

### WEATHER REPORTING IN THE NAS: CURRENT AND FUTURE NEEDS PANEL 1, PRESENTATION 2 TOM GEORGE / AOPA



## Operating with a lack of weather reporting Subtitle: More surface observations needed

Friends and Partners in Aviation Weather Spring 2020

Tom George Alaska Regional Manager Aircraft Owners and Pilots Association AOPA vour froedom to flu

your freedom to fly

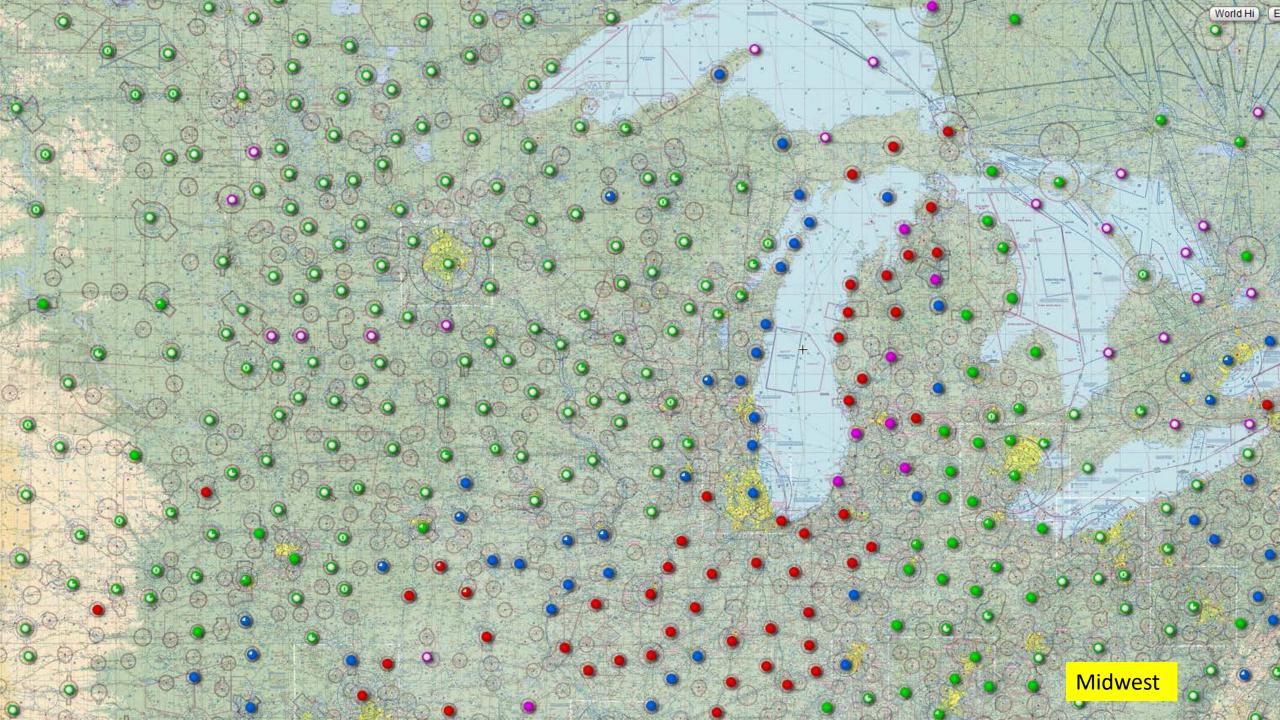
Visual comparison of weather reporting density: Southeast

