

***NATIONAL WEATHER SERVICE INSTRUCTION 10-1710
OCTOBER 1, 2002***

***Operations and Services
Dissemination Policy NWSPD 10-17***

NOAA WEATHER RADIO (NWR) DISSEMINATION

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

OPR: OS51 (H. White)

Certified by: OS5 (D. Wernly)

Type of Issuance: Initial.

SUMMARY OF REVISIONS: This directive supersedes WSOM Chapter C-64, Issuance 98-09, dated December 21, 1998; Operations Manual Letter 4-95, section 3.2; and Operations Manual Letter 04-99.

signed	10/1/02
_____ Gregory A. Mandt Director, Office of Climate, Water, and Weather Services	_____ Date

NOAA Weather Radio (NWR) Dissemination

<u>Table of Contents:</u>		<u>Page</u>
1.	Introduction	4
1.1	Mission Connection	4
1.2	Fundamental Broadcast Concepts	4
1.2.1	Use of NWR Automated Voice	4
1.2.2	NWR "All Hazards" Concept	4
1.2.3	Official Voice of the NWS	5
2.	Technical Description	5
3.	Procedural Responsibilities	5
3.1	Weather Service Headquarters (WSH)	5
3.2	Regional Headquarters	6
3.3	Weather Forecast Offices (WFO)	6
3.3.1	Record Keeping	6
4.	Broadcast Programming Goal	6
4.1	Broadcast Service Area	6
4.2	Broadcast Quality	7
4.2.1	Style of Presentation	7
5.	Broadcast Message Priority	7
5.1	Guidelines	8
5.2	Content	8
5.3	Unauthorized Material	8
5.4	Non-Weather-Related Announcements	9
6.	Operations for Critical Events	9
6.1	Backup Live Mode	10
6.2	Role of NWR in the National Warning System (NAWAS)	10
6.3	Initial Issuance of Short Duration Watches, Warnings, and Related Statements	10
6.4	Programming After Initial Watch/Warning Issuances	11
6.4.1	Watches for Tornadoes, Severe Thunderstorms, and Flash Floods	11
6.4.2	Warnings for Tornadoes, Severe Thunderstorms, and Flash Floods	11
6.4.3	Watches and Warnings for Winter Storms, High Winds, and Dust Storms	11
6.4.4	Watches and Warnings for Hurricanes and Tropical Storms	13
6.4.5	Warnings for Marine and Other Marine Events	13

6.4.6	Watches, Warnings, and Related Statements for Floods	14
6.4.7	Watches and Warnings for Tsunamis	14
6.5	Non-Weather-Related Emergency Messages	14
6.6	Required Weekly Test (RWT)	16
7.	Broadcast Outage and Suspension Rules	17
7.1	Notice of Planned NWR Facility Outage	17
7.2	Broadcast Suspension Rules	18
7.2.1	Routine Request	18
7.2.2	Emergency Request	18
7.2.3	Fire and Bomb Threats	19
8.	Quality Assurance	19
8.1	Quality Assurance on Shift	19
8.2	Drills of Broadcast Rules for Critical Events	19
8.3	NWR Program Leaders	19
9.	NWR as a Substitute for Other Means of Dissemination	20
10.	Use of NWR by the Electronic Media	20
11.	Restrictions Under Operating License	20
12.	Public Education and Promotion	20
12.1	General Promotion Activities	21
12.2	Promotion with Electronic Media	22
13.	Customer Feedback	22
14.	Gift/Cooperator-Operated NWR Systems	22

Exhibit:

1	Guidelines for Handling Critical Information on NWR	12
---	---	----

Appendices:

A	NOAA Weather Radio (NWR) Operator Proficiency Program	A-1
B	NWR Remote Off-Air Monitoring System (ROAMS)	B-1
C	Guidelines for Basic Core and Special Customer Messages	C-1
D	NWR System Basic Terms and Definitions Related to Broadcast Scheduling	D-1
E	NWS Action Plan for NWR Receiver Recall	E-1
F	Dissemination Rules for National and Regional Non-Weather-Related Emergency Messages	F-1

G	Use of NWR-SAME Codes and 1050 Hz Tone Alarm	G-1
H	Federal Communications Commission Authorization for NWR Rebroadcast	H-1

1. Introduction. This National Weather Service (NWS) Instruction (NWSI) provides service guidelines and instructions for broadcasting on the National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR) and identifies the managerial relationships and operational duties (as detailed in section 3). Guidelines and instructions for overall system management, engineering, maintenance, logistics, and other support for the NWR program can be found in NWSI 10-1711, NOAA Weather Radio System Management.

1.1 Mission Connection. The NWS carries out its mission to protect life and property by broadcasting directly to the general public, other government entities, and the private sector (hereafter referred to as “the public,” unless otherwise specified). Broadcasts include timely warnings and other weather and critical non-weather-related information to those in the affected areas under the “all-hazards” concept (see section 1.2.2). NWR broadcasts can be received using low cost, widely available receivers. Furthermore, NWR, as a primary NWS input to the Federal Communications Commission’s (FCC) Emergency Alert System (EAS) (see section 10), has the potential to reach the vast majority of the population with all-hazards information through the Nation’s electronic media.

1.2 Fundamental Broadcast Concepts. NWR is a broadcast service by the NWS for the public. NWR uses formatted text input from the Advanced Weather Interactive Processing System (AWIPS) or other approved sources. The NWR system supports manual broadcast recording and scheduling operations for products not supported by text formatters, referred to as “manual operations,” and for critical events including backup. See “CRS (Console Replacement System) Site Operator’s Manual” (the HTML version of the manual is available to CRS operators through the CRS “help capability” on the CRS).

1.2.1 Use of NWR Automated Voice. To broadcast critical information as quickly as possible, an NWS goal is to use automated voicing technology for broadcast of all messages. Any text to be converted automatically to speech should have full sentences, correct spelling, and effective punctuation to achieve clear communication. For instructions on set up and use of automated voicing, see “Voice Improvement Processor Deployment and Implementation Plan” on the Internet at: <http://www.nws.noaa.gov/oso/oso1/oso12/document/vip20depimplan> and “Voice Improvement Processor User’s Guide” on the Internet at: <http://www.nws.noaa.gov/oso/oso1/oso12/document/vip20guide> .

To maintain operator proficiency, Weather Forecast Office (WFO) staff should practice using manual mode, especially in backup live mode, for those times when manual operations are needed. See procedures outlined in section 6.1 and appendix A.

1.2.2 NWR “All Hazards” Concept. In support of Federal, state, and local government and private sector efforts to provide timely warnings to the public of events that threaten life and

property, efforts to expand NWR to an “All-Hazards” service will continue. All-Hazards include natural disasters (e.g., weather, floods, earthquakes, volcanic activity, forest fires, etc.) and technological disasters, whether accidental or intentional (e.g., chemical or biological releases, oil spills, or nuclear incidents, etc.), and other emergency support activities. Emergency support activities include local emergency management incidents (e.g., train derailments, airplane crashes, marine collisions, industrial fires and accidents, etc.), and law enforcement emergencies (e.g., prison breaks, hostage situations, etc.), and search and rescue missions.

1.2.3 Official Voice of the NWS. NWR is the lone government-operated radio system providing direct warnings to the public. To many listeners, the NWR is the NWS. It is therefore critical NWR broadcasts adhere to the highest standards of timeliness, completeness, accuracy, and clarity.

2. Technical Description. The NWR system provides continuous automated real-time, or recorded, text-to-voice FM-radio broadcasts. The system consists of:

- a. A broadcast console, a personal computer that converts text to speech, and associated peripheral equipment used at WFOs.
- b. A communication link (dedicated telephone line, ultra high frequency radio, or microwave radio) between the transmitter audio output of the audio switching assembly and the broadcast transmitter. Each transmitter has its own dedicated communication link.
- c. A narrow-band very high frequency (VHF) transmitter operating on one of the following Government-assigned frequencies: 162.400, 162.425, 162.450, 162.475, 162.500, 162.525, and 162.550 Megahertz (MHz).
- d. Remote Off-Air Monitoring System (ROAMS) (see section 8.1 and appendix B), emergency power systems, telephone and other utilities, and services required for continuous operation.
- e. A 1050 Hertz (Hz) tone and/or NWR Specific Area Message Encoder (NWR-SAME) transmission. Both either sound an alarm or switch specially equipped NWR receivers from standby to full-on mode for specified weather or non-weather-related emergencies (see section 6). This can be done through the NWR system automation or in manual mode when using the backup live function. See “CRS Site Operator’s Manual” or other local instructions for operation of NWR-SAME, and section 10 for explanation of the NWR role as entry to the EAS.

3. Procedural Responsibilities.

3.1 Weather Service Headquarters (WSH). The Office of Climate, Water, and Weather Services (OCWWS) provides service requirements and instructions for NWR broadcasts, contained in this document, in coordination with the Office of Operational Systems (OOS), and

the Regional Headquarters, with input from WFOs. The OOS provides technical program management support, including operational procedures for expansion of the network, maintenance of a national NWR database, engineering, communications, equipment maintenance, and procedures for resolving interference issues (see NWS Instruction 10-1711, NOAA Weather Radio System Management). The NOAA Public and Constituent Affairs (PA) supports NWS outreach efforts, pursues new initiatives with the private sector, promotes NWR, and coordinates activities related to NWR public education and promotion (see section 12).

3.2 Regional Headquarters. Each Regional Headquarters manages the NWR program within its region and should have a designated regional focal point to oversee day-to-day broadcast operations. In addition, each Regional Headquarters will oversee an NWR Operator Proficiency Program (see section 8 and appendix A) and review and evaluate NWR broadcasts within its region. The Regional Headquarters also will coordinate, define, and document in regional supplements, as necessary, the broadcast service areas for all NWR stations in the region (see section 4.1).

3.3 Weather Forecast Offices (WFO). WFO management adopts these guidelines and regional supplements consistent with local service requirements and staffing. Each WFO should have an NWR program leader (see section 8.3). All operational employees must be proficient at disseminating warnings, watches, and advisories via NWR operational (and any backup) broadcast systems under the NWR Operator Proficiency Program.

3.3.1 Record Keeping. The NWR system at each WFO will automatically maintain a log to help monitor the currency of all broadcast material and the operational status of the equipment. In the event of an NWR system failure, the WFO should maintain a manual log, status board, or other equivalent mechanism for this purpose.

