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

NATIONAL WEATHER SERVICE INSTRUCTION 30-2110
JUNE 7, 2007

Maintenance, Logistics, and Facilities
Systems/Equipment Maintenance, NWSPD 30-21

HYDROLOGIC MAINTENANCE

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OPR: OPS12 (A. Wissman)   **Certified by:** OPS1 (M. Paese)
Type of Issuance: Routine

SUMMARY OF REVISIONS: This revision updates NWSI 30-2110, "Hydrologic Maintenance," dated October 27, 2003, with editorial changes.

_Signed by_____May 23, 2007_
John McNulty, Jr.   Date
Director, Office of Operational
  Systems

Hydrologic Maintenance

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1.   Introduction. This instruction establishes specific equipment maintenance procedures for hydrologic equipment through the use of established technical documentation located in Engineering Handbook 10 (EHB-10) (e.g., technical manuals, maintenance notes, modification notes). Hydrological equipment includes (but is not limited to) sensors, and systems to observe, process and disseminate reports of hydrologic phenomena including precipitation accumulation, river flood stage, soil moisture, and other environmental conditions affecting hydrological resources. These data are used by NWS operational staff to issue timely and accurate forecasts and warnings of flood and flash flood conditions for the protection of life and property.

2.   Procedures. National Weather Service Instruction (NWSI) 30-2101, *System Maintenance Management*, governs maintenance of equipment. NWS field personnel will maintain hydrologic equipment as described in this instruction. Maintenance will be accomplished, following guidance in authorized technical manuals, modification notes, and maintenance notes as defined in EHB-10. Maintenance reporting will follow instructions contained in NWSI 30-2104, *Maintenance Data Documentation*.

3.   Organization. Maintenance services for hydrologic equipment are focused at the local level with augmenting capabilities at the regional and national levels.

4.   Responsibilities. Organizational responsibilities are presented in a "bottom-up" approach because of the field focus of this document.

4.1   Field Office. Field operations personnel, as part of their routine quality control oversight procedures, in accordance with NWSI 10-1305, Observational Quality Control, are responsible for notifying site electronics maintenance staff of detected/suspected observing equipment conditions requiring a maintenance response. This notification will be provided through the Engineering Management Reporting System (EMRS) as prescribed in NWSI 30-2104.

Concurrent outages are handled according to the instructions in NWSI 30-2101, Section 3.2, Maintenance Priorities.

4.2   Electronics Technician. Site electronics staff are responsible for restoring hydrologic equipment to operational status, returning defective components, ordering replacement spares, and reporting on maintenance services provided. Work will be performed in conformance to priorities established by the electronic systems analyst or meteorologist-in-charge.

4.3   Regional Headquarters (RHQ). RHQ coordinates resources for hydrologic equipment as needed to support non-standard (e.g., emergency) service requirements.

4.4   National Weather Service Headquarters (WSH). WSH maintenance support for these systems/equipment is distributed among several organizations within the Office of Operational Systems (OPS). The Maintenance Branch (OPS12) is responsible for generating/coordinating and providing modification and maintenance documentation and processing kits for field use; the Acquisition Branch (OPS11) is responsible for equipment modification design.

5.   Documentation.

5.1   Maintenance Reporting. Maintenance or operational personnel at the field office responsible for the hydrologic equipment will accurately document the time and nature of equipment failures in EMRS following instructions in NWSI 30-2104.

5.2   Maintenance and Technical Documents. Maintenance of hydrologic equipment will be accomplished following authorized guidance (e.g., technical manuals, modification notes, maintenance notes). Centralized Web access to EHB-10 (i.e., maintenance procedures, technical documentation, modification and maintenance notes) is provided at: http://www.ops1.nws.noaa.gov/EHBS.HTM.