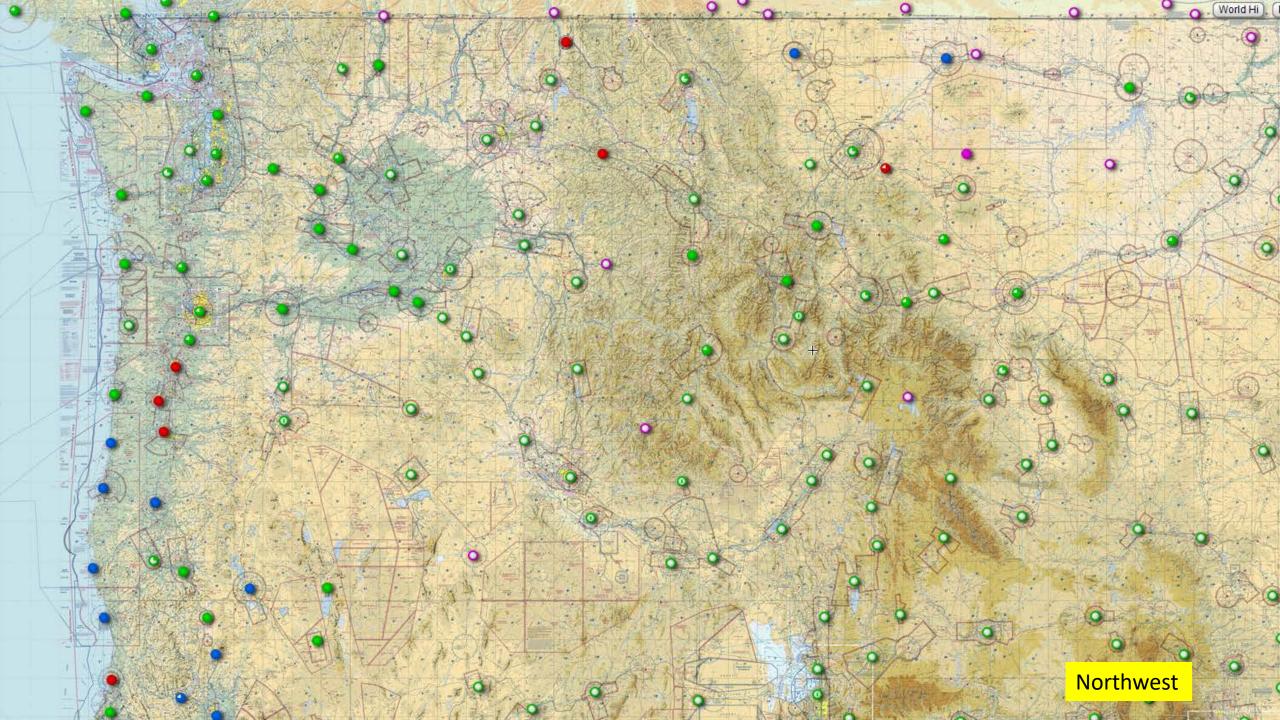
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