4. Broadcast Programming Goal.

4.1 Broadcast Service Area. The broadcast service area for each transmitter site is defined by counties or parts of counties or other defined areas and adjacent coastal or offshore waters where there is a reliable free space signal. Under ideal conditions (i.e., no obstructions to the signal within a uniform landscape), this would be a uniform ground-level signal of 8 microvolts within a 40-mile radius of the transmitter. The signal level will vary as a result of terrain, urban density, obstructions, and antenna mounting arrangements. The broadcast service area also is the region for which the warning alarm is authorized for use. Any changes must be approved by the Regional Headquarters.

Because a broadcast service area depends on signal reception, it may extend beyond the programming office's warning and forecast area of responsibility. For areas with overlapping coverage by multiple transmitters, WFOs may broadcast routine programming for the overlapped area solely on the transmitter providing the best coverage. Periodic announcements over NWR should mention or define the broadcast service area. WFOs should distribute maps showing the broadcast service area as part of any NWR publicity, and post the maps on their Web site.

Do not extend an NWR broadcast service area beyond its normal boundaries to accommodate listeners employing sophisticated high gain receiving equipment.

4.2 Broadcast Quality. While automated broadcasts will use the following broadcast practices, WFOs should adopt these practices when manually inserting products for broadcast to improve program quality and usability.

4.2.1 Style of Presentation. The broadcasts should be in complete sentences for both the lead-in and main text. Use the word "you" as appropriate when referring to listeners. This projects interest and concern.

- a. Summarizing: Summarize tabular data, except in cases where precise listings are necessary or preferred by listeners.
- b. Wording: All messages should use the past or future tense.
- c. Time on Messages: Broadcasts should include time on messages containing highly perishable material. These include observations, radar or other position reports, and river stages.

Issue times should not be broadcast for forecasts, watches, warnings, or related statements. Generally, use times only for occurrences and expiration of an event.

5. Broadcast Message Priority. The four major elements of broadcast priority in descending order for the broadcast service area are:

- a. Messages for critical events. These normally include warnings, short duration watches, and other non-weather-related hazard information (see section 6).
- b. Basic core messages (always included unless de-emphasized or pre-empted by messages for critical events). These normally include the station identification, the hourly weather roundup, the service area forecast and synopsis, a marine forecast if that information meets the predominant needs of the community, and optionally a regional forecast. The basic core messages may vary according to local customer needs. See appendix C for program guidelines.
- c. Special customer messages (desirable). These normally include marine forecasts (if not already part of the basic core messages), lake and river stage reports, recreation forecasts, climatic data, fire weather forecasts, air quality information, weather-related road information, Ultraviolet Index (UVI) forecasts, and non-weather-related announcements. See appendix C for program guidelines.
- d. Educational and promotional messages (desirable, but optional). These normally include safety messages and announcements of awareness activities.

Although there is special customer programming for groups with similar interests, NWR broadcasts will not be tailored to the needs of any individual person or individual business entity.

5.1 Guidelines. The NWR system programming can provide a more customer-oriented broadcast than a simple sequencing of standard products. Offices should find innovative uses of the enhanced scheduling functionality to best meet the preferences of the listeners. The dynamic use of time-insertion for certain products and frequent cycling of others is a good option. One example of this time-based information includes broadcasts of specific information at a prescribed time during the hour, day, week, month, or year.

AWIPS and other platforms provide text formatters to produce NWR messages with conversational style. Follow basic format requirements in manual mode as well. When manually recording products, use a professional, but conversational, news style delivery.

During critical events, place emphasis on watch/warning repetition, updates, and call to action statements with low (or even no) priority placed on the routine core and special customer broadcasts. For basic terms, approaches, and definitions related to the NWR system broadcast scheduling, see appendix D, and the “CRS Site Operator’s Manual” (section 1.2), and the “CRS Jump Start Kit: The Introductory Guidebook.” See sections 5.2 and 6 below for detailed guidelines on broadcasting operations for critical events.

5.2 Content. Messages should concentrate on what has recently happened and what is forecast to happen. Messages should be concise, avoiding acronyms and offensive language, and be mission related. Messages normally should not be broadcast longer than 6 hours after issuance (zone forecasts are, however, usually updated every 12 hours). Offices with broadcast service areas crossing state lines will provide balanced information and not favor one state over the other.

If state or area weather summaries providing past weather information are broadcast, only air them for a limited time. Do not broadcast messages of national coverage except to highlight an event of long-term interest, such as a hurricane threatening the United States or a major winter storm.

5.3 Unauthorized Material. Ensure no unauthorized or improper material (or improper language) is broadcast, either directly or indirectly (through background noise when in manual broadcast mode). If the NWR system is in the WFO operational area, remember to limit or restrict background noise when recording manually.

Specific material restricted from NWR broadcasts include:

- a. aviation weather in any form (i.e., ceilings, altimeter, terminal forecasts, etc.);
- b. music in any form or style, except as authorized by Regional Headquarters;
- c. encoded data, except NWR-SAME;
- d. excessive technical terms;
- e. foreign languages (except when authorized by Regional Headquarters);

- f. bulletin board announcements, such as meetings and activities for civic, business, and hobby clubs, lodges, professional and fraternal organizations, unions, business clubs, charities, fund raising, etc.;
- g. profanity and loud background noise; and
- h. proprietary data provided by private weather companies, unless permitted by agreement.

5.4 Non-Weather-Related Announcements. Only announcements (from NWS or from non-NWS sources) fitting one of the following criteria should be permitted. Non-NWS sources of information should be identified in the message.

- a. Activities helping the NWS to fulfill its primary mission, such as requests for NWR listener feedback, major public preparedness activities, open houses, dedications, safety information, Skywarn training meetings, and educational and promotional information about NWS products and services.
 - (1) Some of these announcements are appropriate for random or occasional broadcast. These messages should be shorter than 60 seconds, preferably between 15 and 20 seconds. Use no more than two such messages at any one time. Prerecorded messages may be used.
 - (2) Announcements for the recall of NWR receivers may be broadcast, following the guidelines in Appendix E, "NWS Action Plan for NWR Receiver Recall." This appendix, approved by General Counsel, should be used to address each receiver recall in the same manner.
- b. Civil emergency and other non-weather-related emergency messages authorized in section 6.5.
- c. Other messages requested through official channels by the DOC/NOAA, such as outlined in the National Marine Fisheries Service Memorandum of Agreement, construed to be time critical and related to the NOAA mission.

If doubt exists whether a message meets one of the criteria, the WFO will coordinate with their Regional Headquarters. If further doubt exists within the Regional Headquarters, coordinate with the OCWWS Dissemination Services Manager (W/OS51).

6. Operations for Critical Events. For the broadcast service area, you must broadcast as soon as possible all watches, warnings, and related statements for:

- a. severe weather, floods, flash floods, and tsunamis;
- b. marine weather; and
- c. any non-weather civil emergency messages (as per agreements with state and local authorities) affecting the designated broadcast service area (see section 6.5).

The automated text-to-speech feature of the NWR system is the most effective way to broadcast warnings as quickly as possible. Offices should strive to automate as much of their warning programming as possible.

Offices should rarely modify these broadcast messages other than to:

- d. form complete sentences (if necessary);
- e. include appropriate punctuation;
- f. eliminate:
 - (1) naming of counties/areas outside the broadcast service area;
 - (2) material that is relevant only to areas outside the broadcast service area;
 - (3) generic calls to action if calls to action are included elsewhere in the broadcast program; and
 - (4) acronyms;
- g. summarize tables and lists.

6.1 Backup Live Mode. In the event of catastrophic failure of any of the playback functions of the NWR system during a potentially life-threatening emergency, the WFO should make every attempt to keep the transmitter on the air and provide a minimum-level warning service in backup live mode. (Transmitters are designed to shut down if there is no continuous audio feed within a predetermined amount of time, typically 10 to 20 seconds.)

6.2 Role of NWR in the National Warning System (NAWAS). The role of NWR in support of national defense is covered in detail in appendix F. The role of NWR as part of an "all hazards" emergency alert network is detailed in sections 6.3, 6.4, and 6.5.

6.3 Initial Issuance of Short Duration Watches, Warnings, and Related Statements. Broadcast the initial issuance of a short duration watch, warning, and related statements, valid for the NWR broadcast service area, immediately. Start these initial broadcasts with the NWR-SAME codes and the 1050 Hz warning alarm tones. These codes and alarms may also precede, at Regional Headquarters option, other watches, warnings, and certain related follow-up statements. See appendix G. The rules for initial broadcasts of these messages are described below. Do not broadcast numbers and plotting points for convective watches.

Initial Watch/Warning Broadcast Rules.

- a. Transmission of the NWR-SAME codes followed by the 1050 Hz alarm tone.
- b. Broadcast the watch/warning information. This information may be abbreviated to suit emergency management or media needs, but the more detailed information should then follow without the codes and alarms. When in manual mode, to minimize any lag time between issuance and broadcast of a short duration warning, you should broadcast the initial warning live.
- c. Repeat highlights (i.e., what, where, and when).

- d. NWR-SAME end-of-message code.

You may broadcast certain short duration warnings for counties/parishes/areas just outside the NWR broadcast service area with NWR-SAME codes, as per local agreement, but without the warning alarm tone.

6.4 Programming After Initial Watch/Warning Issuances. Highlight or summarize most public watches and warnings in the service area forecasts or optional regional forecasts, as outlined in Exhibit 1. But, use separate messages for details of hurricane warnings and short duration warnings for tornadoes, severe thunderstorms, and flash floods.

As threatening weather gets closer to the broadcast service area or when ongoing conditions become more hazardous, eliminate less essential parts of the broadcast program to allow additional time for watch, warning, or special/severe weather statement information.

If time permits, include generic safety rules and call to action statements appropriate to the hazard in the programming as separate messages when watches or warnings are in effect.

The remaining subsections in 6.4 provide guidance on how programming should be conducted during specific hazardous events. Within these subsections, the term "regional area" means beyond the broadcast service area to around 300 miles or so from the NWR station. "Nearby" means only locations in the regional area adjoining the official NWR broadcast service area. Exhibit 1 provides a tabular summary of the guidelines in the following subsections for handling critical NWR information.

6.4.1 Watches for Tornadoes, Severe Thunderstorms, and Flash Floods. After the initial watch message is aired, highlight information on short duration watches for the NWR broadcast service area in the service area forecast and/or include in a separate message.

