. This site is joint use with the 130th AC&W Squadron located at the Salt Lake Municipal Airport. The 200 mile range was used on the PPI scopes, while 100 mile range was used on VG scopes. One VG scope was off-centered to cover 115 miles to the South, this allowed better identification procedures on inbound aircraft from over Delta, Utah. This function has provided continuous radar service for enroute aircraft, also departure and arrivals at Hill AFB, and Salt Lake Municipal Airport.

AUTHORIZED STAFFING DECEMBER 1959

CHIEF CONTROLLER
Robert B. Mayo

DEPUTY CHIEF
Harold S. Greenleaf

ASST. CHIEF, PROFICIENCY DEVELOPMENT
Stillman J. Harding

ADMINISTRATIVE ASSISTANT
Mary M. McMinds

SECRETARIES

Carol Watts | Twildi R. Aman | V. Jean Longhurst

WATCH SUPERVISORS

Stuart Halsey | Dwight J. Williams | Dale F. Backman | William G. Work
Lynn H. McCreary

FLOW CONTROL/COORDINATORS

Wayland H. Campbell | Owen S. Love | Glen M. Allen | Samuel P. Goodman
Milton H. Behrens | Max L. Menlove | Bernard P. McEnany | Chester L. Olsen
Ray L. Boman | Louis E. Wright | Max E. Kay | Edward J. Lusiensk

RADIO/RADAR CONTROLLERS

George A. Brinton | James G. Cottam | Paul F. Jenkel | J. Allen Call
Thomas B. Arbuckle | David P. Jenkins | John Padilla, Jr. | Richard J. Davis
Carlyle L. Brown | Duane S. Willis | Herbert W. Decker | Alden P. Rigby
Dale S. Mathews | Kenneth L. Kerr | Mark W. Paxman | Robert K. Wright
Robert B. Oswald, Jr. | Blaine G. Tempest | William S. Higgs | Gerald H. Lizenber
Wesley E. Nordgren | Jack H. Murdock | Kenneth Pratt | Kenneth L. Olsen
'all R. Oman | Deward D. Urry

CONTROLLERS

Alfred T. Beck | Charles D. Burchett | Robert M. Hacker | G. Terry Nielsen
Harold K. Carn | Clayton W. Fike | Clair A. Whitehead | Thirl Christensen
Keith R. Riley | Raymond F. Alvey | Richard F. Daly | Merrill R. Nielsen
Robert M. Chambers | Clyde A. Linder | Louis L. Kearns | Fred H. Tew
Darrell J. Malin | Norton B. James, Jr. | James E. George | William J. Stiehl
Wallace T. Bertram | Harold L. Jolley | Lowell Babcock | Glen J. Carter
Perry D. Peacock | Richard L. Stout | Stanley H. Johnson | Kenneth D. McMilla
Dewaine Buck | Rodney L. Westphal | Melvin L. Wimber | Glenn R. Molyneux
Richard I. Haggin | John W. Simper | Blaine Bowden | James R. Orton

ASSISTANT CONTROLLERS

Max B. Creer | William L. Ormsby | Elton F. Bangerter | Howard L. Roper
Julius F. Herrick | Paul E. Jerominski | John W. Downey | Carl L. Gillies
Alfred A. Lee | Rulon W. Cluff | Harry D. Walker | Richard S. Ford
Robert E. Coxey | Alan G. Sharp | William R. Mower | Saylor C. Jeppson
Marcus M. Parry | Val S. Stringfellow | Rulon E. Pearce, Jr. | Thomas E. Flowers
Paul E. Huber | Donald W. Dunlap | Kenneth D. Healey | Chester E. Ruxer
William N. Rodenhurst | Gary W. Rutherford | Delbert M. Thomas | Roy A. Kounalis
Jack Lee | Ronald D. Sullivan | George S. Cantrell | Loyd J. Warnick
Fred W. Van Sant | Wayne D. Griffiths | Harold D. Morris | Erin S. Seely
Stewart W. Glenn | Clifford W. Meade | Harvey F. Crosby | Roy J. Hutchinson
George M. Fitz | Roy K. Kamigaki | Jay F. Thompson | Gerald C. Young
Le'l A. Vance | Harold E. Richlie | John P. Budzak

TELETYPE OPERATORS

Elsa C. McKay | Richard H. King | Elvera K. Kemp | John L. Frye

On June 20, 1960, ground was broken at the site of the six million dollar, earthquake-radiation proof FAA Air Route Traffic Control Center at 21st West and 6th North. Participants in the ground-breaking ceremony included Gov. George D. Clyde; Mayor J. Bracken Lee and other commissioners; Joe Bergin, Airport Manager; members of the State Aeronautics Commission; Representatives of the Salt Lake City Chamber of Commerce, the FAA, the Utah National Guard and all airlines serving the city. The building is on 10½ acre plot, and contains about 51,000 square feet.