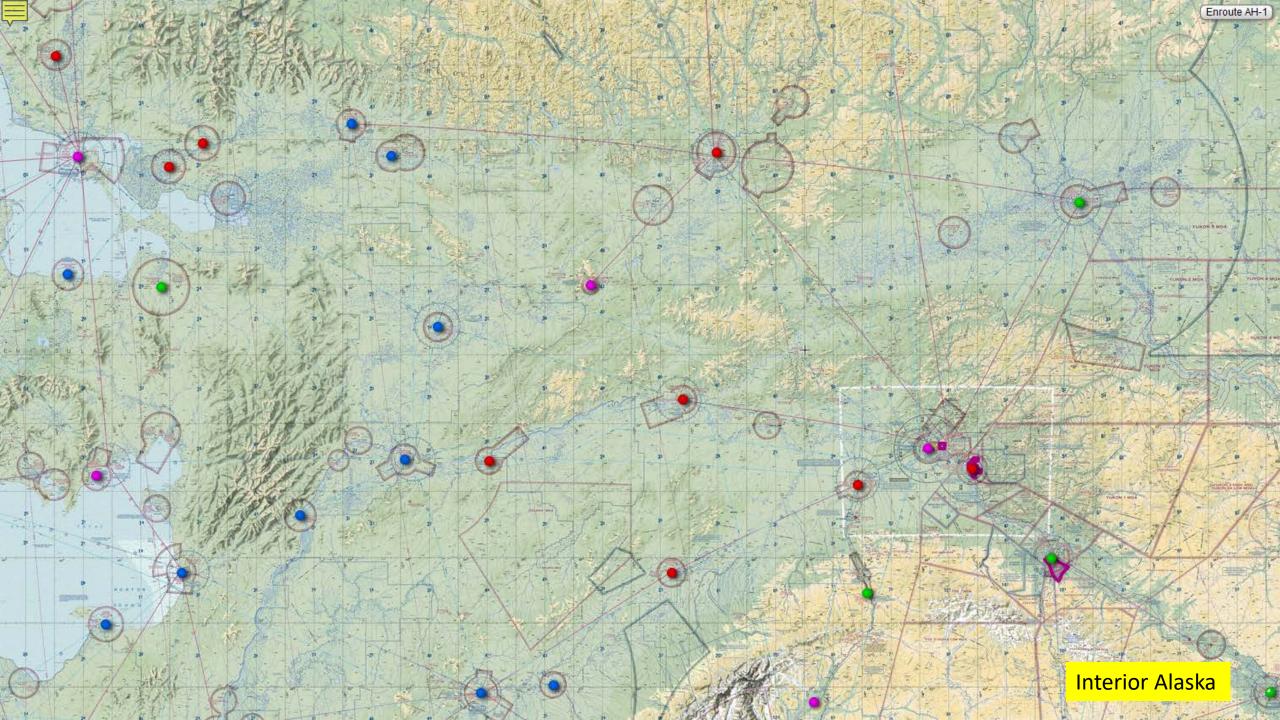
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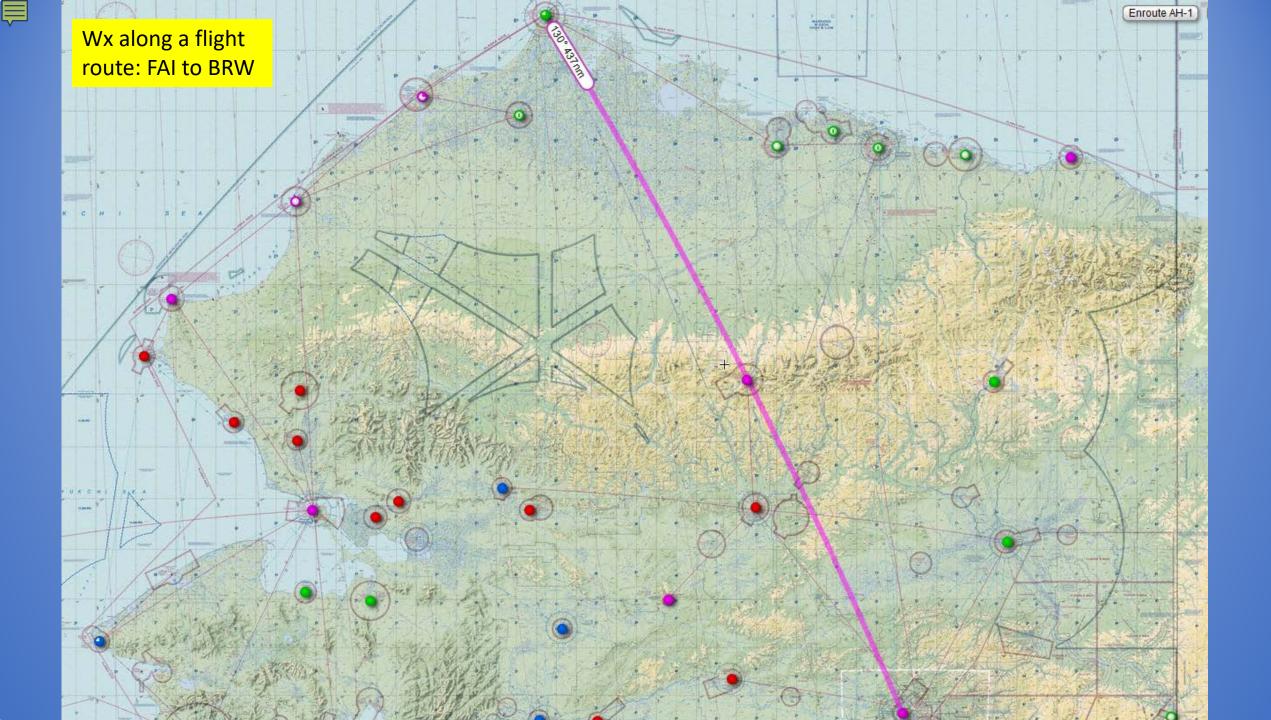
