The Origins of Air Force Weather’s Army Support

It’s often reported that Air Force Weather’s support of Army operations is derived from public law and the 1947 National Security Act. The origins of this inter-service arrangement originated within the Army in World War II and continued with inter-service agreements in 1947 and since. Congress has never legislated this service.

The question of Air Force Weather support to the entire Army remained essentially unanswered from the transfer of the Army’s weather service to the Air Corps on July 1, 1937, until the reorganization of the Army Air Forces in 1942. The Adjutant General’s 1937 transfer order simply stated that the “Chief of the Air Corps will be charged with responsibility for the meteorological service for that arm and for weather forecasts required by divisions and higher headquarters.”

The conduct of World War II operations necessitated consideration of how best to provide weather service for all of the Army.

On August 8, 1942, General Henry “Hap” Arnold requested the Air Staff investigate how to provide weather service to “all military operations—ground, air and sea.” Although initially concerned with the enormity of the task, the Director of Weather formulated a strategic plan for providing weather service to all of the Army. Only after considerable marketing of the plan and assurance that the Air Force was capable of providing the stated service, the ground forces commanders in early 1943 accepted the Army Air Forces Weather Service as the provider of the Army’s weather service.

However, agreement could not be reached on the formulation of the Army’s regulation on weather services, AR 95-150. Although revised in 1943, the directive made no statements about Air Force support to ground forces. It was not until the waning days of World War II that a new regulation was published.

The May 1945 Army Regulation 95-150, Army Weather Service, stated “[the AAF Weather Service will provide weather service for all components of the United States Army except those specifically exempted by the War Department.”

President Harry S Truman signed the National Security Act on July 26, 1947, creating the United States Air Force as a separate service; but nowhere within the Act did it specify that the Air Force would continue to provide weather service to the Army, only that the “activities” of the Army Air Forces would continue under the United States Air Force.

If there is a single document that details that the Air Force would continue weather support for the Army it is the “Agreements as to the Initial Implementation of the National Security Act of 1947,” dated September 15, 1947. In paragraph 15 of Section IV of this document, titled “Weather Service,” the two services agreed that the “USAF will be responsible for maintenance of meteorological service for operation of the Air Forces and provision of meteorological service for the Army except Army meteorological ballistics data which will remain with the Army.” This inter-service agreement was solidified with the new joint publication AR 115-10/AFR 105-3, Weather Service, in March 1949.
The Army Air Forces constituted today’s 25th Operational Weather Squadron as the 25th Weather Squadron on October 28, 1943. The squadron activated at Patterson Field, Ohio, and was assigned to the Army Air Forces Weather Wing four days later. The 25th moved to Lynbrook, Long Island, New York, on November 4, 1943, and was disbanded on September 7, 1944.

The U.S. Air Force reconstituted the 25th Weather Squadron on May 18, 1948, and activated it at Robins Air Force Base, Georgia. The squadron was assigned to the 104th Weather, later the 2104th Air Weather Group on June 1, 1948. It was reassigned to the 2059th Air Weather Wing on October 24, 1950.

The 25th moved to Donaldson Air Force Base, South Carolina, on September 10, 1951. The squadron was assigned to the 2102d Air Weather Group on September 16, 1951. The 25th was reassigned to the 2d Weather Group on April 20, 1952.

In 1953 in addition to operating the Troop Carrier Weather Center at Donaldson Air Force Base, the 25th was designated to test and develop doctrine for the provision of weather service for airborne forces and determine the requirements of and procedures for providing their service in cold weather operations. To validate its cold weather concepts the squadron participated in joint training activities such as Exercise SNOW STORM in upstate New York during the winter of 1953.

The 25th moved to Waco, Texas, and began its association with the Twelfth Air Force on September 18, 1957. In addition to providing meteorological services to Twelfth Air Force bases, the 25th supported U.S. Strike Command exercises, contingencies, and special missions. The squadron was assigned to the 5th Weather Wing when the wing was activated on October 8, 1965.

Air Weather Service inactivated the 25th Weather Squadron on 30 June 1972 as an Air Force budgetary reduction caused Air Weather Service to reduce squadron overhead. A Staff Weather Officer cell was established in its place to support Twelfth Air Force. This was short-lived as Air Weather Service again activated the squadron at Bergstrom Air Force Base and again assigned it to the 5th Weather Wing on January 1, 1975. In June 1975 Lt Col George E. Chapman, who was later promoted to brigadier general and served as commander of Air Weather Service from 1982 to 1988, took command of the 25th. In addition to numerous annual exercises, the 25th supported contingencies such as Operation JUST CAUSE in 1989.

The 25th was inactivated on September 30, 1991, as part of the divestiture of Air Weather Service. The squadron was redesignated the 25th Operational Weather Squadron on February 5, 1999, and activated at Davis-Monthan Air Force Base, Arizona, on April 1, 1999. It was assigned to the 612th Air Operations Group, renewing its association with Twelfth Air Force, which moved its headquarters to Davis-Monthan Air Force Base in 1993. ♠
Colonel Golding Recalls Special Ops Weather

Wayne L. Golding enlisted in the Air Force in 1959 and was assigned to Hurlburt Field, Florida, in October 1962. In January 1963, he became one of the initial cadre for what was originally designated as the Combat Commando Weather Team, later redesignated the Special Warfare Weather Team, and the origins of today's special operations combat weather teams.

