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

NATIONAL WEATHER SERVICE POLICY DIRECTIVE 10-14 MARCH 17, 2005

Operations and Services

UPPER AIR PROGRAM

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

OPR: W/OS7 (M. Campbell) **Certified by:** W/OS (D. McCarthy)

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SUMMARY OF REVISIONS: This directive supersedes NWSPD 10-14, "Upper Air Program" dated December 13, 2003. Changes: Reworded paragraph 3.3. Attachment 1, added reference to "NWS Environmental Management Manual."

- 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 customers.
- 3. This directive establishes the following authorities and responsibilities:
- 3.1 The Office of Climate, Water, and Weather Services (OCWWS):
 - a. prepares policy and procedural directives;
 - b. coordinates, evaluates, analyzes, and oversees national performance indicators;
 - c. promotes observation and monitoring programs with national customers and partners.
- 3.2 The Office of Science and Technology (OST):
 - 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 Operational Systems (OOS):

- a. provides system engineering and software management;
- b. ensures accurate and timely data communications;
- c. provides logistical/facilities support and safety/environmental oversight;
- d. tests and implements new observing systems into the field;
- e. provides analysis of upper-air site performance.

3.4 NWS Regional Headquarters:

- a. ensure Weather Service Offices and upper-air contract offices within their region are organized, trained, equipped, and compliant with policies and procedures;
- b. develop supplements to procedural directives;
- c. provide technical assistance to the field offices;
- d. evaluate site and network performance and effectiveness indicators;
- e. coordinate with OCWWS/OST/OOS on matters related to the upper air program.

3.5 Weather Service Offices:

- a. provide accurate and timely observing services in compliance with NWS policies;
- b. perform customer outreach within their area of responsibility to promote and to assess the success of their upper-air observation and monitoring services;
- c. provide 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 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 customer. 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 observation services to the NWS and its customers.

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

Signed by March 03, 2005
David L. Johnson Date

David L. Johnson Assistant Administrator for Weather Services

Attachment 1

REFERENCES AND GLOSSARY OF TERMS

Procedural Directives

NWS Observing Handbook No. 10, Rawinsonde Observations MicroART Training Guide (for Vaisala Radiosondes) MicroART Training Guide (for VIZ Radiosondes) VIZ 9000 User's Manual NWSM50-5116, Environmental Management Manual NWSM50-1115, Occupational Safety and Health Manual