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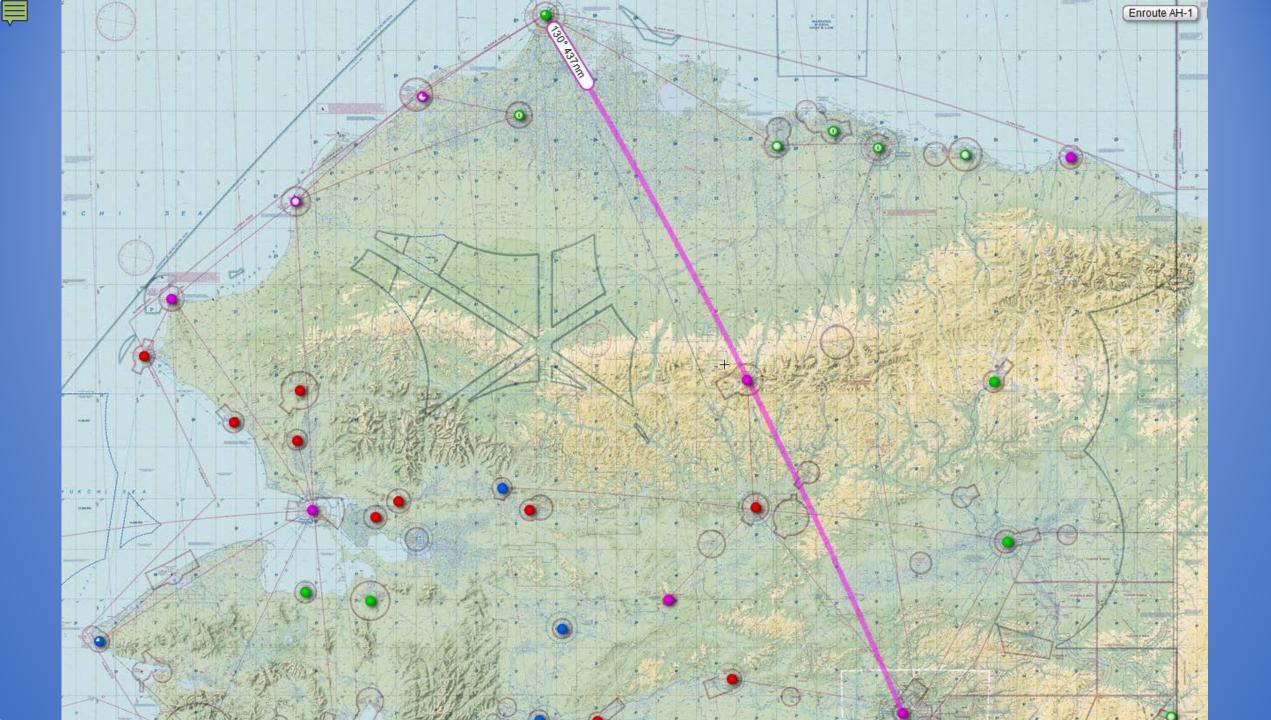