The facility replaced the control center adjacent to the terminal. The jet age, and improvements in air traffic control procedures, installation of radar and other electronic and automatic equipment, made the new building necessary.

STAFFING OCTOBER 1962

CHIEF
Robert B. Mayo

ASSISTANT CHIEF
Harold S. Greenleaf

FACILITY TRAINING OFFICER
David E. Candland

FACILITY OPERATIONS OFFICER
Stuart Halsey

FACILITY SECURITY OFFICER
John B. Haskew

ADMINISTRATIVE ASSISTANT
Mary M. McMinds

CARTOGRAPHIC DRAFTSMAN
Keith C. Nelson

RECEPTIONIST
Vicki J. Christensen

SECRETARIES

Valene R. Adamson
Twildi R. Aman
M. Monique Sells

WATCH SUPERVISORS

Allen, Glen M.
Campbell, Wayland H.
McCreary, Lynn H.
Dwight J. Williams
William G. Work

COORDINATORS

Arbuckle, Thomas B.
Behrens, Milton H.
[illegible]n, Ray L.
[illegible]ton, George A.
Call, J. Allen
Cottam, James G.
Decker, Herbert W.
Goodman, Samuel P.
Jenkins, David P.
Kay, Max E.
Love, Owen S.
Lusienski, Edward J.
McEnany, Bernard P.
Menlove, Max L.
Olsen, Chester L.
Rigby, Alden P.
Tempest, Blaine G.
Wright, Luis E., Jr.

RADAR CONTROLLERS

Alvey, Raymond F.
Babcock, Lowell F.
Beck, Alfred T.
Bertram, Wallace T.
Bowden, Blaine
Brown, Carlyle L.
Cuck, Dewaine
Carter, Glen J.
Chambers, Robert M.
Christensen, Thirl I.
Cluff, Rulon W.
Daly, Richard F.
Davis, Richard J.
Downey, John W.
Dunlap, Donald W.
Edwards, Gordon E.
Fike, Clayton W.
Ford, Richard S.
Garn, Harold K.
George, James E.
Griffiths, Wayne D.
Hacker, Robert M.
Haggin, Richard I.
Herrick, Julius F.
Higgs, William S.
Huber, Paul L.
James, Norton B., Jr.
Jenkel, Paul F., Jr.
Jeppson, Saylor C.
Jerominski, Paul E.
Johnson, Stanley H.
Jolley, Harold L.
Kearns, Louis L.
Kerr, Kenneth L.
Lee, Alfred A.
Linder, Clyde A.
Lizenberry, Gerald
Malin, Darrell J.
Mash, James
Mathews, Dale S.
McMillan, Kenneth D.
Molyneux, Glenn R.
Murdock, Jack H.
Nielsen, G. Terry
Nordgren, Wesley E.
Olsen, Kenneth L.
Oman, Kendall R.
Orton, James R.
Oswald, Robert B., Jr.
Padilla, John, Jr.
Paxman, Mark W.
Peacock, Perry D.
Pratt, Kenneth
Riley, Keith R.
Roper, Howard L.
Simper, John W.
Sorensen, Grant J.
Stiehl, William J.
Stout, Richard L.
Stringfellow, Val
Tew, Fred H.
Urry, Deward D.
Walker, Harry D.
Westphal, Rodney L
Whitehead, Clair
Willis, Duane S.
Wimber, Melvin L.

MANUAL CONTROLLERS

Budzak, John P.
[illegible]gerter, Elton F.
[illegible]ey, Robert E.
[illegible]reer, Max B.
Cronin, James L.
Dowd, Lawrence T.
Fitz, George M.
Glenn, Stewart W.
Kamigaki, Roy A.
Mitchell, Grant L.
Morris, James A.
Mower, William R., Jr.
Nielsen, Lynn J.
Olsen, Cecil A.
Ormsby, William L.
Packard, Florence P.
Parry, Marcus M.
Phinney, Elwood L.
Rutherford, Gary W
Ruxer, Chester E.
Seely, Erin S.
Thompson, Jay F.

