



**Mr. Al Moyers**  
*Chief, Office of History  
Hq Air Force Weather Agency*

**Vacant**  
*Staff Historian  
Hq Air Force Weather Agency*

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This is an unofficial publication of the Air Force Weather History Office, Headquarters Air Force Weather Agency, Offutt Air Force Base, Nebraska. The opinions expressed herein are not necessarily the official views of the Department of the Air Force, the Office of the Director of Weather, or the Air Force Weather Agency.

## Operation GRAPE FRUIT Almost Meant Another Move

On February 4, 1953, Maj Gen (later Lt Gen) William "Oscar" Senter, commanding general of Air Weather Service, and Maj Gen E. Blair Garland, commander of Airways and Air Communications Service, flew to Orlando Air Force Base, Florida, as requested by Lt Gen Joseph Smith, Military Air Transport Service commander, to inspect their potential new headquarters. After two days there, neither General Senter nor General Garland was ready to move to Orlando.

In the three years from 1946 to 1948 Air Weather Service headquarters moved three times—from Asheville, North Carolina, to Langley Field, Virginia; from Langley to Gravelly Point, District of Columbia; from Gravelly Point to Andrews Air Force Base, Maryland. At Andrews it shared space with the Military Air Transport Service headquarters and Headquarters Air and Airways Communications Service.

Air Weather Service leadership was greatly satisfied with their location in the National Capital Region. This mitigated having to have a separate

liaison function and the constant travel to Washington to interface with personnel in the headquarters of the Air Force, the Weather Bureau, and the Navy, and the other agencies, bureaus, and committees with which Air Weather Service leadership had regular meetings.



*Air Weather Service headquarters shared this facility at Andrews Air Force Base, Maryland, with Headquarters Military Air Transport Service, 1948-1958.*

However, the Military Air Transport Service headquarters was not large enough to house all its intended occupants. The congestion continued to grow as more and more occupants were squeezed into the same space. The tense situation in the headquarters building came to a head in late 1952. At his staff meeting on December 19 General Smith instructed his service commanders to

visit Orlando Air Force Base to determine the adequacy of the facilities for moving their respective headquarters there. This headquarters movement planning was soon dubbed Operation GRAPE FRUIT.

Air Weather Service leadership immediately began compiling arguments against a move—the move would mean a split headquarters as a presence was required in Washington; the move would necessitate facility upgrades, new computer installations, and additional operating cost; the move would require additional manpower at the headquarters; but, mostly, the move would interrupt the daily conduct of business Air Weather Service headquarters personnel had in the Washington area.

By April 1953 members of Headquarters Air Weather Service were confident that a move to Orlando was not in their future as other Military Air Transport Service organizations showed eagerness to move to Orlando. Air Weather Service headquarters remained at Andrews until 1958. ☆

## 1st Weather Squadron is an Air Force Original



*Pvt Raymond Gengler in the base weather station, Lemoore Field, California, 1944.*



*The Air Force approved this emblem for the 1st Weather Squadron in 1967.*



*Pvt William Machin and Cpl Lillian Perkins in the base weather station at Minter Field, California, 1944.*

The 1st Weather Squadron was constituted on June 24, 1937, in preparation of the Air Corps assuming the weather service from the Signal Corps. The squadron was activated at March Field, California, on July 1, 1937—Air Force Weather's "birthday." The 1st was assigned to the Office of the Chief of the Air Corps.

The squadron headquarters moved to McClellan Field, California, on February 3, 1941. The 1st Weather Squadron was re-assigned to the newly formed Headquarters Army Air Forces in March 1942. As part of an Army Air Forces weather service reorganization the squadron was redesignated 1st Weather Squadron, Regional, on June 16, 1942, to indicate the scope of its responsibilities for the base weather stations in California, Nevada, Utah, and Arizona.

There were numerous reorganizations of the Army Air Forces in World War II and as part of one of them on April 14, 1943, the squadron was assigned to the short-lived Flight Control Command, before being re-assigned to the Weather Wing in May 1943. The squadron returned to its original designation on November 1, 1943, and moved its headquarters to Santa

Monica, California, later that month to better coordinate activities with the Army's regional communications service headquarters and the regional office of the Civil Aeronautics Administration. In another service reorganization the squadron was disbanded on September 7, 1944, and its mission assumed by the 1st Weather Region.

