

<i>NATIONAL WEATHER SERVICE EASTERN REGION (ER) SUPPLEMENT 02-2005 APPLICABLE TO 10-1710 August 16, 2005</i>	
<i>OPERATIONS AND SERVICES DISSEMINATION POLICY, NWSPD 10-17 NOAA WEATHER RADIO (NWR) DISSEMINATION, NWSI 10-1710 ER NWR SAME/TONE ALARM INSTRUCTIONS</i>	
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1. **Introduction.** NWS Directive 10-1710 leaves the decision to SAME and/or tone alarm certain messages to forecaster discretion. This supplement and Appendices A and B provide regional guidance to forecasters on this topic.
2. **NWR SAME.** SAME consists of discrete bursts of digital code embedded in the NWR broadcast, specifying the message originator, the event (hazard) type of the message, the geographical area of the event, etc. See <http://weather.gov/nwr/resources/same.pdf> for SAME code structure and specifications (note TOW and SVW codes used in the referenced web document examples should actually be TOR and SVR).

Special radios activate when pre-selected parts of the digital code are received. Radios vary in decoding ability, due to the date of hardware/software design, quality of components, and signal strength.

- 2.1 **Unauthorized Codes.** No codes other than those approved by the FCC will be broadcast. Any requests for additional codes will be forwarded to National Weather Service Headquarters through Eastern Region Headquarters, Meteorological Services Division, for consideration.
- 2.2 **Weekly/Monthly Tests.** WFOs will use the Required Weekly Test (RWT) for required weekly warning alarm and tone tests, per directive 10-1710. Required Monthly Test (RMT) codes will be conducted in accordance with designation by local and state EAS plans. All employees authorized to operate NWR must be proficient in operating the Console Replacement System (CRS). Operating instructions must be readily available near the CRS console. The Demo (DMO) code is reserved for internal use.
- 2.3 **Canned Messages.** Pre-written emergency messages residing on AWIPS or CRS or immediate broadcast over NWR for specific sites (Nuclear Power Plants, major dams, etc.) are **not** permitted. The danger of accidental broadcast of such messages precludes permanent residence on these systems. Blank pre-formats may reside on AWIPS; canned messages on a separate, external disk for manual loading into AWIPS or CRS, are also permitted. See Directive 10-1710, appendix F, for similar guidance regarding nuclear attack warnings.
- 2.4 **Multiple Warnings.** For areas under more than one type of warning at the same time, the broadcast will be SAME encoded and tone alarmed for each type of warning, as listed in Appendix A.
- 2.5 **Blackout Period.** As new receivers with event-specific filters replace older receivers, it becomes more feasible to SAME long-fused warnings. Thus, it is now recommended that first issuances of long-fused warnings be SAME encoded. To provide equivalent service to customers with old receivers, the TONE alert should also be used.

In order to prevent awakening NWR listeners in the middle of the night for long-fused

warnings of non-imminent events, and to reduce disabling of audible alarms, a blackout period is recommended from 11 PM to 7 AM local time. In such situations, the SAME and Tone Alarm should be delayed until the end of the blackout period. WFO staff will SAME and Tone Alarm long-fused warnings during the blackout period, whenever significant public impact is expected and lead time is so short that immediate notification is needed. Some examples include unexpected freezing rain glazing roads at 5 AM or a heavy snow squall moving across an area, just prior to the morning commute (See appendix B for more details).

2.6 Public Reminder. When short-fused, severe weather episodes (e.g. TOR, SVR, FFW) are expected, especially during overnight periods, a brief statement reminding listeners to make sure their NWR audible alarm is set to the “on” position is recommended. Such reminders can be placed in special weather statements or in convective watch call-to-action statements.

2.7 Monitoring Outages. During periods of known NWR outages, when messages requesting EAS activation need to be broadcast, offices should follow the appropriate backup procedures in accordance with their local and state EAS plans, to activate EAS.

2.8 SAME Programming During Backup. Offices will retain SAME dissemination on times of backup whenever possible. When this is not possible, the backup office is responsible for following appropriate procedures per local and state EAS plans, as found in backup sections of their Office Duty Manual (ODM).

2.9 SAME Encoding Procedures. ER offices should encode SAME messages in the following manner:

- a. For counties within an office’s broadcast service area (BSA), regardless of county warning area (CWA) boundaries, all applicable alerts will be broadcast.
- b. For those few counties with weak or nonexistent NWR coverage, but with local primary or state primary (LP or SP) coverage, broadcast the alert once (without the 1050 Hz warning alarm tone) for entry into the EAS, and leave the product out of the NWR cycle.
- c. Offices should work with their state EAS planning committee(s) to establish methods of input for alerts, and appropriate methods of backup, should the primary entry point for these alerts into EAS (NWR) fail.

3. NWR Warning Alarm Tone (WAT). Following the three bursts of digital SAME code, a 1050 HZ tone will typically be broadcast over NWR. This tone switches on receivers within the BSA without regard to the county affected or message type. There are only a small number of situations where a message is SAME’d but not tone alarmed (see section 2.9.b above).

4. The Emergency Alert System. Since January 1, 1997, the Emergency Alert System

(EAS) has been in operation. It consists of statewide networks of message entry points including the NWS, emergency managers, police and participating commercial broadcast stations.

Commercial broadcasters have three options upon receipt of SAME messages sent by the NWS. They can store, store and forward, or store, forward and audio broadcast the text. The action taken by each broadcaster depends on what has been agreed upon by the State Emergency Communications Committee (SECC).

WFOs, in conjunction with the NWS State Liaison Office (SLO), should work with each SECC to assure that important public safety messages are appropriately disseminated, including alternate entry points, during backup situations.

5. Additional Equipment. NWS offices are neither encouraged to accept, nor precluded from accepting, equipment from another agency, which makes NWR a relay for EAS messages originated by other partners. For example, through an agreement with the SECC, EAS equipment (decoder/encoder) may be added onto NWR, with the following stipulations:

- a. The proposed modification must be approved by the NWS configuration management process.
- b. NWS accepts no responsibility for failure to disseminate information, for any cause.
- c. NWS accepts no responsibility for costs associated with additional equipment.
- d. Entry must not interfere with NWR/SAME operations; additional equipment must have parallel input to preclude NWR failure, should cooperator's equipment fail.
- e. NWS accepts no responsibility for installation, maintenance, or operation of any additional equipment. Cooperators will provide NWS electronics personnel oversight and technical expertise in disabling additional equipment, in the event said equipment interferes with normal NWS operations.
- f. Entry must be automatic, requiring no intervention by NWS personnel to program.
- g. Cooperator must provide drawings on connections to the field office/regional office.

These points will serve as the basis for any memorandum of understanding (MOU) between the NWS and any cooperator wishing to interface additional EAS equipment with the standard NWR equipment suite. Original MOUs must be forwarded to NOAA General Council for review before signature.

6. Dissemination Resource Page The Eastern Region NWR SAME/Tone Alarm Table, Operational Procedures Blackout Periods and Basic Blackout Instructions for CAFÉ are located on the Eastern Region Dissemination Resource Page at <http://www.werh.noaa.gov/MSD/Resources/Dissemination/resource.htm>