Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-14 DECEMBER 10, 2018

Operations and Services

UPPER AIR PROGRAM

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/.

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Type of Issuance: Routine

SUMMARY OF REVISIONS: This directive supersedes NWSPD 10-14, Upper Air Program, dated February 11, 2014. Changes made to reflect the NWS Headquarters reorganization effective April 1, 2015. No content changes were made.

- 1. The National Weather Service (NWS) is responsible for providing forecasts and warnings. Weather observation assimilation is the first step in the forecast and warning process. This directive governs NWS activities involved with providing upper air observations in support of the NWS forecasts and warnings.
- 2. The NWS upper-air program provides policy and standards for observing, monitoring, acquisition, and dissemination of data to support the NWS and its users.
- 3. This directive establishes the following authorities and responsibilities:
- 3.1 The Office of Observations (OBS):
 - a. Prepares policy and procedural directives;
 - b. coordinates, evaluates, analyzes, and oversees national performance indicators;
 - c. promotes observation and monitoring programs with national users and partners.
 - d. Provides system engineering and software management;
 - e. provides logistical/facilities support and safety/environmental oversight;
 - f. tests and implements new observing systems into the field;
 - g. tests and implements modifications or engineering changes to existing systems;
 - h. provides analysis of upper-air site performance.

- 3.2 The Office of Science and Technology Integration (OSTI):
 - a. Plans, develops, demonstrates, and integrates scientific techniques and system capabilities for the observing services program;
 - b. formulates and maintains a comprehensive research and development plan in support of observation services;
 - c. oversees associated applied research and development.
- 3.3 The Office of Central Processing (CP):
 - a. Ensures accurate and timely data communications;
 - b. provides communication software management and testing.
- 3.4 NWS Regional Headquarters:
 - a. Ensures Weather Service Offices and upper-air contract offices within their region are organized, trained, equipped, and compliant with policies and procedures;
 - b. develops supplements to procedural directives;
 - c. provides technical assistance to the field offices;
 - d. evaluates site and network performance and effectiveness indicators;
 - e. coordinates with OBS/OSTI/CP on matters related to the upper air program.
- 3.5 Weather Service Offices:
 - a. Provides accurate and timely observing services in compliance with NWS policies;
 - b. performs user outreach within their area of responsibility to promote and to assess the success of their upper-air observation and monitoring services;
 - c. provides oversight to upper-air contract offices.
- 3.6 The National Centers for Environmental Prediction (NCEP):
 - a. Creates a monthly quality assurance report on U.S. upper-air observations;
 - b. provides input for upper-air observational accuracy, frequency, and information to meet numerical forecast data assimilation requirements.
- 4. The NWS measures the effectiveness of the upper-air observing program using the following mission-critical performance measures: timely delivery of accurate data to users within the NWS; timely transmission of processed information; and delivery of the final product to the user. At the national and regional level, these metrics highlight efforts to develop and enhance policy for supporting systems, training, technology, and science to enable continued improvement at the field office level. These metrics will provide improved site effectiveness through focused training,

techniques and procedures. The goal of this policy is to improve the operational effectiveness of upper-air observation services to the NWS and its users.

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5. This Policy Directive is supported by references and supporting information listed in Attachment 1.

Signed 11/16/2018

Louis W. Uccellini Date
Assistant Administrator
for Weather Services

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ATTACHMENT 1 - References

Procedural Directives

- NWS Manual 10-1401, Rawinsonde Observations
- NWS Manual 50-1115, Occupational Safety and Health
- NWS Manual 50-5116, Environmental Management
- Radiosonde Replacement System (RRS) Workstation User Guide