ASSISTANT CONTROLLERS

Berry, Larry G.	Hahn, Virgil R.	McGaughey, Cene R.	Stalnaker, Rober
[illegible]elsen, Robert C.	Hansen, Grant A.	Moore, Leon E.	Stuka, Stanley S
[illegible]efield, Richard W.	Johnson, Edward M.	Pearce, Rulon E., Jr.	Sullivan, Ronald
Bowden, Renold L.	Kounalis, Roy A.	Ramsey, Richard W.	Thompson, James
Crosby, Harvey F.	Larson, Kenneth L.	Riches, Ray T.	Vaughn, Clyde G.
Duke, Harold C., Jr.	Mancuso, Jimmy F.	Spackman, Robert C.	Ward, John P.
East, Gerald L.	McAllister, Alfred J.		

TRAINEES

Hill, Johnny Jr.	Lovelace, John C.	Pabor, William E.	Thompson, Mauric
Jones, Ray D.	Marsh, Donnell H.	Pratt, Kermit H.	Watts, Philmon H
Lochhead, Paul R.	Mastropietro, Pasquale J.	Rynearson, Frederick	L. Walton, Lane

SUPERVISORY TELETYPIST

McKay, Elsa C.

TELETYPE OPERATORS

Beckert, Edna R.	Frye, John L.	Kemp, Elvera K.	King, Richard H.
Ewell, Monte E.	Hendrickson, LaVon R.		

At a cost of $6,349,940, of which $3,065,250 was for building property etc., $3,284,690, for equipment, Salt Lake Air Route Traffic Control moved into its new home at 2150 West 6th North. The excellent interior and landscape architecture created a very pleasant environment in which to conduct the very important Air Route Traffic Control activities. On October 1, 1962, the new building with its modern installation of radar systems, telephone lines, radios, and related tools for control of air traffic was commissioned. The cut-over of radar systems, tele hone lines controlling peripheral radio sites, landlines and teletypes took place at 3:00 AM on that date. There were now 15 control sectors.

The foundation engineering and construction of this building was unique in that no excavation was involved. The building is supported by 367 friction pilings, average depth 53 feet, and the ground level was raised to cover the basement floor through the use of over 130,000 cubic yards of fill. Over 50 miles of reinforcing steel was used in the building, ranging from three eights of an inch to one and one half inches in diameter.

During the construction, the contractor poured more than 5200 yards of concrete. Around the control room there is a wall made up of "Lincoln Logs" of reinforced concrete. Each "log" is two feet by one and one half feet, and twenty feet long, so laid as to make a wall eight feet high from the control room floor. This shield of reinforced concrete is designed to protect the "heart" of the Center from radiation due to nuclear fall-out. The insulated terneplate roof has been equipped with a washdown system, capable of supplying 1,000 gallons of water per minute, to remove radio-active fall-out particles in the event of nuclear attack. A separate eight-inch water main supplies water for the system. Emergency drinking water is supplied from a radiation-proof underground system, that can provide a total of 4,000 gallons of water. Automatic humidity and temperature controls have been installed for the comfort of the personnel in the windowless operating and equipment area and to cool down and protect the electrical equipment that must be operated 24 hours a day.

Electrical power needed to operate the many electronic devices would be comparable to the power requirements of a community of 1,000 homes. There is also a stand-by emergency equipment in the event of power failure. The Center is served by 45 telephone circuits. More than 500 miles of wire were required for the electronic radar and power equipment.

The high steel framework towers rising above the Center are micro-wave link towers. These "Catcher's Mitts" are the final step in relaying radar impulses "thrown" from distances as far as 300 miles. They furnish air traffic controllers with important information on aircraft positions and headings which enable them to "vector" aircraft to insure the fastest possible handling with safety.

Cedar City radar was commissioned on February 8, 1962. The site is located twenty five (25) miles East of Cedar City, Utah on Blowhard Mountain 10,691 feet MSL making it the highest radar site located in Salt Lake Center area.

Rock Springs radar was commissioned on October 26, 1962. The site is located eighteen (18) miles Southeast of Rock Springs, Wyoming, on Aspen Mountain 8,661 feet MSL.

Battle Mountain radar was commissioned on June 2, 1963. The site is located twenty-six (26) miles Southwest of Battle Mountain, Nevada, on Lewis Peak 9,601 feet MSL.

Boise radar was commissioned on July 18, 1963. The site is located Southwest of Cascade, Idaho, on Snow Bank Mountain 8,318 feet MSL.