6.4.2 Warnings for Tornadoes, Severe Thunderstorms, and Flash Floods. Replace the short duration warning message with any updated severe weather/flash flood statements issued after initial broadcast of these warnings. These replacement statements should briefly restate the essential basics of the warning (what, where, when) followed by the new information concerning the event. The replacement statement will mention if a warning has been cancelled or allowed to expire. You may use a summary message containing up-to-date information on all existing watches, warnings, and advisories in the area, but the summary must include up-to-the-minute current information.

When multiple warnings are in effect, limit call to action statements to only the most appropriate.

6.4.3 Watches and Warnings for Winter Storms, High Winds, and Dust Storms. Highlight information for these watches and warnings in the service area forecast and/or summarize in the optional regional forecast and/or include in a separate message. If you broadcast a separate watch or warning message, ensure the message does not contain conflicting information and, to

EVENT	AREA AFFECTED (1)	SUMMARIZE IN REGIONAL FORECAST (Optional)	HIGHLIGHT IN SERVICE AREA FORECAST	DETAIL IN SEPARATE MESSAGE	PROGRAM STATUS: normal or as marked (2)
<u>SHORT DURATION</u>					
Thunderstorm/Tornado/ Flash Flood Watches	svc area region		X	X N(3)	
Thunderstorm/Tornado/ Flash Flood Warnings	svc area region			X N(3)	limited
Special Marine Warning	svc area			X	
<u>LONG-FUSE</u>					
Winter Storm/High Wind Watches	svc area region	X X	X	X(3)	
Winter Storm/High Wind Warnings	svc area region	X(4) X	X	X	(4)
Hurricane/Tropical Storm Watches	svc area region	X X(5)	X	X N	
Hurricane/Tropical Storm Warnings	svc area region	X(5)	X	X N	limited
Flood Watches/Warnings	svc area region	X X	X(3)	X N(3)	
<u>MISCELLANEOUS</u>					
Marine Warnings (nonspecial)	area (6)			X	
Tsunami Watches and Warnings	svc area			X	(2) for warnings
Civil emergency messages	svc area			X	(3)
Nuclear attack	anywhere			X	limited

(1) Definition of areas:
 svc area = broadcast service area as defined in section 4.1.
 region = outside of broadcast service area to a radius of about 300 miles.
 N = only those "nearby" areas in the region adjoining the broadcast service area.

(2) Limited program status means to confine information to the hazard, eliminating some basic or special customer programming.

(3) Optional.

(4) Should limit programming when conditions actually affect area.

(5) May include areas an appropriate distance beyond region.

(6) Marine forecast - see appendix C.

Exhibit 1: Guidelines for Handling Critical Information on NWR

the extent possible, does not contain redundant information not useful for listeners in the broadcast service area.

6.4.4 Watches and Warnings for Hurricanes and Tropical Storms. Broadcast the latest Hurricane Local Statement (HLS) (edited for brevity, as necessary) along with any additional locally relevant information from the latest National Hurricane Center (NHC) or Central Pacific Hurricane Center (CPHC) public advisory. Do not broadcast the entire NHC or CPHC forecast advisory due to its lengthy and detailed nature. Indicate total probabilities through 72 hours for locations within the broadcast service area as authorized in NWS Instruction 10-601, Tropical Cyclone Weather Services Program. Also highlight watches and warnings in the service area forecast.

During hurricane and tropical storm warnings, limit the programming to: separate warning message with the advisory, service area forecast, short term forecast, tracking, conditions in the weather roundup, safety rules, or any HLS.

6.4.5 Warnings for Marine and Other Marine Events.

- a. Special Marine Warnings and Follow-up Statements. Broadcast information for each event in the broadcast service area as a separate message. See section 6.4.2 for suggested updating procedures.
- b. Other Marine Weather Warnings. Broadcast all other marine warnings, weather-related statements, and advisories that apply to a WFO's marine forecast area (see appendix C).
- c. Special/Urgent Marine Information. In the interest of marine safety and at the request of the U.S. Coast Guard (USCG) or other appropriate authority as designated by Regional Headquarters, NWS offices should broadcast information dealing with an emergency marine situation where: (1) life and/or property is imminently threatened, and (2) such information could help prevent further losses. The USCG selects messages that are within the appropriate NWR listening range and delivers the information ready for broadcast (without editing by the NWS). Any WFO that has effective NWR coverage in the area of USCG concern should broadcast the USCG message as requested.

Try to limit these messages to no more than 30 to 40 seconds (about 70 words). Keep the broadcast in the programming until the message is updated (normally 2 to 3 hours) or until the USCG cancels it. Consider using the periodicity feature in the broadcast cycle for messages that are not frequently updated. Do not broadcast these messages for longer than 12 hours nor should they replace any routine weather products broadcast over NWR. The following message format is suggested:

"The following emergency marine information is transmitted at the request of the U.S. Coast Guard.... An oil tanker and freighter have collided at the entrance to

the Puget Sound between Ft. Warden and Ft. Casey. The channel is blocked and oil covers much of the water surface in the area. All mariners are requested to stay clear of the area."

In the event NWS priorities require temporary suspension of the USCG broadcast or a station emergency prevents the NWS from broadcasting the message, the NWS should notify the requesting USCG office of the situation as soon as possible.

The WFO and USCG periodically should review the procedures for delivery and broadcast of these messages.

6.4.6 Watches, Warnings, and Related Statements for Floods. Broadcast these products (including river, coastal and lakeshore flood) for the broadcast service area in a separate message. They also may be summarized in the service area forecast or optional regional forecast. This information for nearby areas also may be broadcast in the service area to meet listeners needs.

6.4.7 Watches and Warnings for Tsunamis. When these bulletins apply to the broadcast service area, broadcast them as a separate message using only the predictions for the broadcast service area. Because of rapidly changing water levels associated with a tsunami, **DO NOT** broadcast local water level observations.

Broadcasting information on evacuation over NWR is only permitted when prior arrangements have been made with local disaster preparedness authorities to receive the information in a timely fashion. Provide the source of the evacuation information in the message. If there are no such arrangements, the following statement should be read at the end of a tsunami warning issued by the Pacific or West Coast/Alaska Tsunami Warning Centers:

"Due to rapidly changing conditions associated with tsunami wave activity, listeners are urged to tune to local Emergency Alert System media for the latest information issued by local disaster preparedness authorities. They will provide details on evacuation of low-lying areas, if that is necessary, and when it is safe to return after the tsunami threat has passed."

6.5 Non-Weather-Related Emergency Messages. The NWS is authorized by the Federal Emergency Management Agency (FEMA) (or its equivalent) to relay on NWR potential life-saving messages originated and authenticated by local, state and other Federal government agencies. These messages should meet the requirements outlined in the following subsections. Subsections 6.5.a and 6.5.b provide overall guidelines that apply to all subsections. Subsection 6.5.c provides more specific guidelines any agreements should follow. Subsection 6.5.d provides guidelines when agreements do not exist and an emergency occurs. Subsection 6.5.e provides guidelines on regional/national emergencies.

- a. The lead-in to any non-NWS message should be as follows:

"The following type of message is transmitted at the request of (OTHER GOVERNMENT AGENCY) (remainder of text)."

- b. General Criteria for Broadcasting Non-Weather-Related Emergency Messages. To be permitted on NWR, these messages should comply with all the following criteria.
- (1) PUBLIC SAFETY IS INVOLVED -- Information will aid in reducing the loss of life or the substantial loss of property.
 - (2) OFFICIAL INFORMATION -- The source of the information should be a government agency, Federal, state, or local, whose information directly supports Federal responsibilities concerning the protection of life and property.
 - (3) TIME CRITICAL -- Event requires immediate public knowledge to avoid adverse impact.
 - (4) Other means of disseminating the information are not adequate to ensure rapid delivery of urgent information of an immediate threat or of significant importance to life and property.
 - (5) Information length and format is consistent with other NWR broadcast program material. Inclusion of this information should not compromise the remaining NWR broadcast content.
 - (6) Information should be non-routine and infrequent.
- c. Local Non-Weather-Related Emergencies Covered by Agreement. As a general rule, there should be only one statewide agreement with one agency, such as a state EAS plan, to cover all the anticipated situations. Keep a copy of agreements and detailed procedures to carry out the agreements near the weather radio operations area. Regional Headquarters will approve agreements to broadcast non-weather emergency information (including possible use of the warning alarm tones and NWR-SAME codes), but may assign development and coordination of such agreements to the WFO state liaison office.
- d. Local Non-Weather-Related Emergencies Not Covered by Agreement. At times when events occur requiring the use of NWR by external sources not covered by any agreements, the WFO senior official on duty should determine if the event presents a clear and immediate threat to lives and property in the listening area. If found to be so, and the use of NWR could reduce the threat, authorize these broadcasts, as requested by locally recognized public safety officials. The authority is not to be extended to develop or promote any unofficial or non-approved agreements. If time permits, contact the Regional Headquarters before

the broadcast is made. If time does not permit, contact the Regional Headquarters as soon as possible afterward with details of the event. Examples of situations that would fall under this category are (1) a serious chemical spill or leak, (2) a biological release, (3) an explosion in a populated area, or (4) a nuclear release.

- e. National and Regional Non-Weather-Related Emergencies. The NWS, in support of FEMA (or its equivalent), should disseminate emergency messages over the NWR, including but not limited to, attack warnings and large-scale non-weather-related events, such as earthquakes and volcanic activity. The dissemination rules for national and regional non-weather-related emergency messages, including nuclear attack, are described in detail in appendix F, with broadcast instructions in Exhibit 1.

6.6 Required Weekly Test (RWT). Activate the public alarm tone and NWR-SAME test code features of NWR for test purposes each Wednesday between 10 a.m. and noon local time, except when severe weather is ongoing or threatening. At Regional Headquarters discretion, WFOs may broadcast the RWT additionally at certain other times (e.g., evening prime time) to suit stated customer needs and within office capabilities. WFOs should not broadcast the RWT using automated scheduling unless there is a specific procedure for ensuring the test does not inadvertently air during threatening weather.

Immediately after transmitting the appropriate NWR-SAME codes and tones, broadcast the following message (it may be shortened, at WFO option, except include counties/parishes/areas).