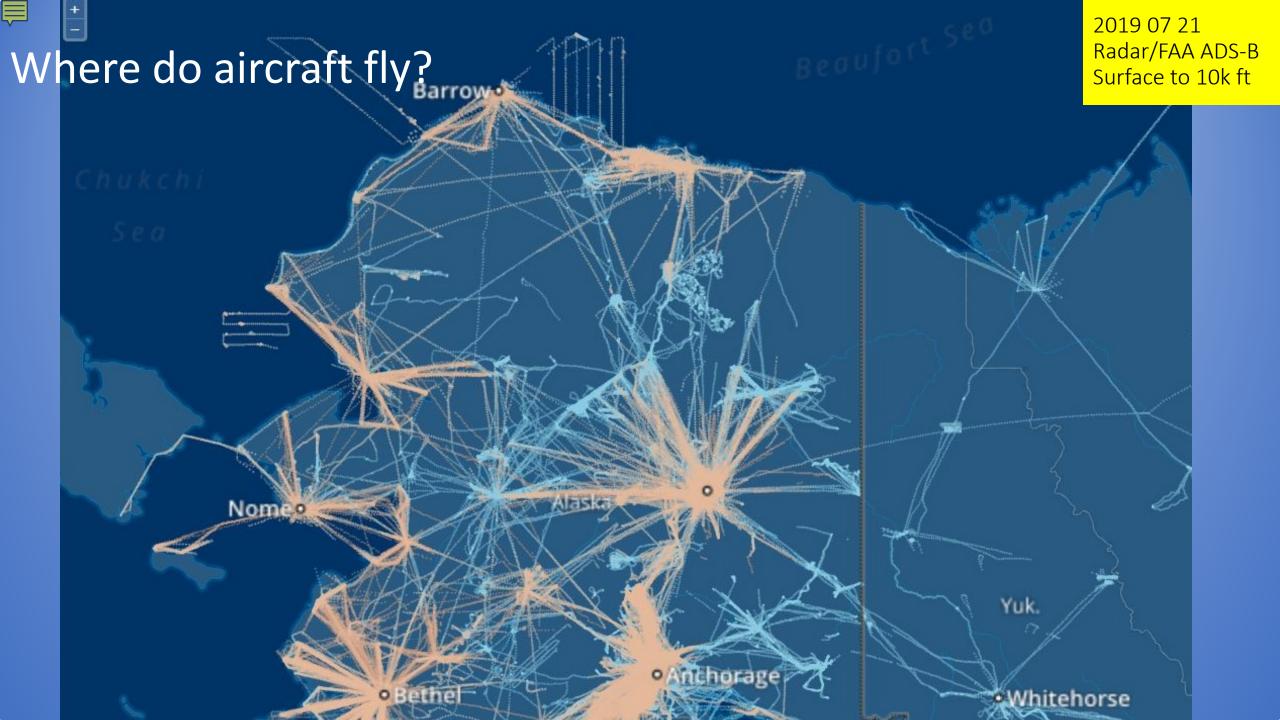












## Why do we want more reported weather?

### NTSB reported Alaska accident rate, 2008-2017

- 2.35 times higher than CONUS for total accidents
- 1.34 times higher for fatal accidents AOPA January 26, 2020 <u>webstory</u>

