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Air Force Weather Historian

A QUARTERLY NEWSLETTER OF THE AIR FORCE WEATHER HISTORY OFFICE



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The D-Day Forecast article previously listed for this issue will be included in the next issue of *Air Force Weather Historian*.

Air Force Weather Agency to Turn Sixty

On April 14, 2003, Air Force Weather Agency will achieve 60 years of service. Some may recall that Air Weather Service already celebrated its 60th anniversary. Why again?

The confusion lies in the difference between function and organization. This year the Air Force Weather function is 65, having been transferred from the Signal Corps to the Air Corps in 1937. Formerly AFW and AWS were, for most members, synonymous.

What is today AFWA was first organized as the Weather Wing in 1943 at Bolling Field, but soon thereafter moved its headquarters to Asheville, North Carolina.

In 1945 the Weather Wing was redesignated AAF Weather Service. The Weather Service moved its headquarters to Langley Field, Virginia, in 1946, and shortly thereafter was redesignated the longfamiliar Air Weather Service. The headquarters moved again in 1946 to Gravelly Point, Virginia. In 1948 AWS headquarters relocated to Andrews Air Force Base, Maryland, where it remained until the 1958 move with Military Air Transport Service to Scott AFB, Illinois.

In October 1997, AWS was redesignated Air Force Weather Agency and relocated to Offutt AFB, Nebraska. cs

Twenty Four have Commanded AFWA to Date

Col (later Lt Gen) William O. Senter, *14 April 1943* (see Senter on page 3);

Col James W. Twaddell, Jr., *15 March 1945;*

Brig Gen (later Lt Gen) Donald N. Yates, *1 July 1945;*

Maj Gen (later Lt Gen) William O. Senter, *1 August 1950;*

Maj Gen (later Lt Gen) Thomas S. Moorman, Jr., 23 April 1954;

Col (later Brig Gen) Norman L. Peterson, 28 March 1958;

Maj Gen Harold H. Bassett, *13 November 1958;* Brig Gen Norman L. Peterson, *1 November 1959;*

Brig Gen Roy W. Nelson, Jr., 13 March 1963;

Maj Gen Russell K. Pierce, Jr., 6 October 1965;

Brig Gen William H. Best, Jr., 27 July 1970;

Brig Gen (later Maj Gen) Thomas A. Aldrich, *30 July 1973;*

Brig Gen (later Maj Gen) John W. Collens III, *15 February 1974;*

Brig Gen Berry W. Rowe, 6 August 1975;

Brig Gen Albert J. Kaehn, Jr., *17 August 1978;*

Brig Gen George E. Chapman, *30 July 1982;*

Brig Gen John J. Kelly, Jr., *1 July 1988;*

Col George L. Frederick, 21 March 1991;

Col Frank J. Misciasci, Jr., 28 May 1993;

Col Joseph D. Dushan, 18 May 1995;

Col John L. Hayes, 12 *September 1997;*

Col Charles W. French, 25 September 1998;

Col Robert H. Allen, 13 November 2000;

and Col Charles L. Benson, Jr., *5 August* 2002. cs

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Headquarters, 15th Weather Squadron, Kadena AB, Okinawa, circa 1954.



The 15OWS emblem, approved on April 18, 2000.



Weather WASPs (left to right) Harriett C. Kenyon, Ethel E. Hoskins, Jane O. Robbins, Martha A. Wilkins and Barbara J. Manchester wearing the Santiago Blue dress uniform Jackie Cochran had designed for the WASPs.



The 15th OWS's Lineage includes Many Moves

The 15th Operational Weather Squadron was activated as the 15th Weather Squadron on April 22, 1942, at Mc-Clellan Field, California.

The squadron shortly thereafter relocated to Australia, first at Melbourne and then to Townsville. In October 1945 the squadron moved to the Philippines, where it remained until 1947. On July 1, 1947, the 15th relocated to Kadena Army Air Base. It was there inactivated in 1959.

