

# Weather Forecast Office (WFO)

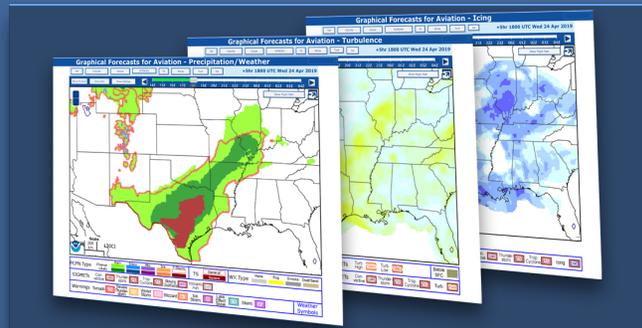
**One** hundred and twenty two NWS WFOs provide local expertise, forecasts, and warnings to their local aviation communities. WFOs are staffed 24 hours a day, seven days a week. The primary aviation responsibility of the WFO is the issuance of Terminal Aerodrome Forecasts (TAFs), a coded forecast consisting of the expected meteorological conditions significant to aviation interests within five statute miles of a given airport.

TAFs are valid for 24 hours or (30 hours for selected international airports). TAFs are issued four times daily and updated as conditions warrant. TAFs include information about wind speed and direction, visibility, present weather, ceilings, and low-level wind shear. Additionally, WFOs issue an Aviation Forecast Discussion, highlighting forecast uncertainty and possible aviation hazards that may not be explicitly mentioned in the TAF.

# Graphical Forecasts for Aviation

[aviationweather.gov/gfa](http://aviationweather.gov/gfa)

The Graphical Forecasts for Aviation (GFA) web page is intended to provide the necessary aviation weather information to give users a complete picture of the weather that may impact flight in the continental United States (CONUS). The web page includes observational data, forecasts, and warnings that can be viewed from 14 hours in the past to 15 hours in the future, including thunderstorms, clouds, flight category, precipitation, icing, turbulence and wind. Hourly model data and forecasts, including information on clouds, flight category, precipitation, icing, turbulence, wind, and graphical output from the National Weather Service's National Digital Forecast Data (NDFD), are available.



[facebook.com/nwsawc](https://facebook.com/nwsawc)

[twitter.com/nwsawc](https://twitter.com/nwsawc)