### What do we rely on?

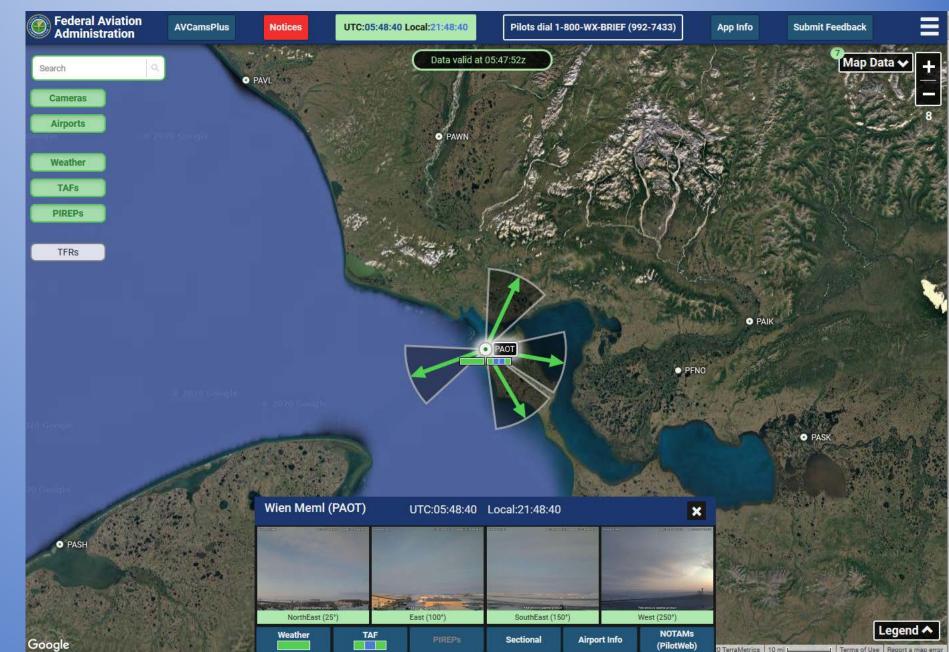
- Existing AWOS/ASOS
- Weather cameras
- PIREPs
- Experimental products



# FAA Weather Cameras

- Complements AWOS/ASOS
- Valuable when stand-alone

https://avcamsplus.faa.gov/



### **Alaska Aviation Guidance Product**

- NWS issues 39 Terminal Area Forecasts (TAF) for the entire state
- Experimental "Alaska Aviation Guidance" Product provides a TAF-like forecast for an additional 61 airports
  - 6-hour look ahead
  - VFR use only
  - Doesn't include all TAF elements

Experimental Guidance issued 2240 UTC 22 Aug 2019 PAMD (MIDDLETON IS, AK) 201908222300-201908230500

Six Hour Forecast:

Forecast period: 2300 UTC 22 August 2019 to 0200 UTC 23 August 2019 Forecast type: FROM: standard forecast or significant change Winds: from the ENE (70 degrees) at 29 MPH (25 knots; 12.9 m/s) gusting to 37 MPH (32 knots; 16.5 m/s) Visibility: 4 sm (6 km) Ceiling: 2500 feet AGL Clouds: overcast cloud deck at 2500 feet AGL Weather: -RA (light rain)

### Forecast period: 0200 to 0400 UTC 23 August 2019

Forecast type: FROM: standard forecast or significant change Winds: from the ENE (60 degrees) at 29 MPH (25 knots; 12.9 m/s) gusting to 37 MPH (32 knots; 16.5 m/s) Visibility: 6 sm (10 km) Ceiling: 2500 feet AGL Clouds: overcast cloud deck at 2500 feet AGL Weather: -RA (light rain)

Forecast period: 0400 to 0500 UTC 23 August 2019 Forecast type: FROM: standard forecast or significant change Winds: from the ENE (60 degrees) at 25 MPH (22 knots; 11.3 m/s) gusting to 33 MPH (29 knots; 14.9 m/s) Visibility: 6 or more sm (10+ km) Ceiling: 5000 feet AGL Clouds: broken clouds at 5000 feet AGL Weather: -RA (light rain)