"This is the National Weather Service Office in city. The preceding signal was a test of the Weather Radio Station LLL-NN's public warning system. During potentially dangerous weather situations, specially built receivers can be automatically activated by this signal to warn of the impending hazard. Tests of this signal and receivers' performance are normally conducted by the National Weather Service at time each day of the week. If there is a threat of severe weather, the test will be postponed to the next available good-weather day. Reception of this broadcast, and especially the warning alarm tone, will vary at any given location. This variability, normally more noticeable at greater distances from the transmitter, can occur even though you are using a good quality receiver in good working order. The warning alarm tone will be activated for hazardous watches and warnings for the following counties list of counties/parishes/independent cities, or other designated areas. This concludes the weekly test of Weather Radio Station LLL-NN."

Where more than one state is involved, include the state name before the names of the counties in that state.

If, for any reason, the test was missed during the scheduled time frame, then the next test should not take place until about 24 hours later on the next available good-weather day.

As part of the weekly test, use ROAMS to quality control the broadcast and validate the proper operation of NWR-SAME from all stations. This procedure is described in appendix B.

7. Broadcast Outage and Suspension Rules.

7.1 Notice of Planned NWR Facility Outage. In the event of an NWR facility outage planned at least 24 hours in advance, broadcast a brief message periodically during the 24-hour period before the outage. Immediately broadcast and frequently repeat planned outages scheduled to occur in less than 24 hours. For example:

"NOAA Weather Radio station KEC-75, Des Moines, Iowa, will be off the air for maintenance from 10 a.m., Wednesday, until about 9 a.m., Thursday."

Include the estimated time of return if it is known. Avoid such terms as "Thursday morning" or "Monday night."

When NWR equipment is taken off the air or unplanned outages occur, send a Public Information Statement (PNS) or announce it using the local NWS telephone recording system, if feasible.

When interference with other agencies requires temporary suspension of NWR broadcasts, a brief message should be aired over the NWR just before the suspension. A sample message follows:

"NOAA Weather Radio station KHB-36, Washington, DC, will be off the air from 7 a.m. until 3 p.m., Thursday, because of technical difficulties. If weather warnings are required during the period, NOAA Weather Radio will resume broadcasts as soon as possible."

Also send an additional PNS and announce it using the local telephone recording system. The following is an example of a suggested message that may be used to advise subscribers of the NWR outage.

Example:

NOUS41 KLWX 161230
PNSLWX

PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE BALTIMORE/WASHINGTON
830 AM EST TUE APR 16 2002

NOAA WEATHER RADIO KHB-36 WASHINGTON DC WILL BE OFF THE AIR
DUE TO TECHNICAL DIFFICULTIES FROM 10 AM TODAY...TUESDAY...UNTIL
ABOUT 9 AM WEDNESDAY. IF WEATHER WARNINGS ARE REQUIRED

DURING THE PERIOD...NOAA WEATHER RADIO WILL RESUME BROADCASTS AT ONCE.

\$\$

Whether the outage is planned or unplanned, if it is expected to be for more than 12 hours, notify the Regional Headquarters. If the station goes off the air in an emergency or potentially threatening situation, notify the Regional Headquarters as quickly as time will allow.

7.2 Broadcast Suspension Rules. Federal, state, and local government agencies use frequencies near the NWR band. On occasion, these agencies (e.g., Treasury, Forest Service) will temporarily move into an NWR broadcast service area with a mobile radio system to cope with a highly critical situation. When NWR is the suspected cause of interference to another emergency radio system, the NWS will eliminate the radio interference by following procedures in NWS Instruction 10-1711, NOAA Weather Radio System Management. For further help, the Regional Headquarters may contact the OOS NWR Program Office (W/OPS17). In addition, the following provides rules for when to suspend NWR operations.

7.2.1 Routine Request. Following are guidelines to suspend NWR operations when interference is expected.

- a. Designated staff of an agency involved in a critical operation should first prove, by "on-off" short duration tests with the local NWR involved, the interference is actually a result of NWR.
- b. If it is shown that the interference can be eliminated by the temporary shutdown of an NWR station, the designated contact for that agency should request from the WFO a temporary shutdown for that station. The WFO should strive to solve the problem, with immediate notification to the Regional Headquarters for relay to the Dissemination Services Manager in OCWWS (W/OS51). If unable to resolve the problem, the WFO should coordinate with the Regional Headquarters, who will notify or coordinate with the Dissemination Services Manager, if necessary.

Any office that has been requested to temporarily shut down, under the above rules, should continue operations—or immediately resume the broadcast operations—during actual or imminent severe weather, flood, or other disasters. NWR offices should inform the Regional Headquarters when this situation arises, and the Regional Headquarters should relay that information to the Dissemination Services Manager in OCWWS (W/OS51), who will relay it to the designated contact for the other agency involved. Outside of normal business hours, follow the procedures at the end of section 7.2.1b.

7.2.2 Emergency Request. Section 7.2.1 provides guidance for expected interference conditions, but not all situations can be expected. When NWR unexpectedly causes interference to another emergency radio system (i.e., fire trucks, ambulance, etc.) and no severe weather is occurring or imminent, the NWR office should suspend the NWR broadcasts. The WFO should

notify the Regional Headquarters as soon as possible, who will relay it to the Dissemination Services Manager. The WFO, in coordination with the Regional Headquarters and the Dissemination Services Manager, if feasible, should work with the involved parties toward resolution and resume NWR broadcasts as soon as possible.

7.2.3 Fire and Bomb Threats. When an NWR office must evacuate due to a bomb threat, fire, hazardous material incident, or other hazard, add a short message to the broadcast program if time permits. For example, "Updates will not be available until further notice." Never announce the office is being evacuated due to a bomb threat or fire.

8. Quality Assurance. The WFO and Regional Headquarters have the primary responsibility for maintaining the quality of NWR broadcasts. The Regional Headquarters should ensure that appropriate training is available to WFO staff to maintain high broadcast quality. The WFO should assure quality by on-shift monitoring and active participation of an NWR program leader as described below. See appendix A for information on training and practice requirements to assure proficiency.

8.1 Quality Assurance on Shift. Monitor the broadcast programming frequently during the shift to ensure the information is timely, complete, consistent, accurate, and of clear audio quality. For those transmitters out of broadcast range of the WFO, check the audio quality using the NWR system monitoring function and ROAMS. Check actual broadcast audio from the transmitter once a week as part of the RWT (see section 6.6). Also, each person placing a message in the broadcast program should see that the product is reviewed and proofread, and evaluate the new product's impact on the total program before broadcasting it.

See appendix B for identification of NWR system problems by ROAMS and the appropriate responses by WFO personnel.

8.2 Drills of Broadcast Rules for Critical Events. Each WFO will establish rules for conducting and documenting periodic drills under the rules outlined in appendix A.

The RWTs should be conducted live through on-air or recorded emergency override, or through backup live. These tests will provide experience for the staff in the event they have to use the emergency override or backup live function of the NWR system.

8.3 NWR Program Leaders. Each WFO should have an NWR program leader(s) who will:

- a. ensure manuals, handbooks, and logs are kept up-to-date and all NWR operators are familiar with current operating instructions and techniques for preventive maintenance, as locally determined;
- b. carry out any NWR-related duties assigned by the WFO management;
- c. assist the NWR system focal point (if not the same person) in the programming and maintenance of the NWR system;

- d. ensure educational and promotional materials and the NWR Web page on the WFO Web site, if appropriate, are adequate and up-to-date (see section 12); and
- e. assist WFO management in the NWR Operator Proficiency Program, as described in appendix A.

9. NWR as a Substitute for Other Means of Dissemination. WFO management should try to use NWR broadcasts to lighten the total dissemination workload of the office. NWR broadcasts may be used to reduce the number and variety of manual telephone recordings, as well as reduce the number of incoming telephone calls to the office.

10. Use of NWR by the Electronic Media. The FCC permits AM, FM, TV, and cable TV broadcast stations to re-broadcast NWR transmissions. Appendix H is a copy of the FCC release to broadcasters that specifies the conditions placed on the blanket re-broadcast authority. The same conditions apply to re-broadcasts of NWR on amateur radio. See also NWS Instruction 10-1711, NOAA Weather Radio System Management, which includes a template agreement form.

The Regional Headquarters and WFOs should encourage cable TV systems and TV stations whose areal coverage coincides with the NWR broadcast service area to re-broadcast NWR programming. For cable TV systems and TV stations that extend well beyond the NWR listening range, re-broadcasts are discouraged since most material will not apply, particularly the warnings.

An important function of the NWR is to serve as the NWS's primary input to the EAS through the use of NWR-SAME technology, which has the identical communications protocols as the EAS. NWS at the national, regional, and WFO levels should continue to work closely with their respective electronic media and emergency management partners to assure the success of the EAS. WFOs, along with their EAS partners, should be involved in the creation of state and local EAS plans. See appendix G for NWS policy regarding the use of the 1050 Hz warning alarm tone and authorized NWR-SAME codes on NWR broadcast messages.

11. Restrictions Under Operating License. The NWS is licensed to operate individual NWRs through the Interdepartmental Radio Advisory Committee (IRAC). This Federal committee is chaired by the National Telecommunications and Information Administration of the DOC. IRAC controls NWS operations of the NWR, and other government-operated radio stations, in the same way the FCC does for commercial and other non-Federal groups and organizations. Each NWR license is granted for a particular power setting and frequency at a specific site. The power, frequency, or location of an NWR station cannot be changed without prior IRAC approval.

12. Public Education and Promotion. To be fully effective, NWR must employ a continuing program of public education. Public education and promotion should involve the efforts of WSH (PA, OCIO, OCWWS, OOS), and Regional Headquarters and WFOs.

The following PA Web site provides further information on promoting NWR:

<http://www.publicaffairs.noaa.gov/grounders/nwr.html>.

Substantial publicity is accruing from announcements about the ongoing NWR expansion through installation of new transmitters throughout the country. (These installations are in partnership with external groups.) The PA at the national and regional levels, in coordination with WSH, plays a significant role in these promotional efforts. This is most true for written materials, such as press releases and brochures, and any audio or video "spots" for commercial broadcast. Much information on NWR for the public and NWS staff is available on the Internet. Two Web sites of particular interest are:

<http://www.nws.noaa.gov/nwr>

<http://www.nws.noaa.gov/pa/secnews/nwr>.

