

**NATIONAL WEATHER SERVICE INSTRUCTION 30-2106  
SEPTEMBER 1, 2023**

**Maintenance, Logistics, and Facilities  
System Maintenance, NWSPD 30-21**

**RADAR MAINTENANCE**

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

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**Type of Issuance:** Routine

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**SUMMARY OF REVISIONS:** This instruction supersedes NWSI 30-2106, “Radar Maintenance,” dated August 22, 2019. There were minor updates to the NWSH responsibilities section.

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**WAR.1365835825** Date: 2023.08.18 00:06:18 -04'00'

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Date

**Radar Maintenance**

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**1 Introduction**

This instruction establishes specific equipment maintenance procedures through the use of established technical documentation for radar, Engineering Handbook 6 (EHB-6) (e.g., technical manuals, maintenance notes, modification notes).

**2 Procedures**

National Weather Service Instruction (NWSI) 30-2101, *System Maintenance Management*, governs maintenance of NEXRAD equipment. NWS field personnel will maintain radar equipment as described in this instruction. Maintenance will be accomplished following guidance in authorized technical manuals, modification, and maintenance notes as defined in EHB-6. Maintenance reporting will follow instructions contained in NWSI 30-2104, *Maintenance Data Documentation*.

**3 Organization**

Maintenance services for radar equipment are focused at the local level, with augmenting capabilities at the regional and national levels.

**4 Responsibilities**

Organizational responsibilities are presented in a “bottoms-up” approach because of the field focus of this document.

#### **4.1 Field Office**

Field operations staff are responsible for notifying site electronics maintenance staff of required maintenance using the Engineering Management Reporting System (EMRS) as prescribed in NWSI 30-2104. Electronics maintenance staff resolve concurrent outages following the instructions in NWSI 30-2101.

#### **4.2 Electronics Technician**

Site electronics maintenance staff are responsible for restoring radar equipment to operational status, returning defective components to the National Reconditioning Center, ordering replacement parts from the National Logistics Support Center, and reporting on maintenance services provided. Work will be performed in conformance with priorities established by the local Electronic Systems Analyst (ESA) or Meteorologist-in-Charge (MIC).

#### **4.3 Regional Headquarters (RHQ)**

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

#### **4.4 National Weather Service Headquarters (NWSH)**

NWSH support for this systems/equipment is distributed among several organizations within the Office of Observations (OBS).

- The Program Branch (OBS12) is responsible for generating/coordinating and providing modification and maintenance documentation and processing kits for field use.
- The Engineering Branch (OBS13) is responsible for equipment modification design.
- The National Logistics Support Center (OBS341) is responsible for storage of spare parts, the shipping of parts to radar sites, and accepting the return of defective parts.
- The National Reconditioning Center (OBS342) is responsible for repairing or arranging the repair of returned defective parts.

### **5 Documentation**

#### **5.1 Maintenance Reporting**

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

#### **5.2 Maintenance and Technical Documents**

Maintenance of radar equipment will be accomplished following authorized guidance (e.g., technical manuals, modification notes, maintenance notes). Centralized web access to EHB-6 (i.e., maintenance procedures, technical documentation, modification and maintenance notes) is provided at <https://www.roc.noaa.gov/WSR88D/Program/TechManPubBull.aspx>