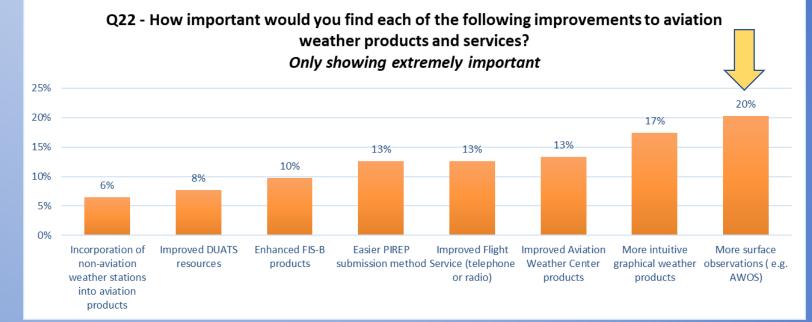
### https://www.weather.gov/arh/aag

Includes FAQ file and link to an online survey

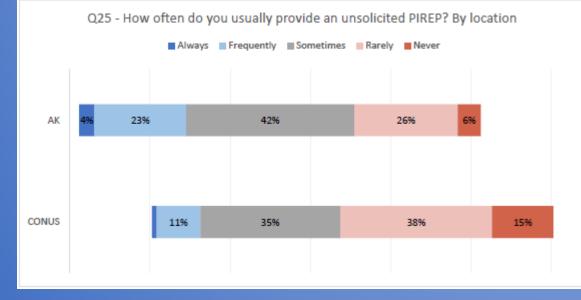


# User Feedback

# Pilots want more surface observations



From AOPA's 2017 Weather Survey, nation wide pilots rated the need for more surface observations at the top of the list



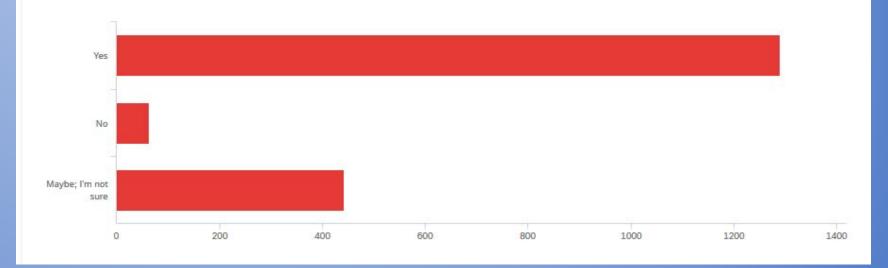
 2018 survey found Alaska pilots are more likely to file Pilot Reports than pilots operating in the CONUS

## Current weather survey underway:

Preliminary results (survey still open):

- Pilots

   overwhelmingly
   would use
   uncertified
   weather
- <u>Ceiling</u>, <u>visibility</u> and <u>wind</u> are the top three elements they desire



Question: If an uncertified weather observation was available at an airport you fly to that currently does not have an AWOS or ASOS, would you use this advisory information?



# Appreciate the progress...

### <u>2017</u>

- Industry letter sent to FAA calling for making more surface observations available to pilots
  - Certified (less than AWOS III)
  - Uncertified-called for VFR standard

### **Today**

- Pleased with FAA plans to develop VFR Weather Concept & 2020 test with Weather Camera Program
- Support development of a Con Ops, and plans for data distribution
- Willing to help test and solicit feedback



Mr. Vaughn Turner Vice President, Technical Operations Federal Aviation Administration 800 Independence Avenue SW Washington, DC 20591

RE: Surface Weather Observation Policy

Dear Mr. Turner,

We are writing today to express our frustration at the lack of inclusion of valid surface weather observation sites in the FAA's Weather Message Switching Center Replacement (WMSCR). The lack of unrace observations is a widepend safety issues as general availate anteraft, air ambalance services, and a significant number of commercial operators fly under Visual Flight Rules (VFR). These avaters need to know that they can maintain the requisite cloud clearance and visibility to complete their mission. Unfortunately, there are hundreds of weather observation systems currently operational in the United States that can provide adequate aviation wather reports that are not visible to pilots.

Attempts to fly by visual references in instrument conditions, also known as unintentional VFR into Instrument Meteorological Conditions (IMC), is a leading cause of fatal general aviation accidents and the leading cause of weather-related accidents. Although increased weather



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