The 15th was again activated on February 28, 1961, at Charleston Air Force Base, South Carolina. It moved to McGuire AFB, New Jersey, in August 1963 and in June 1972, the 15th made its first sojourn to Scott AFB, Illinois. It remained there until 1976 when it transferred to Wright-Patterson AFB, Ohio. In 1980 the squadron returned to McGuire AFB until it was inactivated on September 30, 1991. It was again activated on June 1, 1992, at Hickam AFB, Hawai'i, but was inactivated on August 1, 1994. The squadron was redesignated the 15th **Operational Weather** Squadron on January 8, 1999, and again activated on February 15, 1999, at its current location, Scott AFB, Illinois. cs

Weather WASPs Remembered for WWII Service

Women were first assigned to Air Force Weather during WW II. In early 1943, the first enlisted women were assigned to stateside weather units as observers and, occasionally, as forecasters. There were no women meteorological officers during WW II.

Perhaps the least known group of women to serve in Air Force Weather was the WASPs (Women's Airforce Service Pilots) assigned to the Weather Wing (later redesignated Air Weather Service and today's Air Force Weather Agency) in 1943 - 1944.

In October 1943, then-Col (later Lt Gen) Oscar Senter, the Weather Wing commander, notified his stateside weather units that because of "a critical shortage of pilots for combat duty, male pilots in the Weather Wing could be released for overseas duty if "adequately trained WASPs are assigned to the Weather Wing . . . to replace them."

On November 11, 1943, WASP leadership notified Colonel Senter that the first ten WASPs would report for duty with the Weather Wing on November 26. After a sixweek indoctrination, three WASPs were assigned to the Weather Wing headquarters at Asheville, North Carolina, and one WASP to each of the seven stateside weather regions. Five additional WASPs were assigned to the Weather Wing in February 1944.

The service of the Weather WASPs was remarkably accident free. During their 13 months of service, only one pilot was grounded from injuries received in a crash. All the WASPs received high marks from senior Weather leadership and many received specific mention of their outstanding flying skills.

Several WASPs returned to Air Force Weather as commissioned and noncommissioned officers following WW II. One former Weather WASP served as a weather officer in the 20th Weather Squadron in Japan during the Korean War providing forecasts to B-29 crews bombing Korea.

The pioneering efforts of the Weather WASPs is one of the important legacies of Air Force Weather and one of the many stories that compile the narrative of the Centennial of Flight. cs

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General Senter Recalls Early Weather Service

Lt Oscar Senter completed the course in meteorology at the Massachusetts Institute of Technology in June 1938. He was then assigned as the base weather officer at Maxwell Field, Alabama, and later as weather regional control officer with regional headquarters at that same station.

In June 1942, Lt Col Senter transferred to Army Air Forces Headquarters as chief of the Operations Division in the Directorate of Weather. The following April he assumed command of the newly organized Weather Wing in Asheville, North Carolina. Following assignments as a wing commander and the deputy commander of Air Weather Service, General Senter became the Air Weather Service commander in August 1950.

Mr. Moyers conducted an oral history interview with General Senter in January 2002. Here is an excerpt from that interview:

MR. MOYERS: As a young pilot, what did you think about the weather service?

LT GEN SENTER: In those days we didn't pay much attention to the weather as far as planning a flight. If the weather was bad you landed or you turned around and went back. Instrument flying was in the early stages. [T]he airplanes weren't really instrumented to fly in bad weather.

The thing that made me interested in weather [was] it was the one thing in aviation you couldn't seem to quite [master]. It was always impeding your progress. As an aviator you could learn about communications, etc., but weather was something you [needed to study more]. [Learning more about] it was a challenge.

The complete interview is available form the AFW History Office. *ca*



Lt Gen Senter



Lt Gen (Ret) Senter and Col Allen, AFWA/CC, at AFWA 59th Anniversary reception

Add *Air Apparent* to your Weather Library

The AFW History Office recommends *Air Apparent: How Meteorologists Learned to Map, Predict, and Dramatize Weather* by Mark Monmonier, published by the University of Chicago Press.