12.1 General Promotion Activities. WFOs should promote NWR, highlighting the warning alarm and NWR-SAME code features and the value of NWR to schools, hospitals, industrial centers, and homes. WFOs should also promote NWR awareness through outreach activities at conventions, fairs, boat shows, and other gatherings at the local, regional, and national levels. Pursue personal contacts where necessary in dealing with special customer groups and business groups promoting the sales of NWR receivers.

NOAA and King Features Syndicate have an agreement allowing for use of the Mark Trail comic strip character as a campaign symbol for promoting NWR. NWS staff should contact their regional PA Officer for guidance on using the Mark Trail image in specific campaigns.

The OCWWS and the OOS have developed and periodically update NWR brochures. These are available from the National Logistics Supply Center in Kansas City, Missouri. NWR exhibits are available from the OOS NWR Program Office.

The OOS has supplied Regional Headquarters with briefcase size NWR exhibits for use by regional and WFO staff in promoting NWR. The exhibits are self contained and unfold to display a variety of NWR receivers with a brief text message on NWR. NWR videotapes and NWR Public Service Announcement video and audio tapes are available from the NWR Program Office. The videos, exhibit, and brochures can be used in combination to provide a very effective presentation on NWR.

WFOs should distribute, and post to the WFO Web page, maps showing the NWR coverage area, that also might include information about the NWR service. Other awareness avenues may include newspaper articles and telephone recordings.

A sample listing in the newspaper for the weather section or radio station listing section might be as follows:

WEATHER RADIO

For 24-hour NOAA Weather Radio broadcasts, tune to
162.--- MHz.

Brief NWR promotion messages can be placed on the office phone or WFO Web page. An example of such a message might be as follows.

“Because of high public interest in weather, you may be unable to reach this number (or Web page) during active weather situations. You may wish to tune in to our NOAA Weather Radio station on 162.--- MHz to receive the latest weather information broadcast continuously from this office. Consult your radio sales outlet to select a suitable receiver.”

Another means of promoting NWR is to use the NWR broadcast as "audio" whenever the office telephones are placed "on-hold."

12.2 Promotion with Electronic Media. WFOs should cultivate positive relations with local electronic media. The goal would be to have EAS facilities directly re-broadcast NWR-SAME-coded emergency messages in a timely manner to the public. In addition, WFOs should continue to encourage electronic media facilities to rebroadcast more of the NWR broadcasts outside of the EAS arena, including follow-up statements and other supporting forecasts. As examples, some television stations do this through the Secondary Audio Programming (SAP) technology, where people can tune televisions sets to the SAP to hear the information. Some cable television facilities use NWR re-broadcasts as a "voice-over," along with radar or other graphics. These efforts should be expanded where possible.

13. Customer Feedback. From time to time, WFOs should make on-air requests for comments and suggestions from listeners. This feedback should prove helpful in providing an overall more useful broadcast service. WFOs should coordinate plans to solicit customer feedback with, and send summaries of the results to, the Regional Headquarters.

14. Gift/Cooperator-Operated NWR Systems. The basic NWR network funded by the Federal government was completed in the early 1980s. Because the completed network did not reach every community in the United States, state and local governments, private companies, and various civic groups can help establish complete new NWR stations or expand broadcast service areas by buying supplemental transmitters. NWS Instruction 10-1711, NOAA Weather Radio System Management, provides specific information on these efforts, including agreement forms for donated equipment.

**APPENDIX A - NOAA Weather Radio (NWR)
Operator Proficiency Program**

Purpose: All NWS operational staff at the WFO must be skilled at disseminating warnings, watches, and advisories on the NWR system, including NWR-SAME, word pronunciation interfaces, and any backup broadcast systems. Operational staff include the Meteorologist in Charge (MIC), senior and general forecasters, Hydrometeorological Technicians (HMTs), Meteorological Interns, Service Hydrologists, Science Operations Officers (SOOs), Data Acquisition Program Managers (DAPMs), and Warning Coordination Meteorologists (WCMs).

Background: The NWS's critical mission is to issue warnings, watches, and advisories for the protection of life and property. The prompt and efficient issuance of these products on NWR and the EAS provides a far-reaching and effective warning/alert system to the American citizen. Hence, all NWS operational staff at NWR sites must be skilled at providing this warning dissemination service.

Regional Headquarters: Regional Headquarters oversee an NWR operator proficiency program in their region. This program will include an annual report from each WFO MIC to their Regional Headquarters. It will assure each operational employee performed practice or real-time NWR/EAS warning issuances at enough intervals to show they can disseminate, in an operationally effective time, watches, warnings, advisories, and other appropriate messages over the NWR broadcast system(s) at their office. The report will contain enough detail, as described in the following section, to document the steps taken to confirm this capability. Each Regional Headquarters will maintain this documentation on file for a period of 5 years.

Weather Forecast Offices (WFO): All operational employees will perform practice or real-time NWR/EAS warning issuance on the NWR system and any backup NWR broadcast systems no less than quarterly, and at other random times determined by the WFO management. These practice sessions will be clearly indicated as such during broadcast. For the NWR system, this will include correct and timely use of its Emergency Override function, Backup Live function with an NWR-SAME encoder, and Weather Message Creation function to disseminate an NWS warning.

One of these practice sessions per year will be for the official record and be monitored by a WFO trainer (SOO, WCM, DAPM, or NWR Program Leader) for proper rules and timeliness. Once a year, the WFO management will document to their Regional Headquarters that all quarterly practice sessions have been successfully completed by all operational employees, including the date(s) of the monitored NWR/EAS warning issuances. The WFO management will describe other actions taken throughout the year to ensure the skill of the office staff to effectively operate NWR in critical event situations, such as watches, warnings, and advisories.

Use the planned practice demonstration code (DMO), a code specifically designed for use with practice EAS broadcasts. The exercises may be conducted at any time under WFO policy/rules, ensuring that each practice broadcast is clearly indicated as such, and performed only during

times of non-threatening weather. A quarterly practice session may be replaced by a routine weekly test but will not be a substitute for a monitored yearly test by the local NWR trainer.

If the DMO code is not available, these practice broadcasts must be confined to the time of the manually produced NWR tone alarm/RWT (EAS Required Weekly Test).

APPENDIX B - NWR Remote Off-Air Monitoring System (ROAMS)

Purpose: This appendix describes the monitoring capabilities of the ROAMS and the actions WFO staff should take in response to ROAMS messages to help timely NWR transmitter network maintenance.

ROAMS Operation: ROAMS is designed to monitor and report on the failure status of several transmitter parameters/applications. Among the parameters/applications monitored by ROAMS are: (1) primary transmitter AC power; (2) secondary transmitter AC power; (3) primary transmitter low broadcast power; (4) secondary transmitter low broadcast power; (5) program audio feed (signal at input to transmitter); (6) proper transmission of NWR-SAME messages from the transmitters; (7) transmitter radio frequency (RF) carrier output; and (8) lack of broadcast audio output. Additional parameters/applications (e.g., shelter temperature) may be added to this list at regional discretion.

Response to ROAMS Calls: If ROAMS calls the site on an administrative telephone line, the operator should log the date and time of the call, the ROAMS ID, and the fault number(s) reported. The operator should send a command to acknowledge the report. Each WFO has instructions on the remote operation of ROAMS that is programmed to receive these calls.

The ROAMS fault numbers and the required actions are listed in Table 1.

Response to ROAMS Fault Report on the NWR System: If ROAMS calls the NWR system, ROAMS will alert the operator through the Alert Message window. Each ROAMS telephone call will be reported with the transmitter ID in the Alert Message window without detailed alarm status. The operator should then use the ROAMS Data window under the Transmitters menu to check the detailed alarm status. Response to ROAMS status should be as listed in Table 1.

Table 1: ROAMS Response Status

ROAMS Fault ID*	Fault Description	Follow-Up Action	Whom to Notify
Input Power Alarm	AC Power Failure to #1 Transmitter and System Power	If not equipped for automatic switch-over, switch to backup transmitter if available	Transmitter Site Power point of contact (POC)
Alarm #1	Transmitter #1 output power is low	Same as for Input Power Alarm	Transmitter Technician
Alarm #2	Transmitter #2 output power is low	Same as for Input Power Alarm	Transmitter Technician
Alarm #3	AC Power Failure to #2 Transmitter	Same as for Input Power Alarm	Transmitter Site Power POC
SAME Alarm #8	Indicates bad SAME message	Retransmit SAME message to determine if bad messages persist	If bad messages persist, National ROAMS Control/ Monitoring point and local office technical staff as necessary
Alarm #9	No broadcast audio	<i>Response for last three alarms listed:</i> (a) Use ROAMS to check transmitter input audio (b) Use ROAMS to check broadcast audio (c) Monitor console audio	If audio level acceptable, then (b); else (c)
Alarm #10	No RF carrier from transmitter		If audio level is acceptable, then problem has cleared; else Transmitter Technician
Input Audio Alarm	Audio telephone feed has dropped below level to keep transmitter keyed		If console level is acceptable, then Telecommunications POC; else CRS technician

* Note: Coordinate additional faults selected for monitoring at both regional and OOS NWR Program Office (W/OPS17) levels.

Points of Contact: Table 1 will be included in the station manual with telephone numbers for the five points of contact identified in the table.

Action Report: If maintenance action is required for any equipment as the result of a ROAMS report, start an Engineering Management Reporting System report.

**APPENDIX C - Guidelines for Basic Core and
Special Customer Messages**

1. Basic Core Messages. Basic core messages are those to be repeated, often as a set, on a frequent basis. Except for the brief station identification (I.D.), delete or shorten these messages, as appropriate, when warnings are in effect within the broadcast service area. Normally, program this set of core messages in the following order.

- a. Station I.D. A brief station identification should appear with each repetition of the core broadcast. It should include the call sign, general broadcast service area, programming office and, if necessary, attribution information. This may be necessary at sites where free tower rent is provided, but the tower owner requires frequent attribution. At least one version of the I.D. should refer to NWR as the voice of the NWS. Two examples follow:

"This is NOAA Weather Radio station KEC-74, serving central Indiana and originating from the National Weather Service Office in Indianapolis."

"You are listening to NOAA Weather Radio, the voice of the National Weather Service, serving western Washington and the adjacent coastal waters. KHB-60 Seattle and KIH-36 Neah Bay originate from the National Weather Service Office in Seattle."

