



August 22, 2017

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 surface observations is a widespread safety issue as general aviation aircraft, air ambulance services, and a significant number of commercial operators fly under Visual Flight Rules (VFR). These aviators 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 weather 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

reporting could prevent accidents and save lives, the cost to acquire and maintain fully certified Automated Weather Observing System (AWOS) stations makes it unlikely that this will occur under the current federal and state budget climate.

According to an independent review of National Transportation Safety Board (NTSB) accident reports conducted by Dr. Ira Blumen as part of the Opportunities for Safety Improvement in Helicopter Emergency Medical Services (HEMS) Project, between 1983 and 2013, 25% of the accidents directly related to weather. The fatality rate in these cases, according to Dr. Blumen's study, was 58% versus the non-weather related accidents where it was just 33%. Further, the National EMS Pilot's Association asserts that weather reporting has a significant impact on the decision of these operators to either launch or to decline a request for patient transport. The HEMS Weather Tool was implemented to help provide a more complete weather picture to these pilots so they could make more informed decisions. The HEMS Weather Tool is limited to VFR operations and only for the operator to make "no-go" decisions.

There would be a tremendous benefit to have additional weather information included in the HEMS Weather Tool, particularly the non-federal weather systems not included in WMSCR, due to the aviation reporting information they provide. Incorporating more weather systems that could be limited to assisting pilots "no-go" decisions could prevent VFR-into-IMC and save lives. We believe these weather systems must have operational integrity and sensible quality assurance for them to be effective for pilots.

The good news is that there are lower level AWOS systems and non-AWOS weather stations already in operation that the FAA has noted meet aviation standards. The National Weather Service in Alaska is installing stations that collect the basic parameters required by the aviation community (ceiling, visibility, wind, temperature, altimeter, etc.) using a system that is not certified by the FAA called the Modular Automated Weather Station (MAWS). These weather stations, and many others, have dissemination restrictions for pilots because of FAA technical barriers that designate certification and maintenance standards. We believe this FAA criteria is excessive for weather stations that could be limited to use for VFR flight.

The FAA's weather policy stipulates that for any non-Federal weather station to be connected to WMSCR that the facility meet and be maintained at the same standard as FAA facilities. This means that weather observations officially provided to users must be AWOS-III systems or better. These systems must also be initially FAA certified, undergo annual FAA recertification, and receive a minimum of three maintenance visits a year. These additional requirements take place after the initial expense of installing an AWOS station, and can be prohibitively expensive for operators, particularly in isolated environments where they are most needed.

A supplementary weather certification and maintenance standard would allow the hundreds of non-federal and federal weather systems across the country that are comparable to AWOS-III to be usable to pilots for advisory information. While the FAA has agreed that the National Weather Service's MAWS systems meet the basic requirements of an AWOS-III, they are unwilling to waive the requirements for three maintenance visits a year, a significant expense in areas like Alaska. An alternate weather certification standard would allow many more reporting locations, like the MAWS, to be visible to pilots for VFR advisory purposes.

The current policy is too restrictive and serves as a barrier to VFR operators having greater access to weather. The fact that hundreds of weather observation systems are already available that meet aviation standards, but not technically able to be included in WMSCR, means pilots are being deprived of critical information that could enhance the safety of flight. There are precedents for a VFR-only system. For example, the FAA maintains several NDBs that are designated as for VFR-only navigation. We believe the existing FAA standards could be relaxed to reflect the nature of VFR operations.

To provide greater weather information to operators, some other countries have implemented alternative weather dissemination standards. One country uses the Limited Weather Information System (LWIS) moniker for these more basic automated weather systems. These automated stations generate wind, temperature, dew point, and altimeter setting using LWIS as the identifier, instead of METAR or SPECI. The weather report is issued in the same order and with the same content, coding and formatting as for a METAR, except several elements may be omitted. The LWIS is similar to the AWOS-AV, AWOS-I, and AWOS-II systems; however, these systems in the United States are not disseminated via WMSCR. These other countries file a difference to ICAO's Annex 3 that allows them to meet the needs of their customers and comply with their international obligations.

In conclusion, we are asking for the FAA to remove the technical requirement that non-federal weather stations must be AWOS-III or better to be included in WMSCR, and to allow the establishment of a new VFR weather station standard that would allow fewer maintenance visits and reduced operational cost for owners. The VFR weather stations could have a unique identifier, similar to LWIS, to ensure pilots understand that that system may be used for limited purposes. The incorporation of these hundreds of weather systems will provide much better information to pilots as they conduct their VFR flight planning. By reducing the cost of both the initial investment and ongoing maintenance, we expect that additional stations will be established, leading to improved aviation safety.

Sincerely,

Air Medical Operators Association  
Aircraft Owners and Pilots Association  
Alaska Airmen Association  
Association of Air Medical Services  
Association of Critical Care Transport  
Colorado Division of Aeronautics  
Experimental Aircraft Association  
General Aviation Manufacturers Association  
Helicopter Association International  
National Association of State Aviation Officials  
National EMS Pilots Association  
United States Helicopter Safety Team Infrastructure Work Group  
Utah Business Aviation Association  
Utah Division of Aeronautics