The Future of AMDAR in the National Weather Service

Gene Brusky Rich Mamrosh National Weather Service Green Bay, Wisconsin

Given the expanding amount of high quality aircraft data and the increasing recognition of its operational utility, the National Weather Service (NWS) has for the very first time dedicated a person committed to AMDAR observations. This was via the designation of a new Office of Aircraft Observations in 2014. As a result of this renewed dedication to AMDAR, several new initiatives are currently being supported or are being considered. A brief description of these initiatives will be discussed. These initiatives include:

The development of an improved AMDAR data display capability in AWIPS II. The current display of AMDAR data in AWIPS has not been updated since 1998, thus most NWS meteorologists do not utilize it due to its limitations.

The acquisition of data from new carriers Air Wisconsin (eastern United States) and SKYWEST (western states). In addition, the NWS has contracted to receive higher resolution data from over the data sparse Atlantic and Pacific oceans.

The current AMDAR internet web page is currently being transitioned from ESRL GSD to MADIS. The move to MADIS will allow for 24 hour support of the AMDAR web page. The World Meteorological Organization (WMO) is also considering a contract with MADIS to provide an AMDAR display capability for member nations, and to provide an archive of AMDAR data.

The ability to provide data from 130 aircraft (Southwest and UPS Airlines) that have water vapor sensors to the public. AMDAR data have been restricted by the airlines to the airlines themselves, the NWS, defense department and university researchers. The completion of a new contract will permit the NWS to distribute the water vapor sensor data to the private sector and public starting at the end of the year. The data will be provided by a MADIS web page.