A more detailed I.D. should be broadcast on a less frequent basis (e.g., once an hour) with appropriate attribution, frequency, and transmitter location and description of the service. The detailed I.D. should not be broadcast during critical event operations, only the brief I.D. should be broadcast. Include requests for feedback concerning NWR programming and scheduling in the detailed I.D.

- b. Synopsis and Optional Regional Forecast. These messages should be updated frequently enough to avoid reference to times that may be surpassed before the issuance of a replacement message. For example, do not say "snow is expected over the Great Lakes by late morning..." if the product will air past noon.
- (1) Synopsis. The general synopsis should contain a discussion of weather systems that will be affecting the broadcast service area during the valid forecast period. The synopsis should be very brief, in layman's terms, and limited to highlighting only the most significant features. It should emphasize the first 48 hours of the forecast period and indicate pertinent information through the extended forecast periods. If marine messages are part of the core broadcast programming (see special customer messages section below), the marine synopsis may be used instead, provided it describes features affecting both marine and land areas in the broadcast service area.

- (2) Regional Forecast (optional). This is an optional overview, created for NWR, of the weather beyond the broadcast service area for a multitude of uses, such as marine, travel, outdoor activities, construction, media rebroadcasts, etc. It normally should not exceed 1 minute in length. The region covered should include the area out to a radius of about 300 miles from the transmitter.

For brevity, include in the forecast portion information for no longer than the next 36 hours. Place emphasis on problem areas associated with rain or snow, severely restricted visibility, and significant variations in temperature. A small number of larger city forecasts may be highlighted where there is a lot of listener need or interest. Alaska, Hawaii, or Puerto Rico may want to include weather to common destinations beyond the normal regional range (including mainland United States) or restrict the region to areas reachable by land. The latter would apply to U.S. coastal stations as well.

Information in the regional forecast for winter storm and high wind watches and warnings should be summarized, avoiding specific details. Include specific information in other portions of the broadcasts.

Avoid details on specific severe thunderstorm, tornado, flood, or flash flood watches in the regional forecast. Instead, use language or terms similar to the convective outlook about the potential for severe convective weather and flash floods. Include specific watch and warning information for severe convective weather and flash flooding for the broadcast service area in other portions of the broadcast.

Use information from the latest advisory on hurricane/tropical storm watches and warnings. At a minimum, include the storm location and strength as well as the 24-hour forecast movement and strength. Local offices or Regional Headquarters should set policies or guidelines to broadcast such information for appropriate distances beyond the regional area.

Temperature forecasts should be general and need not be closer than ranges of 10 degrees. Do not mention discussions of current or past weather unless relevant to the forecast conditions or if they will impact customers, such as those traveling into flooding or deep snow.

- c. Service Area Forecasts. This forecast should cover, at a minimum, the main population base of the broadcast service area, as covered in the zone forecast product. Also include the extended forecast modified for the broadcast service area but with more general information than the 1- to 3-day forecast. Do not include short duration warnings (e.g., for tornadoes, severe thunderstorms, and

flash floods) since they are carried on a separate broadcast segment. Highlight most other watches, warnings, and advisories.

- d. Weather Roundups. Broadcast the latest observations within the broadcast service area around-the-clock and update them at least hourly. You may also include in the roundup observations or a summary of weather conditions adjacent to the broadcast service area out to a range of 100 to 300 miles. Offices in Alaska, Hawaii or Puerto Rico, because of their large areas of coverage, may include weather observations of interest to listeners beyond 300 miles. State the time of the observations. Update or remove observed weather from the core set of messages no later than 1 hour and 20 minutes after the valid time of last observation. If for any reason it becomes impossible to update this hourly, either automatically or manually, remove the weather roundup from the broadcast until it can be updated.

Some observations taken at 2- to 3-hour intervals, such as marine, still may be of some value for a longer time. If you include them in later updates, state the specific time of these observations. Use an available formatter to produce the roundup.

- e. Short Term Forecast. Broadcast any Short Term Forecast in effect for the broadcast service area. Refer to NWSI 10-517, Multi-Purpose Weather Products Specification.

2. Special Customer Messages. These messages are of interest to well-defined customer groups that make up a large part of the listening audience. To avoid redundancy, limit the parameters to those not included in other broadcast material. With the exception of marine forecasts and forecasts for rivers near or at flood levels, schedule special customer messages in selected and limited time periods. Special customer messages may vary during the day, week, or season as audience needs change. For example, commercial fishermen are closely tuned to marine forecasts early in the morning before leaving port. Messages for special customers include:

- a. Marine Forecast. Program the coastal waters forecast or Great Lakes near-shore and open lake forecast for all NWR stations listed on Marine Weather Service charts. Also broadcast offshore marine forecasts depending on listener interest. Where marine interests are dominant, the marine forecasts may make up a large portion of the broadcast cycle, or even become the core broadcast. For instance, the concept of a “marine hour” may be addressed through scheduling of a marine suite. Landlocked NWRs with significant public interest in marine areas that are outside the NWR broadcast service area but reasonably accessible also should schedule some marine programming. Include weather information for inland lakes in the NWR service area forecast or recreational/resort area forecast if it is not part of the marine forecast programming. You may also include tidal information and water temperature in marine programming. Remember, NWR programming is very important to mariners!

- b. Climate Data. For a period of 1 to 3 hours every morning and evening, each station should broadcast a brief summary of the day's climate data. This information should take up less than 1 minute and should include high and low temperatures and precipitation. You may broadcast data, such as degree days and normals, solar information, and record reports. You also may program statements summarizing the monthly climatic data, dry spells, or other timely features. Recommended local broadcast times are from around 7 a.m. to 9 a.m. and 7 p.m. to 9 p.m., depending on listener feedback, AWIPS issuance times, and local staffing considerations.
- c. Hydrologic Observations and Forecasts, Tide Data, and Water Temperature. Include this information when reasonably large streams, rivers, lakes, or coasts are in or near the broadcast service area according to customer needs. Broadcast this message continuously when a hazard exists. Otherwise, broadcast this message in a limited time interval.
- d. Fire Weather Forecasts. Include this information only during the fire season and where major forest, brush, or grass fires are possible or occurring. If the forest is out of the broadcast service area, you could include the information in the regional forecast.
- e. Air Quality Information. Broadcast this information when pollution is above a critical safety level and the information is available from a local government agency. Include the time and the source of the report.
- f. Recreational Forecasts. Limit these to areas where a significant percentage of the listeners are expected to go. These forecasts should describe weather events that will enhance or restrict activity. Incorporate these forecasts, as desired, in the regional forecast.
- g. Weather-Related Road Information. Include road condition reports when there are hazards (typically in winter) and when the reports are easily available with frequent updates from an official source. The data should be summarized and require little or no writing or editing by NWS staff. If approved by the officials involved, broadcast telephone numbers of the official sources to aid motorists. Also include the time and source of the report.

Example:

"AT 11:00 AM THE IOWA STATE POLICE REPORT INTERSTATE HIGHWAYS AND MAJOR US ROUTES WEST OF...ARE...."

- h. Ultraviolet Index (UVI) Forecasts. WFOs that have UVI forecast sites within their NWR broadcast service area(s) should broadcast those UVI values on the appropriate NWR transmitters.

**APPENDIX D - NWR System Basic Terms and Definitions
Related to Broadcast Scheduling**

<i>(Weather) Messages:</i>	<i>The most important unit of information that the NWR system handles. A message consists of two parts: the message header (i.e., the message attributes including the message identifier) and the message content (i.e., information intended for broadcast). Messages may be live voice, digitized voice, or ASCII text. They may be input directly at the NWR system (by microphone or from floppy disk) or from an external source (i.e., AWIPS).</i>
<i>Message Type:</i>	Name of message. The NWR system uses message types analogous to legacy Automation of Field Operations and Services PILs, i.e., contains information in nine characters about the node origination site (source of the message), the product category (e.g., severe weather statement), and the specific product designator.
<i>Broadcast Suite:</i>	A list of message types that are eligible to be broadcast when that suite is active. Categorized by “General,” “High,” and “Exclusive,” these are ascending orders of program urgency relating to restricted message types in the suite.
<i>Broadcast Program:</i>	Each suite is assigned to a program, and there will be multiple suites assigned to a single program. These programs are then assigned to a specific transmitter and result in the broadcast itself.
<i>Backup Live:</i>	Condition of operation if the NWR system has failed. Allows direct human-to-transmitter dissemination of information, bypassing the failed NWR system.
<i>Emergency Override:</i>	Operation used when the NWR system is working, but an emergency situation exists that requires immediate human access to the transmitter. Cuts off current broadcast for the operator to “go live” with emergency information. These “live” messages can be recorded for subsequent insertion into the ongoing broadcast program.
<i>Listening Area Codes:</i>	Also known as LACs, these are essentially Universal Geographic Codes renamed to identify their specific use by the NWR system. It is a code that identifies geopolitical areas (e.g., NWS defined zones, counties, parts of counties, and even independent cities) to which a message applies.

*Message Reference
Descriptor:*

Also known as MRD. One of the attributes required to uniquely identify messages in the NWR system. Used ultimately to determine whether a message should be replaced or not.

Periodicity:

Messages may be scheduled so they are inserted at specific time intervals. This time interval is the periodicity (i.e., a message set to broadcast every 10 minutes has a periodicity of 10 minutes).

Broadcast Cycle:

The broadcast cycle can be considered as the core set of messages currently playing, including those playing sequentially and those playing periodically. On the NWR system, the broadcast cycle is depicted as inclusive of those message types listed on the broadcast cycle screen. Broadcast cycle length is the length of time it takes to broadcast all of those messages.

Manual Operations:

Use of the NWR system for manually recording and scheduling messages rather than using automated text-to-voice capability.

**APPENDIX E - NWS Action Plan for
NWR Receiver Recall**

NWS Action Officer: Office of Climate, Water, and Weather Services Dissemination Services Manager (W/OS51) or designee.

