National Weather Service
Alaska Aviation Weather Unit
Anchorage Center Weather Service Unit

Virtual Tour
Welcome!!

Carrie Haisley
Anchorage Center Weather Service Unit
Meteorologist-in-Charge
• **Mission:**
NWS Alaska Region provides integrated environmental analysis and forecasts, leveraging a broad spectrum of partnerships that enable communities and stakeholders to make the best possible decisions.

• **Vision:**
Alaska Region communities and stakeholders are ready, responsive, and resilient to environmental impacts: protecting lives and property, enhancing commerce, and safeguarding the “Last Frontier”.
Service Areas

- Aviation
- Climate
- Fire Weather

- Marine Weather & Sea Ice
- Public Forecasts and Warnings
- Rivers/Hydrology

- Space Weather
- Tsunami
- Volcanic Ash
National Weather Service Alaska Region Facilities

In Anchorage:
- Alaska Aviation Weather Unit
- Anchorage Volcanic Ash Advisory Center
- Anchorage Center Weather Service Unit
- Weather Forecast Office
- River Forecast Center

Weather Forecast Offices

Weather Service Offices

National Tsunami Warning Center
Alaska Aviation Weather Unit (AAWU)

- Forecasts for over 2.4 million sq. miles of airspace
  - Graphics, Area Forecasts, AIRMETs, and SIGMETs
  - Flight Category, Icing, Turbulence, Convection, Surface Analyses, and Volcanic Ash
- Need for a strong internal collaborative forecast process
- Close partnerships with FAA, industry, and formal associations to help guide services
Alaska Aviation Weather Unit (AAWU)

• Forecast Staff: (2 always on duty)
  • 5 Lead Forecasters
  • 6 Journey Forecasters

• Support Staff
  • 1 Meteorologist-in-Charge
  • 1 Science & Operations Officer
  • 1 IT System Administrator
  • 1 Administrative Support Assistant
Alaska Aviation Weather Unit (AAWU)

North Desk:
- 12 Area Forecasts
- Freezing Levels
- Icing
- Convection
- Flight Category

South Desk:
- 13 Area Forecasts
- Surface wind
- Low-level Turbulence
- High-level Turbulence
- Surface Analysis
Product Preparation and Interactive Analysis of Meteorological Data
AAWU Forecast Process

Gridded Icing Forecast

Icing Model Guidance
AAWU Forecast Process

- Text is generated from the gridded database.
AAWU Forecast Graphics

- Icing
- Turbulence
- Flight Categories
- Convection
- Surface Analysis and Forecasts
AAWU Area Forecasts

- Issued three times per day and are valid for 12 hours
  - 4:15am, 12:15pm, and 8:15 pm

- Contains these elements:
  - Synopsis
  - Clouds and weather
  - Wind (if gusts are 25 kts or greater)
  - Turbulence forecast
  - Icing forecast
  - Freezing level
  - Pass forecasts (if applicable)
  - Outlook for hours 12 to 18

http://www.weather.gov/aawu/
AAWU AIRMETs and SIGMETs

**AIRMET (≥3000 sq miles or greater) or occasional or prevailing conditions:**

- Instrument Flight Rule conditions (IFR)
- Mountain Obscuration
- Moderate Icing
  - May describe isolated severe
- Moderate Turbulence
  - May describe isolated severe
- Low Level Wind Shear (LLWS)
  - Shear below 2000 ft exceeding 10 kts/100 feet
- Strong Surface Winds
  - Sustained 30kts or greater

**SIGMET (≥3000 sq miles or greater) for occasional or prevailing conditions:**

- Severe Icing
- Severe Turbulence
- Convection
  - Scattered coverage of storms
  - Storms obscured by stratus
  - Isolated severe storms (1” hail and/or winds > 58 mph)
- Volcanic Ash

* Or in high traffic areas under 3000 sq miles with significant impacts expected.
Anchorage Volcanic Ash Advisory Center (VAAC)

- Detect and track volcanic ash for >50 active volcanoes in Alaska
- Develop interagency plans for responding to volcanic ash fall and related hazards
- Leading role in international coordination, planning, and policy issues
Weather Forecast Offices (WFOs)

- Public Forecasts, Marine Forecasts, TAFs, Fire Weather, Flood Forecasts, & Data Collection
- Anchorage Only: Sea Ice & TV
Anchorage Center Weather Service Unit (CWSU)

Anchorage Air Route Traffic Control Center
• Located in the Air Route Traffic Control Center and staffed by NWS meteorologists between 5am and 9pm daily.

• Provide meteorological consultation, forecasts, and advice to managers and staff within the ARTCC and other Federal Aviation Administration supported facilities.

• Collaborate with other NWS offices and solicit pilot reports.
CWSU Operations Area

Product Preparation and Interactive Analysis of Meteorological Data
CWSU Support to FAA Facilities

- **Daily Stand-up Briefings**
  - 7:30am and 3:00pm
  - Graphics made in Power Point

- **Recorded Video Briefings for Controllers**
  - 7am, 1pm, and 9pm

- **Focus on weather that could impact air traffic:**
  - SIGMETs/CWAs/MISs
  - Volcano Information
  - Icing
  - Turbulence/LLWS
  - Flight-level Winds
  - Convection
  - Required PIREPs
  - Flight Category for 10 Hubs
Thank you!

Questions?

Jeff Osiensky  
Meteorologist-in-Charge  
Alaska Aviation Weather Unit  
(907) 266-5116  
jeffrey.osiensky@noaa.gov

Carrie Haisley  
Meteorologist-in-Charge  
Anchorage Center Weather Service Unit  
(907) 269-1245  
carrie.haisley@noaa.gov