The 1st Weather Squadron was re-activated at Wright Patterson Air Force Base, Ohio, on May 20, 1949, and assigned to the 2102d Air Weather Group. The squadron oversaw weather services in Ohio, Kentucky, West Virginia, Virginia, District of Columbia, Maryland, Delaware, and parts of Pennsylvania.



*The Army first approved an emblem similar to this for the 1st Weather Squadron on December 21, 1943. It was modified and re-instated as the squadron's emblem on December 9, 1993.*

Air Weather Service reassigned the 1st to the 2059th Air Weather Wing in 1950. As part of yet another restructuring the squadron was inactivated on May 20, 1952.

Military Air Transport Service reactivated the 1st Weather Squadron on September 24, 1965, but it was not actually organized until January 8, 1966, at MacDill Air Force Base, Florida, under the 5th Weather Wing.

While at MacDill, the 1st supported several unified commands. It was formed to support the headquarters of the U.S. Strike Command, later redesignated U.S. Readiness Command. The squadron assumed responsibility for providing weather services to Headquarters U.S. Central Command upon that command's activation in January 1983.

Following the divestiture of Air Weather Service and transfer to Tactical Air Command, now Air Combat Command, the 1st Weather Squadron was inactivated at MacDill on June 15, 1992, and, simultaneously re-activated at Langley Air Force Base, Virginia, with the 1st Operations Group. It inactivated again on April 29, 1994. The 1st was reactivated at Fort Lewis, Washington, on July 1, 1994, as part of the 1st Air Support Operations Group. ☆

### AF Weatherman is a Space and Missile Pioneer

In 1997, the Air Force officially established the Space and Missile Pioneer Award to recognize individuals who have played a significant role in the history of Air Force space and missile development. In 2000 the Air Force recognized Col Thomas O. Haig as a space and missile pioneer.

Colonel Haig began his Air Force career as a meteorologist in World War II and has been called by some the *Father of the Air Force Weather Satellite Program*.

After meteorological training, Colonel Haig attended the Meteorology Instrumentation School at Fort Monmouth, New Jersey. He operated the sferics station on Bermuda in the late 1940s (see *Sferics* article on page 4).

During the early 1950s, Colonel Haig directed a program to develop the equipment and techniques for high-altitude reconnaissance balloons. By the late 1950s, he was

chief of the requirements office for satellite ground support.

The first CORONA reconnaissance satellite photos in August 1960 convinced authorities that knowledge of cloud cover was necessary and could be obtained only via satellite. Since the civilian TIROS weather satellite program could not yet meet the requirement, an interim military program was authorized. The interim system was programmed to operate for a year until TIROS could take over. TIROS delays persisted and the interim military system continued.

Colonel Haig had problems operating the meteorological satellites within the ground system designed for CORONA and proposed two dedicated ground stations and a separate control center operated solely by Air Force personnel. Colonel Haig soon oversaw the first operational satellite

program manned entirely by Air Force military personnel.

No longer an interim effort, the military weather satellite received another name—Program 417. Its use was expanded and provided meteorological data for aircraft flights during the Cuban missile crisis, for the evacuation of civilians from the Congo, and for air operations in Vietnam.

The classified work Colonel Haig began with the military meteorological satellite program is now known as the more familiar Defense Meteorological Satellite Program.

The Air Force Weather History Office has "e-copies" of the following studies of the early years of the meteorological satellite program which are available on request: *A History of the Military Polar Orbiting Meteorological Satellite Program and Air Weather Service and Meteorological Satellites, 1950-1960.* ☆



*Models of Defense Meteorological Satellite Program satellites on display in the Air Force Weather Heritage Center.*



*Painting of Col Thomas O. Haig from the Air Force Space and Missile Pioneers Hall of Fame.*

### Personnel Changes in the AFW History Office

After three years with the Air Force Weather History Office, Mr. Jerry White is returning to his "roots" with the Air Force Reserves. Jerry left Headquarters Air Force Weather Agency the first of January to accept a promotion as a staff historian in the Headquarters Air Force

Reserve Command History Office at Robins Air Force Base, Georgia.