He graduated from Texas A&M University in 1970 with a degree in meteorology and after Officer Training School, Lieutenant Golding was assigned back to Hurlburt, where he served as Officer in Charge, Special Operations Weather Team. In October 1989, Lieutenant Colonel Golding returned to special operations as operations officer and later commander of the 6th Weather Squadron, which included duties as Staff Weather Officer for Air Force Special Operations Command. Following the divestiture of Air Weather Service and another promotion, Colonel Golding was assigned as Chief of Environmental Services, United States Special Operations Command, MacDill Air Force Base, Florida. He served there until retirement from active duty in July 1995.

The Air Force Weather History Office conducted an interview with Colonel Golding in August 2002. Here is an excerpt from the interview. The complete interview is available on request.

COL GOLDING: The next thing you knew, we had Captain [Keith R.] Grimes coming through the door. [He] was a brand-new shiny captain; he had pinned it on just a few days earlier and boy, was he ever impressive. He came in and he was full of enthusiasm and he was telling us about all this stuff we were going to be doing on the combat weather team. Frankly, I couldn’t see myself doing half the stuff he was talking about. I was wondering if he had the right guy, particularly when he got to the part about jumping out of airplanes. I knew he had the wrong guy because I was scared of heights, I didn’t want to get higher than about six or seven feet off the ground. From that time until the time I went to jump school . . . I would be traveling on an airliner going somewhere and I would look down and say, “My God, am I really going to do this?”

Meteorology Histories for your Bookshelf

Every member of Air Force Weather should be knowledgeable of the development of meteorology. The Air Force Weather History Office recommends this trio of texts on the history of meteorology, The History of Meteorology to 1800 by H. Howard Frisinger, Meteorology in America, 1800-1870 by James Rodger Fleming, and Calculating the Weather: Meteorology in the 20th Century by Frederik Nebeker.

These books are among only a few in a field that is still largely neglected by historians of science. As a group they survey the history of meteorology from its earliest speculations to its development into a computational science.

H. Howard Frisinger is Professor Emeritus in the Department of Mathematics at Colorado State University. The American Meteorological Society published History of Meteorology to 1800 in 1977.


Frederik Nebeker is Senior Research Historian at the Institute of Electrical and Electronics Engineers History Center and adjunct professor of history at Rutgers University. Academic Press published Calculating the Weather: Meteorology in the 20th Century in 1995.

Aristotle’s weather treatise Meteorologica, written about 340 BC, was the unquestioned authority on weather theory for nearly 2,000 years.
Looking Back at Air Force Weather

January 18, 1940, 1Lt (later Col) Arthur F. Merewether replaced Capt Robert M. Losey as the second Chief of the Weather Section in the Office of the Chief of the Air Corps.


January 31, 1970, The Air Force Global Weather Central, Offutt Air Force Base, Nebraska, assumed the severe weather forecasting and warning function upon the inactivation of the Military Weather Warning Center (Detachment 42, 7th Weather Wing) at Kansas City, Missouri.


February 5, 1947, Col (later Lt Gen) Donald N. Yates was promoted to brigadier general, the first officer to attain flag rank while serving in Air Force Weather.

March 15, 1949, The Global Weather Central (no lineal relation to the Air Force Global Weather Central activated in 1969) was organized at Offutt Air Force, Nebraska, to support Strategic Air Command.

March 18, 1953, World War II weather officer Brig Gen Richard E. Ellsworth, wing commander at Rapid City Air Force Base, South Dakota, was killed in an RB-36 crash in Newfoundland. Rapid City Air Force Base was renamed Ellsworth Air Force Base in his honor in June 1953.

SEON Program Devised to Better Manage Funding

By the mid-1970s some within the leadership of Air Weather Service voiced concerns about the future of the Space Environmental Support System, whose architecture had been unveiled in 1968. Limited funding hampered progress in the procurement of equipment for the Solar Observing Electro-Optical Network and the Radio Solar Telescope Network.

Consequently, the Air Staff issued a revised program management directive in February 1975 combining the two programs into the Solar Electro-Optical Network thereby permitting the two programs to be managed as one, providing better procurement overhead efficiencies.

To keep costs within acceptable limits, the new RSTN procurement strategy included providing subsystems, such as antennas, to the contractor as government-furnished property and using single rather than dual computers. Other cost savings were realized by production rather than pre-production system procurement and by moving directly to acceptance testing, minimizing or eliminating design and development testing.

In late 1976 the Radio Solar Telescope Network equipment was designated AN/FRR-95, officially termed the Radio Interference Measuring Set. *

Col Arthur F. Merewether
Brig Gen Donald N. Yates

“We can’t change the weather, but we can change our operations to conform to the weather.”

Gen Henry H. Arnold
World War II Diary