Lovell radar was commissioned on August 7, 1963, the site is located forty (40) miles West of Sheridan, Wyoming in Big Horn County, a top Medicine Mountain 9,967 feet MSL.

Ashton radar was commissioned on December 24, 1963. The site is located thirty (30) miles Northwest of Ashton, Idaho on Sawtelle Peak 9,904 feet MSL.

Positive control area was designated from FL 240 through FL 600 throughout the Salt Lake City ARTCC area, effective November 12, 1964. The Soaring Society of America (SSA) objected to this because of the inconvenience which designation of positive control area caused to glider flights. The SSA questioned whether the chance for collision is lessened or increased in positive control area.

On June 29, 1965, the FAA announced examination for Flight Data Aid GS-5 $5,000, for duty in the Federal Aviation Agency at Salt Lake City Air Route Traffic Control Center, Salt Lake City, Utah. The Flight Data Aid's work in the Center will be to receive and validate proposed instrument flight plans, to encode such information on flight progress strips and prepare the number of strips required for control of the flight through the Center area, and to deliver the flight progress strips to the proper control sectors within the Center.

The Center employs 186 personnel in the Air Traffic Control function, with up to 62 highly skilled technical personnel installing and maintaining the complex of radio and radar equipment. The Salt Lake City Center utilizes seven radar installations throughout the intermountain area to provide control to aircraft within approximately 203,145 square miles of its advisory area. Within the confines of this area, the Agency has installed 43 navigational aids to enable the airborne pilots to navigate accurately throughout the area.

Of the 21 Air Route Traffic Control Centers within the Continental United States, the Salt Lake City Center's flight advisory area is the largest in number of square miles for which this service is provided.

The Air Route Traffic Control Centers provide separation service for all airplanes operating under Instrument Flight Rules (IFR) within their boundaries: aircraft varying in speeds from helicopters to the 600-miles-per-hour, 170-passenger, jet transport, upward into the supersonic ranges of the Nation's military fighters and bombers.

The Center is responsible for maintaining a safe distance between aircraft flying under Instrument Flight Rules (IFR) throughout their area of responsibility. The Federal Aviation Agency employs men, airplanes, telephones, radar, and radio to do the job. When radar is used, airplanes are separated by a minimum of three nautical miles laterally and longitudinally, within 40 miles of the radar antenna, at the same altitude. When the aircraft are 40 miles or more from the antenna, the separation is increased to five miles. Separation of traffic not under radar control is accomplished longitudinally by spacing aircraft at ten minute intervals at the same altitude. Vertically, 1,000 feet separation is provided at altitudes below 29,000 feet, and 2,000 feet separation above that altitude.

Flights in poor weather are conducted under Instrument Flight Rules (IFR). The pilot files a flight plan with the nearest FAA facility at his point of departure which enables the FAA to control the flight from beginning to end.

Salt Lake Air Route Traffic Control Center is linked with other western centers, located at Los Angeles, Oakland, Seattle, Great Falls, and Denver, all of which are a part of a nation-wide network of FAA Air Route Traffic Control Centers.

STAFFING APRIL 1966

FACILITY CHIEF
William J. Decker

ASSISTANT FACILITY CHIEF
Harold S. Greenleaf

OPERATIONS OFFICER
David E. Candland

EVALUATION AND PROFICIENCY OFFICER
John B. Haskew

AIR DEFENSE OFFICER
Stuart Halsey

PLANNING AND PROCEDURES OFFICER
William C. Cassun

ADMINISTRATIVE ASSISTANT
Mary M. McMinds

CARTOGRAPHIC TECHNICIAN (DRAFTING
Keith C. Nelson

RECEPTIONIST
Nancy B. Dyson

SECRETARIES

Va'Lene R. Adamson
Pat L. Farr
Charlene Olsen

WATCH SUPERVISORS

Glen M. Allen
Wayland H. Campbell
Lynn H. McCreary
William G. Work
Dwight J. Williams

CREW CHIEFS

Boman, Ray L.
Brinton, George A.
Decker, Herbert W.
Goodman, Samuel P.
Higgs, William S.
Kay, Max E.
Lusienski, Edward J.
Mathews, Dale S.
McEnany, Bernard P.
Menlove, Max L.
Olsen, Chester L.
Rigby, Alden P.
Wright, Louis E., Jr.

COORDINATORS

Arbuckle, Thomas B.
Behrens, Milton H.
Call, J. Allen
Cooper, Lester G.
Cottam, James G.
Jenkins, David P.
Kerr, Kenneth L.
Love, Owen S.
Paxman, Mark W.

