

**SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION:  
QUESTIONS FOR THE RECORD**

**HEARING ON  
FEDERAL AVIATION ADMINISTRATION REAUTHORIZATION  
TUESDAY, APRIL 14, 2015**

**Questions for the Honorable Michael P. Huerta, Administrator, Federal Aviation Administration**

*From Chairman Thune*

*Question 1.* What is the agency doing to assist general aviation airports and rural states in providing cost-effective local weather data needed to support Instrument Flight Rules approaches and maximize airport operational utility?

Answer. The FAA's Non-Federal Program mission includes helping general aviation (GA) airports and rural states acquire/operate cost-effective aids to air navigation. This includes acquiring &/or expanding access to local weather data that supports IFR approaches, and maximizes airports' operational utility.

The Non-Federal Program approaches this effort in various ways. One key example is the work with the Aircraft Owners & Pilots Association. ("AOPA" represents the GA community, and has nearly 400,000 members.) This collaborative effort focuses on non-Federally-owned automated weather observation systems (AWOS). The goal is to increase the number of non-Federal AWOS that are connected to the FAA's WMSCR system.

The FAA's WSMCR capability is used to disseminate current aviation-meteorological data products. This includes "aviation routine weather reports," aka "METARs," which are aggregated from various sources. Increasing the sources of data results in better quality weather products and increased benefit for the GA community. As the sources increase, pilots planning a flight will have access to FAA-certified weather information available for broader array of airports. Additionally as data is received from the increased number of local AWOS, the accuracy of local weather forecasts will be improved. These benefits clearly help to support instrument flight rule (IFR) approaches, and maximize airports' operational utility.

*Question 2.* What policy changes can be taken to encourage manufacturers of Automated Weather Observing Systems (AWOSs) to use new technology that minimizes maintenance requirements and ongoing operational costs? In turn, what agency policies can be modified to minimize or remove unnecessary or burdensome requirements related to AWOSs that are not required for safe aircraft operation?

Answer. The FAA's Non-Federal Program has been working with the Aircraft Owners & Pilots Association (AOPA). One objective of this joint effort is to encourage prospective owners of non-Federal AWOS to buy the newest types of FAA-approved AWOS. Similarly, owners of older types of AWOS are being encouraged to upgrade to newer systems.

This effort is primarily intended to benefit the aviation community. However, as the pool of prospective buyers grows, a benefit will also accrue to the companies that manufacture and maintain non-Federal AWOS. Presumably, these companies will seek to convert the maximum number of prospective buyers into actual buyers. A fundamental way companies can accomplish this is by making their products and services as affordable as possible. For instance, many manufacturers also sell maintenance packages. Therefore, manufacturers can make AWOS ownership more affordable by developing new technology that minimizes maintenance requirements and on-going life-cycle costs.

Additionally, the FAA is taking steps to reduce maintenance requirements and their associated costs. A prime example can be found in the latest revision to the “non-Federal AWOS AC,” which reduced annual maintenance costs by 25%. Prior to this revision, maintenance had been required four times per year (i.e. every 90 days). However, the revision reduced this requirement to three times per year (i.e. every 120 days). This change was made possible because non-Federally-owned facilities must be operated and maintained to the same standards as FAA-owned facilities. The FAA had determined that its AWOS only needed to receive maintenance three times a year - rather than four. That decision was influenced by manufacturers’ development of systems with improved technology and reliability.

It is important to note that the FAA does not – and cannot – develop its maintenance requirements based solely on how technologically advanced a system is. A requirement may seem “burdensome” and “unnecessary” – until all the relevant (though lesser known) factors are considered. For instance, if a non-Federal AWOS is not operating properly, how will that affect its weather data? Will it interfere with the frequencies of nearby air-navigation facilities? Also, how well is the system protected against cyber attacks and physical vandalism? Will softening the requirements expose the FAA to potential liability that outweighs the benefits to owners & manufacturers? And if an accident occurs, will the AWOS owner be able to provide the necessary data to assist the NTSB?

Finally, the Agency strives to support the expansion of non-Federally-owned systems in the NAS. However, it also strives to provide quality over quantity.

*Question 3.* FAA Advisory 150/5220-16D, “Automated Weather Observing Systems (AWOS) for Non-Federal Applications,” requires maintenance technicians for AWOSs to comply with FAA Order 6700.20A, “Non-Federal Navigational Aids and Air Traffic Control Facilities.” This Order is dated December 11, 1992. Technology has changed significantly in 23 years. For example, the Order requires non-federal technicians to have an FCC general radio telephone operator license as well as the same qualifications as federal technicians. Has the FAA re-evaluated the qualifications for non-federal technicians to ensure the requirements are commensurate with the level of skill necessary to maintain the modern day technology? If so, how has the FAA worked with manufacturers during this evaluation? If not, how would the FAA work with manufacturers during such an evaluation?

Answer. The FAA has recently re-evaluated 6700.20A’s qualifications for non-Federal technicians. Those qualifications remain proportional to the task of maintaining FAA-approved, non-Federally-owned systems. Similarly, those same qualifications continue to apply to the FAA technicians who maintain Federally-owned equivalents of non-Federal systems.

FAA Order 6700.20A is nearing the culmination of a complete, multi-year overhaul. The result

will be an updated version: 6700.20B. The update process included extensive review by a large number of organizations and personnel from across the FAA. During the national review, the FAA office in charge of the overhaul received more than 800 comments. Many of them proposed changes to obsolete policies and procedures. However, out of more than 800 comments, there were no suggestions to amend the FCC-licensing requirements for non-Federal technicians.

Finally, order 6700.20 is an FAA “directive.” Agency policy dictates that directives are mandatory instructions for FAA personnel. As a result, only Agency personnel are involved in the writing and revision of FAA orders.