Monmonier is Distinguished Professor of Geography in the Maxwell School of Citizenship and Public Affairs at Syracuse University. He is the author of ten books related to maps.

Weather maps have made our atmosphere visible,

understandable, and at least moderately predictable.

In Air Apparent Monmonier "traces debates among scientists eager to unravel the enigma of storms and global change, explains strategies for mapping the upper atmosphere and forecasting disaster, and discusses efforts to detect and control air pollution."

"Fascinating in its scope and detail, *Air Apparent* makes us take a second look at the weather map, an image that has been, and continues to be, central to our daily lives."

"Monmonier is solid enough in his discussion of geographic and meteorological information to satisfy the experienced weather watcher. But even if this information were not presented in such a lively and engaging manner, it would still hook most any reader who checks the weather map every morning or who sits happily entranced through a full cycle of forecasts on the Weather Channel," says Michael Kenney, of the Boston Globe. cs



"Mark Monmonier's book is a thoroughly enjoyable, visually stimulating, and accessible history of the practices and paradoxes of atmospheric cartography."

> James Rodger Fleming, author of *Meteorology in America*, 1800-1870

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In the next issue 17OWS Lineage; D-Day Forecast; and more.

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

Looking Back at Air Force Weather

April 1, 1966, Solar Forecast Facility (Detachment 7, 4th Weather Wing) established at Ent AFB, Colorado.

April 12, 1978, Office of the Assistant for Weather, HQ USAF, abolished.

May 1, 1959, Joint Typhoon Warning Center established at Navy Fleet Weather Central on Guam.

May 22, 1962, Air Weather Service directed to implement an Air Force meteorological rocket network.

June 14, 1946, Headquarters, Air Weather Service moved from Langley Field, Virginia, to Gravelly Point (near present-day Reagan National Airport), Virginia.

June 20, 1986, Air Force Global Weather Central implemented the Global Spectral Model on the Cray supercomputer.

New From the AFW History Office

The AFW History Office is pleased to announce these new publications:

In "An Interview with Col James E. Hoke, Ph.D.," Colonel Hoke, the Individual Mobilization Assistant to the AFWA commander from 1995 until his recent retirement discusses his long career as a weather reservist. *"Lineage and Honors of the Operational Weather Squadrons;"* the first of a new series of AFW heritage brochures, lists the lineage, assignments, stations, decorations, and emblems of the present OWSs.

These are available upon request from the AFW History Office.cs



MSgt Jesse B. Smith, Solar Forecast Center, computes solar flare probability, circa 1970.



Meteorological rocket bodies on display in the Air Force Weather Heritage Center at Offutt AFB, Nebraska.

"In any combat operation or any conflict, weather's probably your number one concern."

> Gen Richard Myers Chairman, Joint Chiefs of Staff

Recalling the Origins of Rocketsondes

Rockets have long been used for making atmospheric observations. Famed American physicist, Robert H. Goddard (1882-1945), launched the first instrumented rocket containing a thermometer and aneroid barometer on July 17, 1929, at Auburn, Massachusetts. When the parachute deployed, a camera recorded the instrument readings.

In the spring of 1946,

personnel at White Sands Proving Ground, New Mexico, launched captured German V-2 rockets with on-board cameras to photograph clouds from aloft.

During 1957 - 1958, extensive investigations were made of the upper atmosphere using a variety of sounding rockets. An effort to make a smaller, simpler and cheaper rocket system for synoptic studies resulted in the development of the ARCAS (All-Purpose Rocket for Collecting Atmospheric Soundings). This rocket was first used in 1959. That same year, the Meteorological Rocket Network was established as an upper atmospheric synoptic observation program under the joint sponsorship of the U.S. Weather Bureau, the military services, and NASA. C8