16th WEATHER SQUADRON

MISSION

The 16th WS's mission is to exploit cutting-edge technologies, science, and innovations to provide responsive, accurate, and relevant weather information to the warfighter, the intelligence community and other national agencies. Rapidly innovate, exploit, and operate cutting-edge software applications to generate environmental and IW insights to support national interests.

16th Weather Squadron is comprised of military and civilian technical experts, with integrated contractor support, and is organized into four flights that enable national outcomes through developing and deploying innovative environmental intelligence products into global weather operations.

Core Models Flight Operates global and regional models software that inform forecasts to support mission planning. It also produces a global cloud analysis and specialized cloud forecasts.

Tailored Products and Applications Flight Develops and operates tailored and mission-focused atmospheric/land surface models and algorithms using ensembles to provide a complete environmental risk assessment. Via its Stakeholder Engagement Team, it also educates and solicits feedback from warfighters on available 16 WS environmental information, helping shape current and future requirements.

Data Science and Analytics Flight Mines, quality controls, delivers and stores data for use in weather model verification and downstream applications. It also prototypes and operates artificial intelligence, machine learning and big data software applications.

Special Capabilities Flight (WXS)
Rapidly prepares and prototypes cyberspace platforms and training for the squadron's software teams.

LINEAGE[1]
16th Weather Squadron (Regional Control) constituted, 13 Aug 1942
Activated, 1 Sep 1942
Redesignated 16th Weather Squadron, Regional, 25 Aug 1942
Inactivated, 18 Nov 1957
Activated, 8 Jul 1959
Inactivated, 1 Oct 1976
Redesignated 16th Weather Squadron
Activated, 18 Nov 2009

STATIONS
Great Falls, MT, 1 Sep 1942
Edmonton, Canada, 1 Apr 1944
Fort Richardson, AK, 20 Jun 1946
Elmendorf AAF (later Elmendorf AFB), AK, 31 Jan 1948
Scott AFB, IL, 9 Jun 1948
Waco, TX, 16 May 1952-18 Nov 1957
Fort Monroe, VA, 8 Jul 1959-1 Oct 1976
Offutt AFB, NE, 18 Nov 2009

ASSIGNMENTS
Flight Control Command, 14 Apr 1943
Weather Wing, Flight Control-Command (later Army Air Forces Weather Wing), 19 May 1943
Army Air Forces Weather Wing 6 Jul 1943
7th Weather Group [AFCON], 4 Dec 1945
102nd Weather (later 2102nd Air Weather) Group, 9 Jun 1948
2103rd Air Weather Group (AFCON), 20 May 1949
2059th Air Weather Wing [MAJCON], 24 Oct 1950
8th Weather Group [AFCON], 20 May 1952
2nd Weather Group, 8 Jul 1959
5th Weather Group, 8 Oct 1965-1 Oct 1976
2nd Weather Group, 18 Nov 2009

COMMANDERS
Lt Col David H. Kennedy, 1 Sep 1942
Col Carl W. Carlmark, 1 Jan 1945

[1] Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.

Capt Bernard Pusin, Unknown
Capt Avery M. Gage, Unknown
1st Lt Norman P. Michelson, 15 May 1948
Maj Paul S. Bechtel, 16 Aug 1948
Lt Col Frederick S. Tuttle, 29 Aug 1951
Lt Col Andrew Paton, 23 Jun 1953
Lt Col Charles A. Beckham, 20 Sep 1956
Lt Col Walton L. Hogan, Sr., 8 Jul 1959
Lt Col Lewis L. Howes, 24 Aug 1961
Lt Col Thomas W. Lane, Early 1963
Col Leonard V. Gillespie, Late 1963
Col L. A. Pitt, 1968
Col William H. Shivar, 1969
Col Isaac S. Israel, 1972
Col Walter R. Brett, 1 Mar 1975

HONORS
Service Streamers
World War II, 7 Dec 1941-2 Mar 1946

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations
Air Force Outstanding Unit Award
1 Jul 1971-30 Jun 1973
1 Jul 1973-31 Dec 1974

EMBLEM

First emblem: Approved, 15 Feb 1946

Second emblem: emblem symbolizes the mission of the 16th Weather Squadron; the helping hand that safely guides the pilot through fair and stormy conditions. Ultramarine blue and golden yellow are the Air Force colors. (Approved, 25 Oct 1957)

Third emblem: Against a field of ultramarine blue, a golden yellow anemometer is placed to reflect the Air Force colors. A field of blue, white, and red reflects the United States Continental Army Command patch and colors. Thus, the two services involved, Air Force (Air Weather Service) and Army (United States Continental Army Command) emblems are represented within this emblem to indicate Air Force and Army cooperation. The lightning flash over all symbolizes both the element of weather and the mobile, fast-reacting support rendered Approved, 14 Jun 1962

MOTTO

IN TEMPESTATE ET SERENITATE--In Storming Condition's and Fair Conditions

SUSTINEMUS--We Support

OPERATIONS

Weather information was critical to the success of aerial operations. During the war, the 16th Weather Squadron handled weather reporting along the Northwest Staging Route and had a detachment at Ladd. The weather office at Hangar One was located on the south side of the second floor, overlooking the airfield. A team of military and civilian weather observers and forecasters worked there simultaneously. On the military side, the unit consisted of weather observers, who were enlisted men, and forecasters, who were officers. The civilian staff were employees of the Weather Bureau, which also operated a weather station at Fairbanks' civilian airport, Weeks Field. Together they covered three eight-hour shifts. During the day, at least two forecasters would be on duty with between six and eight observers. On the night shifts, when traffic was down, the crew was slightly smaller. Every hour, the observers collected weather information such as the height and type of clouds, altimeter settings, visibility, and wind direction and velocity. Forecasters put the information together and plotted weather maps by hand when those were needed. They always encrypted the forecasts and hourly observations with special equipment before transmitting them via radio. A bank of teletype machines in the office were connected to other weather stations along the Northwest Staging Route.