RADAR HANDOFF CONTROLLERS

Alvey, Raymond F.
Anderson, Clarence E.
Babcock, Lowell F.
Beck, Alfred T.
Bertram, Wallace T.
Blair, Ben R.
Boushek, Lauren R.
Bowden, Blaine
Braaten, Earl M.
Brown, Carlyle L.
Buck, Dewaine
Burchett, Charles D.
Carter, Glen J.
Chambers, Robert M.
Clark, Dan D.
Christensen, Thirl I.
Cluff, Rulon W.
Coats, Frank Jr.
Coxey, Robert E.
Creer, Max B.
Cronin, James L.
Crosby, Harvey F.
Daly, Richard F.
Davis, Lyle H.
Davis, Richard J.
Dekleva, Felix J.
Dowd, Lawrence T.
Downey, John W.
Duke, Harold C., Jr.
Dunlap, Donald W.
Fike, Clayton W.
Fitz, George M.
Ford, Richard S.
Gallion, Donald E.
Garn, Harold K.
Glenn, Stewart W.
Griffiths, Wayne D.
Hacker, Robert M.
Haggin, Richard I.
Helsten, Harvey B.
Herrick, Julius F.
Howard, Roy P.
Huber, Paul L.
Irvine, Gregg R.
James, Norton B., Jr.
Jenkel, Paul F., Jr.
Jeppson, Saylor C.
Jerominski, Paul E.
Johnson, Stanley H.
Jolley, Harold L.
Kamigaki, Roy K.
Kearns, Louis L.
Lansbury, Ray S.
Lee, Alfred A.
Linder, Clyde A.
Malin, Darrell J.
Mancuso, Jimmy F.
Mash, James
Mitchell, Grant L.
McMillan, Kenneth D.
Molyneux, Glenn R.
Morris, James A.
Mower, William R., Jr.
Murodck, Jack H.
Nielsen, G. Terry
Nielsen, Lynn J.
Nordgren, Wedey E.
Olsen, Kenneth L.
Oman, Kendall R.
Olsen, Cecil A.
Orton, James R.
Oswald, Robert B., Jr.
Padilla, John, Jr.
Perry, Marcus M.
Peacock, Perry D.
Pearce, Rulon E., Jr.
Phinney, Elwood L.
Pratt, Kenneth
Price, Thomas R.
Riley, Keith R.
Roper, Howard L.
Rutherford, Gary W.
Ruxer, Chester E.
Seely, Erin S.

RADAR HANDOFF CONTROLLERS (Continued)

Simper, John W.	Stiehl, William J.	Tew, Fred H.	Ward, John P.
Sorensen, Grant J.	Stout, Richard L.	Urry, Deward D.	Westphal, Rodney L.
Spackman, Robert C.	Stringfellow, Val S.	Vaughn, ClydeG.	Whitehead, Clair A.
Stalnaker, Robert L.	Sullivan, Ronald D.	Walker, Harry D.	Willis, Duance S.
Wimber, Melvin L.	Wright, Robert K.	McAllister, Alfred J.	McGaughey, Gene R.

ASSISTANT CONTROLLERS

Bangerter, Keith I.	Fisher, Norman R.	Jones, Ray D.	Robert, Neil S.
Bertelsen, Robert C.	Foster, John F.	Lochhead, Paul R.	Rynearson, Frederick L
Bowden, Renold L.	Hansen, Grant A.	Miller, Marvin J.	Snow, Dean B.
Boyle, Harry K.	Harmon, Frank R.	Potter, Roy	Southam, Melvin G.
Couch, Edward L.	Isenhour, David B.	Ramsey, Richard W.	Thompson, Maurice D.
Davis, Vance L.	Johnson, Edward M.	Riches, Ray T.	Walton, Lane W.

FLIGHT DATA AIDS

Bangerter, Elton F.	Hackett, Clarence B.	Newton, Roger D.	Rice, Millard B.
Bockas, William W.	James, Willard L.	Nielsen, LaVern	Shippee, R. Keith
Cawley, Glenn H.	Mansfield, Benjamin J.	Orton, Melvin O.	Smith, Douglas A.
Cude, James R.	McLaughlin, John J.	Reeder, Richard T.	Turner, Earl M.

SUPERVISORY TELETYPIST

McKay, Elsa C.

TELETYPE OPERATORS

Ewell, Monte E.	Gonzales, Andres J.	King, Richard H.	Wilson, Roger R.
Frye, John L.			