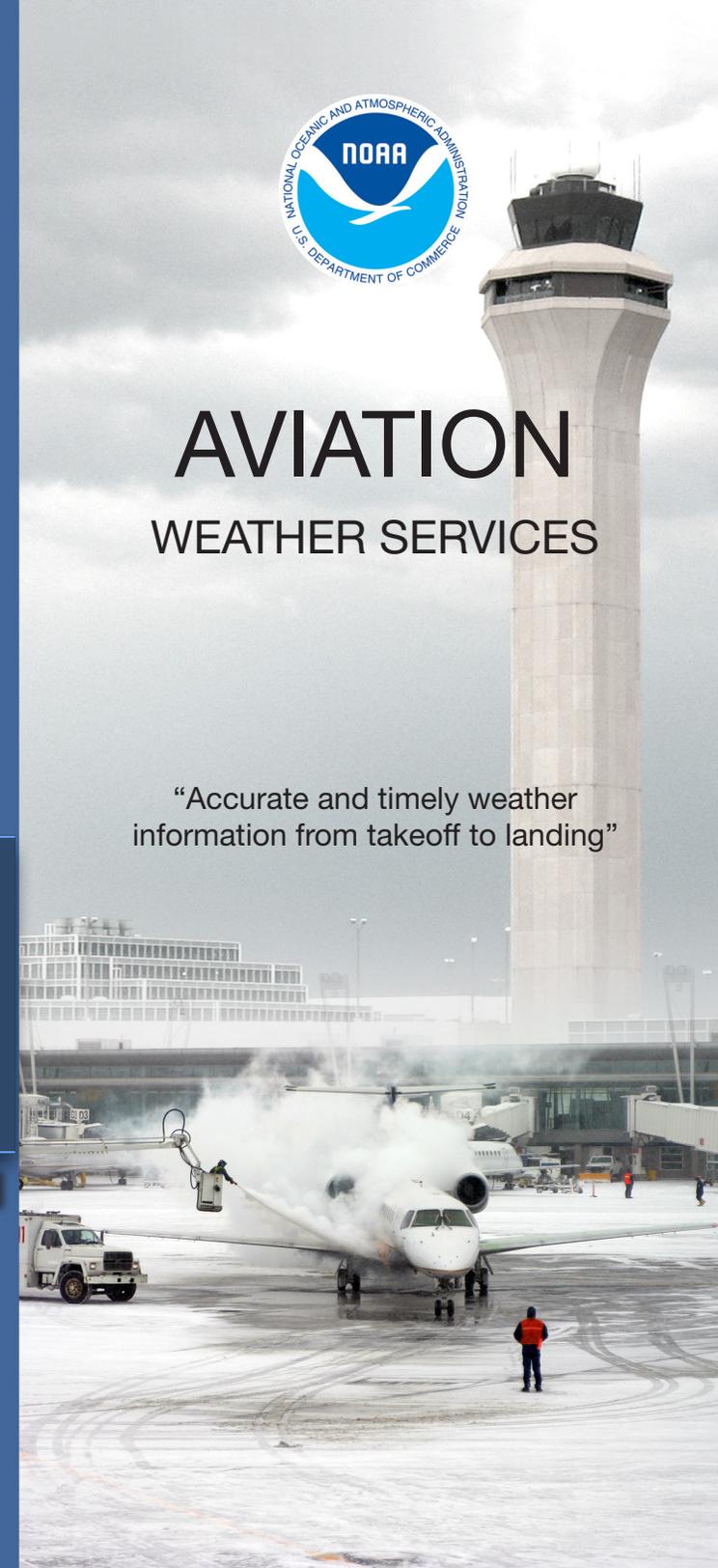


U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service



# AVIATION WEATHER SERVICES

“Accurate and timely weather information from takeoff to landing”



## Aviation Weather Services

The National Weather Service (NWS) issues aviation products and services for the National Airspace System (NAS). Offices include the Aviation Weather Center (AWC), the Alaska Aviation Weather Unit (AAWU), Center Weather Service Units (CWSUs) and Weather Forecast Offices (WFOs). AWC, AAWU, and the WFO in Honolulu, HI (HFO) are also Meteorological Watch Offices (MWOs).

MWOs are designated by the International Civil Aviation Organization to maintain a continuous watch over weather conditions that affect flight operations, and to issue necessary warnings and forecasts for the aviation community. This brochure outlines roles and responsibilities of these NWS aviation offices.

## Aviation Weather Center Kansas City (AWC)

**AWC** is one of three U.S. MWOs providing weather information to the NAS, and one of two World Area Forecast Centers providing global forecasts. AWC issues a number of domestic and international forecasts. In addition, AWC maintains the Aviation Digital Data Service (ADDS). ADDS was created in partnership with the National Oceanic and Atmospheric Administration (NOAA) and the FAA. It is much more than just a web site; it is an online weather information database.

The website, [aviationweather.gov](http://aviationweather.gov), provides pilots and other operators the most up-to-date weather observations and forecasts when planning flights and making flight-related weather decisions. AWC, which provides [aviationweather.gov](http://aviationweather.gov), maintains an ISO 9001:2015 quality management system certification.

## Alaska Aviation Weather Center Unit (AAWU)

**AAWU** is a MWO providing Alaska aviation weather products and services to the flying community. The AAWU is responsible for issuing Area Forecasts (FAs), AIRMETs (Airman's Meteorological Information), and SIGMETs (Significant Meteorological Information) for the Anchorage Flight Information Region (FIR). In addition, the AAWU serves as the Anchorage Volcanic Ash Advisory Center (VAAC).

The Anchorage VAAC is one of nine international offices providing forecasts and analyses of volcanic ash plumes for eastern Russia and Alaska. There are over 100 historically active volcanoes along the North Pacific "ring of fire" that are monitored by the Anchorage VAAC.

## Weather Forecast Office Honolulu (HFO)

**HFO** is one of the three MWOs in the U. S. and maintains a meteorological watch across more than eight million square miles of the central and western Pacific. This area of responsibility covers the portion of the Oakland Oceanic FIR south of 30° N and west of 140° W. HFO issues many aviation forecasts for domestic and international travel.

## Center Weather Service Unit (CWSU)

**CWSU** meteorologists provide provide decision support and weather briefing services to the 21 FAA Air Route Traffic Control Centers (ARTCCs) throughout the United States. CWSU meteorologists issue the Center Weather Advisory (CWA) and Meteorological Impact Statement (MIS), among other products, to address stakeholder concerns and promote weather safety within and outside of the ARTCC.

CWAs are short-term weather warnings, issued for periods of two hours or less. They describe hazardous conditions not contained within national in-flight advisories (AIRMETs, SIGMETs or Convective SIGMETs) or define a hazardous area within the larger national in-flight advisory. For instance, a CWA may highlight an area of severe thunderstorms within a convective SIGMET.

The MIS details weather conditions expected to adversely impact air traffic flow. The MIS is a freeform product and can contain a variety of forecast information pertinent to en route air traffic control out to 12 hours and beyond.