1. The action officer will research available information and determine if the NWR receiver recall circumstances meet criteria for broadcasting non-weather-related announcements as listed in NWS Instruction 10-1710, "NOAA Weather Radio (NWR) Dissemination," section 5.4.
2. If the recall circumstances do not meet the criteria, the action officer will inform NWS Headquarters and regional offices of the pertinent facts.
3. If recall circumstances meet the listed criteria, the action officer will:
 - a. Coordinate with General Counsel and Public Affairs on a draft Special Announcement, using the Special Announcement template in Attachment 1 as guidance.
 - b. Inform the weather radio manufacturer's point of contact of the planned NWS action, provide a copy of the draft Special Announcement if possible, and allow reasonable time (five business days) for comment.
 - c. Distribute via email instructions and Special Announcement script to Weather Forecast Office (WFO) Warning Coordination Meteorologists and Regional Headquarters Meteorological Service Divisions (MSD). The MSDs may redistribute at their discretion.
 - d. Transmit a version of the scripted Special Announcement via a national Public Information Statement with the following Communications Identifier:

NOUS41 KWBC (and issuance date/time in UTC)
PNSWSH
 - e. Maintain a weather radio receiver recall link to the U.S. Consumer Product Safety Commission (CPSC) on the NWS NWR receiver information Web page at: <http://www.nws.noaa.gov/nwr/nwrrecvr.htm>.
4. Upon receipt of the instructions and Special Announcement script, WFOs will take the following actions as soon as practicable:
 - a. Record and broadcast on every NWR transmitter the Special Announcement script provided verbatim without deviation. Broadcast the scripted message once each hour for a seven day period, then re-record and broadcast twice each day at 9 a.m. and 9 p.m. local time for three additional weeks.

- b. WFOs that maintain a local NWR Web page on their WFO Web page will have a weather radio receiver recall link to the CPSC Web site. As a template, use the format seen at: <http://www.nws.noaa.gov/nwr/nwrrcvr.htm>.
- c. Provide the following information to telephone and personal inquiries regarding the scripted Special Announcement for the recalled weather radio:
 - (1) the recalled radio is only (manufacturer and model number).
 - (2) if they own a (model number) radio, they should call (manufacturer) at (phone number, including hours number is attended if not covering daytime business hours for entire U.S.) or visit the company's Web site at (company Web page).
 - (3) the CPSC 24-hour hot-line is 1-800-638-2772, and the CPSC Web site is: <http://www.cpsc.gov>.

Attachment 1

Weather Radio Receiver Recall Script

THIS IS A SPECIAL ANNOUNCEMENT.

(Manufacturer), in cooperation with the U.S. Consumer Product Safety Commission, is (voluntarily) recalling one of its Weather Radios, Model (number). (Sentence describing appearance of radio and where to find model number, if appropriate). The radios are being recalled because (reason, taken from CPSC information). (Advisory information taken from CPSC press release or received from the manufacturer such as “consumers should not rely on the recalled weather radio to receive emergency information.”)

Owners of (model number) should call (manufacturer) at (phone number, include hours number is attended if not covering daytime business hours for entire U.S.) (...or visit the company's Web site at (URL) (if Web option available)). This recall is ONLY for (manufacturer) Weather Radio (model number). This message will be repeated (hourly, daily at 9 a.m. and 9 p.m.).

**APPENDIX F - Dissemination Rules for National and Regional
Non-Weather-Related Emergency Messages**

Non-Weather-Related National or Regional Emergencies

Use these rules to disseminate messages from authorized government agencies for non-weather-related hazards affecting the Nation or large regions of the country normally consisting of several states or territories. These would include, but are not limited to, nuclear attack, earthquakes, terrorist attack, etc. The details of the rules outlined here will be amended occasionally by replacing this appendix to account for changes in NWS communications systems as the NWR system matures, and as new NWR-SAME and EAS codes are developed. The basic concept, however, should not be affected by these changes.

1. Initial Dissemination.

- a. Following a 7-second ring on NAWAS, the National Warning Center or its authorized alternate will announce the title of the WARNING message.
- b. The regional warning centers or other authorized alternate emergency operation centers (that normally operate in these situations) acknowledge the National Warning Center. The state warning points then acknowledge. The state warning points will then request acknowledgment from locations on the state warning circuits (including NWS locations). (Note for FEMA staff reading this directive: "Activate the warning signal" means to transmit the appropriate NWR-SAME/EAS code and the 1050 Hz warning alarm tone to activate NWR receivers.)
- c. NWS offices will prepare the appropriate message for dissemination. If the message is:
 1. NUCLEAR ATTACK: Get the red-bordered envelope containing the approved text for this specific hazard. The text of the message on this card may be prerecorded and stored on a diskette with the diskette sealed along with the card in the red-bordered envelope. THE TEXT OF THIS MESSAGE, HOWEVER, SHALL, UNDER NO CONDITIONS, BE RECORDED AND STORED AS A FILE ON THE NWR SYSTEM OR ANY OTHER ON-LINE NWR MESSAGING SYSTEM BEFORE ITS ACTUAL USE IN A REAL EVENT. DO NOT leave the envelope out in the open. The NWS must eliminate the possibility of a false or accidental ATTACK WARNING.
 2. OTHER NON-WEATHER NATIONAL/REGIONAL HAZARDS: Get the text of the message by either transcribing or recording it from the NAWAS. If you get the message from another authorized source, such as

AWIPS or fax, use the state or nationally established method of confirmation.

- d. Until updated with a more specific event code, select the NWR-SAME/EAS code for Civil Emergency Message (CEM) to disseminate these messages along with ALL the appropriate geographic codes available on the NWR system (or NWR-SAME panel if it is being used in backup mode). Suspend all normal broadcast operations and trigger the NWR to send the event code followed by the 1050 Hz public warning alarm tone. At the conclusion of the 1050 Hz warning alarm tone, immediately begin READING THE MESSAGE EXACTLY AS WRITTEN.
- e. Read the message live and record it. An alternative is to play the message from the prerecorded diskette. Following transmission of the NWR-SAME/EAS End-Of-Message, immediately program the NWR for this message and a short station identification to play indefinitely until manually replaced with another message. If the WFO will be evacuated, broadcast a recurring short message informing listeners that the WFO will not provide any service until further notice. Do NOT mention that the office has been evacuated.

(Note: When a new event code(s) is established for this civil emergency message(s), offices should consider creating a special high priority product suite that will be activated when a message is broadcast with this specific code.)

2. Termination.

- a. Following a 7-second ring on NAWAS, the National Warning Center or its authorized alternate will announce the termination of the specific hazard WARNING as follows.

1. NUCLEAR ATTACK:

“ATTENTION ALL STATIONS, THIS IS THE NATIONAL WARNING CENTER. THE ATTACK WARNING IS TERMINATED. REPEAT. THE ATTACK WARNING IS TERMINATED. WARNING CENTERS ACKNOWLEDGE.”

2. OTHER NON-WEATHER NATIONAL/REGIONAL HAZARD: A similar statement to that in 2(a)1 above will be read on NAWAS. If a message is sent by another authorized source, such as AWIPS or fax, use the state or nationally established method of confirmation. Include the source and time of the report.

- b. The regional warning centers or other authorized alternate emergency operations centers (which normally operate in these situations) acknowledge to the National Warning Center. The state warning points then acknowledge. The state warning points will then request acknowledgment from locations on the state warning circuits (including NWS locations).
- c. Following acknowledgment to the appropriate warning centers or as soon as the NWS office is again occupied, NWS offices will disseminate these cancellation messages. Until updated with a more specific event cancellation code, select the NWR-SAME/EAS code for Civil Emergency Message along with ALL the appropriate geographic codes available on the NWR system (or NWR-SAME panel if it is being used in backup mode). Interrupt the existing broadcast operations and cause the NWR to send the appropriate event code followed by the 1050 Hz warning alarm tone. At the conclusion of the 1050 Hz warning alarm tone, immediately begin READING THE MESSAGE EXACTLY AS WRITTEN.

1. NUCLEAR ATTACK:

"THE U.S. GOVERNMENT HAS ISSUED A TERMINATION OF THE ATTACK WARNING. REPEAT. THE U.S. GOVERNMENT HAS ISSUED A TERMINATION OF THE ATTACK WARNING. FOLLOW INSTRUCTIONS ISSUED BY YOUR LOCAL GOVERNMENT. SINCE THERE MAY BE A DANGER OF RADIOACTIVE FALLOUT, YOU SHOULD NOT LEAVE A SHELTER OR PROTECTED LOCATION UNTIL YOUR LOCAL GOVERNMENT ANNOUNCES THAT IT IS SAFE TO DO SO."

2. OTHER NON-WEATHER NATIONAL/REGIONAL HAZARD: Read the text of the message as provided by the appropriate authority. Include the source and time of the report.

Record the CANCELLATION MESSAGE and place it on the NWR routine broadcast cycle for at least 1 hour.

3. Training Exercises.

NWS WFOs will be notified of training exercises in advance by the official government source. WFO management will periodically review these instructions with all staff who might have to broadcast the warning.

APPENDIX G - Use of NWR-SAME Codes and 1050 Hz Tone Alarm

NWR Tone Alert and SAME activations give immediate information about life-threatening conditions. The NWR-SAME codes and 1050 Hz warning tone will precede initial broadcasts of watch and warning events, as specified below. The tones and codes may precede events with an *, at forecaster discretion or in response to customer demand. Forecasters will consider the specific situation and the need for immediate notification. Customer demand includes requirements of emergency managers and broadcasters as agreed to in state and local EAS Plans.

Note: **Events and their codes in bold are operational.** The rest of the events/codes listed below (from the FCC 2002 EAS Report and Order), and the authorization to use them, will be implemented by NWS in 2003 after broadcasters have opportunity to upgrade EAS encoder/decoder equipment to recognize the new codes.

