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

NATIONAL WEATHER SERVICE ALASKA REGION SUPPLEMENT 03-2004
APPLICABLE TO NWSI 30-2107
APRIL 15, 2011

Maintenance, Logistics, and Facilities
System Maintenance, NWSPD 30-21
NOAA Weather Radio (NWR) Maintenance, NWSI 30-2107

NWS/USCG WEATHER BLANKET NETWORK

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

OPR: W/AR41 (P. Pedersen) **Certified by:** W/AR4 (S. Denton)
Type of Issuance: Routine

SUMMARY OF REVISIONS: This supplement supersedes ARS 03-2004, NWS/USCG Weather Blanket Network, dated March 21, 2007, applicable to NWSI 30-2107. The tables have been updated to reflect the current transmitter configuration.

/SIGNED/ April 1, 2011
Frank P. Kelly Date
Regional Director

NWS/USCG Weather Blanket Operations and Maintenance

Table of Contents: Page

1. Introduction. The National Weather Service (NWS) Alaska Region provides a 24x7 public service radio broadcast of NWS warnings, watches, forecasts and other hazard information using a network of high power NOAA Weather Radio (NWR) transmitters in major communities throughout Alaska. This leaves large coastal areas and smaller communities with almost no NWR coverage. To increase the NWR coverage, the NWS Alaska Region and the United States Coast Guard (USCG) 17th District entered into a partnership for the operation of low power NWR transmitters at USCG "high" sites throughout the coastal areas of Alaska. We call this collaborative effort "Weather Blanket."

The USCG "high" sites are at remote mountaintop locations that have USCG supplied power and transmitter facilities. The use of low power NWR transmitters at the USCG high sites results in an estimated 300 percent increase in NWR coverage along Alaska's coastal areas. Partnering with the USCG to operate the Weather Blanket network provides the most effective method to provide NWR coverage in the coastal areas of Alaska. The USCG high sites often provide coverage at locations where using an NWS high-power NWR transmitter is impractical.

This supplement defines the roles and responsibilities for the operations and maintenance of the Weather Blanket network. It also includes an agreed upon joint reporting process to ensure each agency receives notification of changes in the Weather Blanket network status.

2. Responsibilities. The NWS and the USCG share the cost of operations and maintenance

responsibilities for the Weather Blanket network. This section defines the roles and responsibilities for the operations and maintenance of the Weather Blanket network.

2.1 National Weather Service (NWS). The NWS is responsible for providing the 24x7 continuous NWR audio programming containing the weather forecasts, warnings, and observations to the USCG. The NWS is responsible for the provision and funding of the audio circuits required between each NWS office that supplies the NWR program audio and the USCG microwave feed points. Because the 5-watt NWR Weather Blanket transmitters operate in the NWR frequency spectrum, the NWS also provides the licenses required for operation.

2.2 United States Coast Guard (USCG). The USCG owns and maintains the 5-watt NWR transmitters used at the USCG high sites. The USCG assigned repair priority is equivalent to the NWS NWR repair priority. The USCG is responsible for the operation and maintenance of the 5-watt transmitters and any USCG supplied microwave equipment or communications circuits used to transport the NWS supplied NWR audio to the USCG mountaintop sites.

3. Failure Reporting. The transmitters at the USCG high sites have no automated remote off-air monitoring or reporting capability. This means that our customers may often be the first to note and report a network outage. To help ensure the continuity of operations, the NWS and USCG have agreed to provide and share any reports of failures anywhere in the Weather Blanket network. This will help both the NWS and USCG staffs provide accurate customer feedback for reported outages and helps ensure that neither agency expends resources attempting to correct a problem that is not within their area of maintenance responsibility. The following sections describe specific responsibilities for reporting outages of the Weather Blanket network.

3.1 NWS. It is the responsibility of all the Alaska Region NWS staff to report any known or scheduled outages of any equipment, system, or circuits that affect the Weather Blanket network operation.

3.1.1 Systems Integration Branch (SIB) Chief. The NWS Alaska Region SIB Chief is the NWS focal point for the Weather Blanket network operation and maintenance. The SIB Chief, or their designee, will report the failure of any equipment, system, or communications circuits used to provide NWR programming audio, *when we expect the outage to exceed eight hours*, to the Chief, Communications & Technology Branch, USCG 17th District, Juneau, Alaska, via telephone at (907) 463-2222. The SIB Chief will leave a voice mail message if there is no answer.

The SIB Chief will provide Weather Blanket outage information to the lead forecaster, or their designee, and, when appropriate, the Meteorological Technician at the affected NWS offices to ensure the operations staff are aware of any outages in their area of responsibility. This helps ensure that we provide up-to-date information to the public on the Weather Blanket network status.