Ms. Kathy Skipper is expected to join the Air Force Weather History Office in mid-February following completion of the Air Force's PALACE ACQUIRE history intern program. Kathy will come

to Headquarters Air Force Weather Agency from the Headquarters Air Mobility Command History Office, Scott Air Force Base, Illinois. ☆



*The Air Force Weather History Office and Heritage Center, Offutt Air Force Base, Nebraska.*

## Air Force Weather History Office

HQ AFWA/HO  
106 Peacekeeper  
Drive, Suite 2N3  
Offutt AFB NE 68113-  
4039

PHONE:  
402 232-8682/8683

DSN:  
272-8682/8683

FAX:  
402 232-8684

E-MAIL:  
HO@afwa.af.mil



### In the next issue

*Another Original -  
Heritage of the  
3d Weather Squadron*

*"Provide the historical perspective  
for Air Force Weather to know its  
past, understand its present, and  
anticipate its future."*

## Looking Back at Air Force Weather

**January 12, 1953**, Air Weather Service installed the WEATHERVISION system at Hamilton Air Force Base, California.

**January 18, 1940**, Maj (later Col) Arthur F. Merewether replaced Capt Robert M. Losey as Chief of the Weather Section in the Office of the Chief of the Air Corps.

**January 28, 1937**, Adjutant General of the Army informed the Chief of the Air Corps to assume responsibility for weather service effective July 1, 1937.

**February 1, 1978**, The first Department of Defense combined weather forecaster course began at Chanute Air Force Base, Illinois, with Air Force, Navy, and Marine Corps students in attendance.

**February 5, 1952**, Brig Gen (later Lt Gen) William O. Senter, commanding general of Air Weather Service, was promoted to major general—the first of four two-star commanders of Air Weather Service.

**February 18, 1975**, Air Weather Service deactivated the last AN/APQ-13 radar in its inventory.

**March 3, 1973**, Air Weather Service inactivated its last "unit" in the Republic of Vietnam—Detachment 1, 10th Weather Squadron, Tan Son Nhut Air Base.

**March 13, 1946**, Headquarters Army Air Forces redesignated the Army Air Forces Weather Service as Air Weather Service and re-assigned it to the Air Transport Command.

**March 30, 1976**, Air Force awarded a \$287,300 contract for the manufacture of 34 AN/GMH-7 lightning warning (sferics) sets.



Col Arthur F. Merewether.

*The roll of musketry  
and the roar of cannon  
left all of us unmoved,  
but the crash of  
thunder and the  
vividness of the  
lightning. . . caused  
uneasiness and  
disturbances among  
some of the bravest  
men.*

Diary of Pvt Greely  
19th Massachusetts  
Battle of Ox Hill, 1862

## AFW Evaluated the Value of Sferics in Early 1950s

Under the guidance of Dr. Sverre Petterssen, Headquarters Air Weather Service initiated a sferics evaluation project in 1950. The 1952 Air Weather Service Technical Report entitled *A Preliminary Evaluation of the Meteorological Worth of Sferics Data* defined the term sferics as "a contraction of 'atmospherics' and refers to the electromagnetic waves generated by static discharges within the atmosphere."

The first known instance

of plotting a thunderstorm based upon the directional observations of discharges were those made in England in 1915 when the source of electromagnetic waves was located by triangulation of indicated bearings from a network of stations.

Although many discredited its value, evaluation and use of sferics data continued throughout World War II. Planners often used sferics data in their preparation of combat missions over

Europe.

In 1944, the Army Air Forces Weather Service put a three-station sferics network in operation in the Caribbean. Air Weather Service expanded that network to five stations for the evaluation project.

The 1952 report concluded the net was "capable of accurately detecting all major areas of thunderstorm activity within a range of approximately 2000 miles from the center of the network." ☆