<u>EVENT: Weather-Related</u>	<u>NWR-SAME Code</u>	<u>Use of NWR-SAME & 1050 Hz</u>
Blizzard Warning	BZW	*
Coastal Flood Watch	CFA	*
Coastal Flood Warning	CFW	*
Dust Storm Warning	DSW	*
Flash Flood Watch	FFA	*
Flash Flood Warning	FFW	Yes
Flash Flood Statement	FFS	*
Flood Watch	FLA	*
Flood Warning	FLW	*
Flood Statement	FLS	*
High Wind Watch	HWA	*
High Wind Warning	HWW	*
Hurricane Watch	HUA	Yes
Hurricane Warning	HUW	Yes
Hurricane Statement	HLS	*
Severe Thunderstorm Watch	SVA	Yes
Severe Thunderstorm Warning	SVR	Yes
Severe Weather Statement	SVS	*
Special Marine Warning	SMW	*
Special Weather Statement	SPS	No
Tornado Watch	TOA	Yes
Tornado Warning	TOR	Yes
Tropical Storm Watch	TRA	Yes
Tropical Storm Warning	TRW	Yes

<u>EVENT: Weather-Related</u> (cont'd)	NWR-SAME	Use of
Tsunami Watch	<u>Code</u>	NWR-SAME &
Tsunami Warning	TSA	<u>1050 Hz</u>
Winter Storm Watch	TSW	*
Winter Storm Warning	WSA	Yes
	WSW	No
		*

<u>EVENT: Non-Weather-Related</u>	NWR-SAME	Use of
(National Codes-Required)	<u>Code</u>	NWR-SAME &
Emergency Action Notification	EAN	<u>1050 Hz</u>
Emergency Action Termination	EAT	Yes
National Information Center	NIC	No
		No

(State and Local Codes-optional)		
Avalanche Watch	AVA	*
Avalanche Warning	AVW	Yes
Child Abduction Emergency	CAE	No
Civil Danger Warning	CDW	Yes
Civil Emergency Message	CEM	Yes
Earthquake Warning	EQW	Yes
Evacuation Immediate	EVI	Yes
Fire Warning	FRW	Yes
Hazardous Materials Warning	HMW	Yes
Law Enforcement Warning	LEW	Yes
Local Area Emergency	LAE	No
911 Telephone Outage Emergency	TOE	No
Nuclear Power Plant Warning	NUW	Yes
Radiological Hazard Warning	RHW	Yes
Shelter in Place Warning	SPW	Yes
Volcano Warning	VOW	Yes

<u>EVENT: Administrative</u>	NWR-SAME	Use of
Administrative Message	<u>Code</u>	NWR-SAME &
National Periodic test	ADR	<u>1050 Hz</u>
Network Message Notification	NPT	No
Practice/Demo Warning	NMN	*
Required Monthly Test	DMO	No
Required Weekly Test	RMT	*
	RWT	Yes

**APPENDIX H - Federal Communications Commission
Authorization for NWR Rebroadcast**

NEWS Federal Communications Commission [FCC logo]

1919 H Street, NW.
Washington, D.C. 20554

For recorded listing of releases and texts call 632-0002

For general information
call 632-7260 99084

April 3, 1978 - B

REBROADCAST OF NATIONAL WEATHER SERVICE TRANSMISSIONS ALLOWED

The Commission has authorized AM, FM, and TV broadcast stations to rebroadcast weather transmissions originated by the National Weather Service on the 162.400, 162.475 and 162.550 MHz frequencies.

The action becomes effective immediately.

The Commission put four conditions on this authority:

- Messages must be rebroadcast within one hour of receipt from the National Weather Service;
- If commercials are aired in connection with a weather rebroadcast, they must not convey an endorsement by the Government of the products or services advertised;
- Credit must be given to indicate the messages originated with the National Weather Service; and
- A station may not rebroadcast the transmissions of a Personal Radio Services station.

The FCC noted that when the Emergency Broadcast System (EBS) and the EBS two-tone attention signal were used in conjunction with a weather emergency, operations must be conducted in accordance with Section 73.935 of the rules (below) and the local or state EBS operational plans in effect for the area. It stressed emergency plans would take precedence over any monitoring and rebroadcasting conducted under the new authority.

Update notes:

- (1) There are four additional frequencies for NOAA Weather Radio transmissions: 162.425 MHz, 162.450 MHz, 162.500 MHz, and 162.525 MHz.
- (2) The Emergency Alert System (EAS) replaced the Emergency Broadcast System (EBS).
- (3) An updated Code of Federal Regulations (CFR) section 11.55 (shown on page H-2) replaces CFR section 73.935.
- (4) An updated CFR section 73.1207 is on page H-3.

NWSI 10-1710 OCTOBER 1, 2002

§ 11.55 EAS operation during a State or Local Area emergency.

(a) The EAS may be activated at the State or Local Area levels by broadcast stations and cable systems at their discretion for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant activation are: tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

(b) EAS operations must be conducted as specified in State and Local Area EAS Plans. The plans must list all authorized entities participating in the State or Local Area EAS.

(c) Immediately upon receipt of a State or Local Area EAS message, participating broadcast stations and cable systems must do the following:

(1) State Relay (SR) sources monitor the State Relay Network or follow the State EAS plan for instructions from the State Primary (SP) source.

(2) Local Primary (LP) sources monitor the Local Area SR sources or follow the State EAS plan for instructions.

(3) Participating National (PN) and Non-participating National (NN) sources monitor the Local Area LP sources for instructions.

(4) Broadcast stations and cable systems participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans. Television stations must comply with Sec. 11.54(b)(7). Broadcast stations providing foreign language programming shall comply with Sec. 11.54(b)(8).

(5) Upon completion of the State or Local Area EAS transmission procedures, resume normal programming until receipt of the cue from the SR or LP sources in your Local Area. At that time begin transmitting the common emergency message received from the above sources.

(6) Resume normal operations upon conclusion of the message.

(7) The times of the above EAS actions must be entered in the broadcast station or cable system records as specified in Sec. 11.54(b)(15), FCC Form 201 may be used to report EAS activations.

(8) Use of the EAS codes or Attention Signal automatically grants rebroadcast authority as specified in Sec. 11.54(d).

§ 73.1207 Rebroadcasts.

(a) The term rebroadcast means reception by radio of the programs or other transmissions of a broadcast or any other type of radio station, and the simultaneous or subsequent retransmission of such programs or transmissions by a broadcast station.

(1) As used in this section, "program" includes any complete programs or part thereof.

(2) The transmission of a program from its point of origin to a broadcast station entirely by common carrier facilities, whether by wire line or radio, is not considered a rebroadcast.

(3) The broadcasting of a program relayed by a remote pickup broadcast station is not considered a rebroadcast.

(b) No broadcast station may retransmit the program, or any part thereof, of another U.S. broadcast station without the express authority of the originating station. A copy of the written consent of the licensee originating the program must be kept by the licensee of the station retransmitting such program and made available to the FCC upon request.

(1) Stations originating emergency communications under a State EAS plan are considered to have conferred rebroadcast authority to other participating stations.

(2) Permission must be obtained from the originating station to rebroadcast any subsidiary communications transmitted by means of a multiplex subcarrier or telecommunications service on the vertical blanking interval or in the visual signal of a television signal.

(3) Programs originated by the Voice of America (VOA) and the Armed Forces Radio and Television Services (AFRTS) cannot, in general, be cleared for domestic rebroadcast, and may therefore be retransmitted only by special arrangements among the parties concerned.

(4) Except as otherwise provided by international agreement, programs originated by foreign broadcast stations may be retransmitted without the consent of the originating station.

(c) The transmissions of non-broadcast stations may be rebroadcast under the following conditions:

(1) Messages originated by privately-owned non-broadcast stations other than those in the Amateur and Citizens Band (CB) Radio Services may be broadcast only upon receipt of prior permission from the non-broadcast licensee. Additionally, messages transmitted by common carrier stations may be rebroadcast only upon prior permission of the originator of the message as well as the station licensee.

(2) Except as provided in paragraph (d) of this section, messages originated entirely by non-broadcast stations owned and operated by the Federal Government may be rebroadcast only upon receipt of prior permission from the government agency originating the messages.

(3) Messages originated by stations in the amateur and Citizens Band (CB) radio services may be rebroadcast at the discretion of broadcast station licensees.

(4) Emergency communications originated under a State EAS plan.

(d) The rebroadcasting of time signals originated by the Naval Observatory and the National Bureau of Standards and messages from the National Weather Service stations is permitted without specific authorization under the following procedures:

(1) Naval Observatory Time Signals. (I) The time signals rebroadcast must be obtained by direct radio reception from a naval radio station, or by land line circuits.

(ii) Announcement of the time signal must be made without reference to any commercial activity.

(iii) Identification of the Naval Observatory as the source of the time signal must be made by an announcement, substantially as follows: "With the signal, the time will be . . . courtesy of the U.S. Naval Observatory."

(iv) Schedules of time signal broadcasts may be obtained upon request from the Superintendent, U.S. Naval Observatory, Washington, DC 20390.

(2) National Bureau of Standards Time Signals. (I) Time signals for rebroadcast must be obtained by direct radio reception from a National Bureau of Standards (NBS) station.

(ii) Use of receiving and rebroadcasting equipment must not delay the signals by more than 0.05 second.

(iii) Signals must be rebroadcast live, not from tape or other recording.

(iv) Voice or code announcements of the call signs of NBS stations are not to be rebroadcast.

(v) Identification of the origin of the service and the source of the signals must be made by an announcement substantially as follows:

"At the tone, 11 hours 25 minutes Coordinated Universal Time. This is a rebroadcast of a continuous service furnished by the National Bureau of Standards, Ft. Collins, Colo." No commercial sponsorship of this announcement is permitted and none may be implied.

(vi) Schedules of time signal broadcasts may be obtained from, and notice of use of NBS time signals for rebroadcast must be forwarded semiannually to: National Bureau of Standards, Radio Stations WWV/WWVB, 2000 East County Road 58, Ft. Collins, Colorado 80524.

(vii) In the rebroadcasting of NBS time signals, announcements will not state that they are standard frequency transmissions. Voice announcements of Coordinated Universal Time are given in voice every minute. Each minute, except the first of the hour, begins with an 0.8 second long tone of 1000 hertz at WWV and 1200 hertz tone at WWVH. The first minute of every hour begins with an 0.8 second long tone of 1500 hertz at both stations. This tone is followed by a 3-second pause, then the announcement, "National Bureau of Standards Time." This is followed by another 3-second pause before station identification. This arrangement allows broadcast stations sufficient time to retransmit the hour time tone and the words "National Bureau of Standards Time" either by manual or automatic switching.

(viii) Time signals or scales made up from integration of standard frequency signals broadcast from NBS stations may not be designated as national standard scales of time or attributed to the NBS as originator. For example, if a broadcasting station transmits time signals obtained from a studio clock which is periodically calibrated against the NBS time signals from WWV or WWVH, such signals may not be announced as NBS standard time or as having been originated by the NBS.

(3) National Weather Service Messages. (I) Messages of the National Weather Service must be rebroadcast within 1 hour of receipt.

(ii) If advertisements are given in connection with weather rebroadcast, these advertisements must not directly or indirectly convey an endorsement by the U.S. Government of the products or services so advertised.

(iii) Credit must be given to indicate that the rebroadcast message originates with the National Weather Service.