3.1.2 Weather Forecast Offices (WFO). The lead forecaster, or their designee, will report any failure of their Console Replacement System (CRS) or communications circuits used to provide NWR programming audio supplied by their office, *when we expect the outage to exceed eight hours*, to the SIB Chief via telephone at (907) 271-3462. The lead forecaster, or their designee, will leave a voice mail message if there is no answer or if the outage occurs during non-business

hours.

3.1.3 Kodiak Weather Service Office (WSO). The station manager will ensure that their staff reports any failure of the local NWR broadcast audio recording device used to provide the programming audio, *when we expect the outage to exceed eight hours*, to the SIB Chief.

3.2 USCG. It is the responsibility of all USCG units in District 17 to report any known or scheduled outages of any equipment, system, or circuits that affect the Weather Blanket network operation.

3.2.1 Chief, Communications and Technology Branch, USCG 17th District. The Chief of Communications and Technology Branch is the USCG focal point for the operation and maintenance of the Weather Blanket network. This person, or their designee, has agreed to report any outages of the equipment and systems used in the operation of the Weather Blanket network to the NWS SIB Chief. The NWS SIB Chief uses this information to update the operations staff at the affected NWS offices to ensure they are aware of the Weather Blanket network status.

3.2.2 USCG Communication Centers Juneau, Valdez and Kodiak. The operations specialist in charge will ensure that their staff reports any failure of USCG VHF-FM high sites and Weather Blanket equipment or links to the Chief, Communications and Technology Branch.

4. Restoration Reporting. The NWS and USCG have agreed to exchange confirmation information once a failure is corrected. This exchange helps ensure continuity of operations and assists both the NWS and USCG staff in supplying accurate customer feedback regarding the status of the Weather Blanket network.

4.1 NWS. The following sections describe specific responsibilities for reporting Weather Blanket network restoration within the NWS Alaska Region.

4.1.1 SIB Chief. The SIB Chief will report the restoration of any equipment, system, or communications circuits used to provide NWR programming audio to the USCG Chief Communications and Technology Branch and the lead forecaster, or their designee, and, when appropriate, the Meteorological Technician at the affected NWS offices.

4.1.2 WFOs. The lead forecaster, or their designee, will report the restoration of their CRS system or communications circuits used to provide NWR programming audio supplied by their office, once repairs are completed, to the SIB Chief.

4.1.3 Kodiak WSO. The station manager will ensure that their staff reports the restoration of the local NWR broadcast audio recording device used to provide the programming audio, once repairs are completed, to the SIB Chief.

4.2 USCG. The following sections describe specific responsibilities for reporting Weather Blanket network restoration within the USCG 17th District.

4.2.1 Chief, Communications and Technology Branch, USCG 17th District. This person, or their designee, has agreed to report the restoration of any equipment and systems used in the

operation of the Weather Blanket network to the NWS SIB Chief. The SIB Chief will provide this information to the lead forecaster, or their designee, and, when appropriate, the Meteorological Technician at the affected NWS offices to ensure the operations staff are aware of the Weather Blanket network status.

4.2.2 USCG Communication Centers Juneau, Valdez and Kodiak. The operations specialist in charge will ensure that their staff reports all restorations of USCG VHF-FM high sites and Weather Blanket equipment or links to the Chief, Communications and Technology Branch.

5. Network Configuration. To reduce the need for CRS expansion, and decrease the number of dedicated circuits required, we used "drops" from existing NWR program audio feeds to audio for the USCG high sites. The tables on the following page define which NWS offices are responsible for providing the NWR programming audio to each USCG high site within the Weather Blanket network. For the WFOs, this provides a quick reference to aid in determining which USCG sites will be affected by a CRS channel failure.

Kodiak WSO	**USCG Sites**
The local NWS staff uses a manual device to record and provide the NWR program audio.	Raspberry Island Pillar Mountain Cape Gull Marmot Island Sitkinak Dome

Anchorage WFO	**USCG Sites**
CRS channel 2 (Homer)	Bede Mountain
CRS channel 3 (Seward)	Rugged Island
CRS channel 5 (Dutch Harbor)	Cold Bay Saint Paul
CRS channel 7 (Whittier)	Point Pigot
CRS channel 8 (Valdez/Cordova)	Naked Island Potato Point Cape Hinchinbrook
CRS channel 9 (dedicated channel)	Tuklung Mountain Dillingham

Juneau WFO	**USCG Sites**
CRS channel 1 (Juneau)	Mount Robert Barron Cape Fanshaw Althorp Peak
CRS channel 3 (Sitka)	Mount McArthur
CRS channel 4 (Wrangell)	Zarembo Island
CRS channel 5 (dedicated channel)	Manleyville
CRS channel 6 (Ketchikan)	Duke Island Gravina
CRS channel 7 (Craig)	Sukkwan Island