§ 5.411 Notification.

(a) The holder of an authorization issued under this subpart shall notify the Engineer in Charge of the district in which the station will be operated in advance of each scheduled operation.

(b) The notice to the Engineer in Charge shall be in writing and shall contain the following information:

1. Place of operation.
2. Date(s) of operation, including exact time if known.
3. Frequency(ies) to be used.
4. Call letters of station.

§ 5.411 Notification.

(c) These records shall be retained for one month after the termination of the authorization.

§ 5.411 Notification.

(a) The holder of an authorization issued under this subpart shall notify the Engineer in Charge of the district in which the station will be operated in advance of each scheduled operation.

(b) The notice to the Engineer in Charge shall be in writing and shall contain the following information:

1. Place of operation.
2. Date(s) of operation, including exact time if known.
3. Frequency(ies) to be used.
4. Call letters of station.

PART 11—EMERGENCY ALERT SYSTEM (EAS)

Subpart A—General

Sec. 11.1 Purpose.

11.11 The Emergency Alert System (EAS).

11.12 Two-tone Attention Signal encoder and decoder.

11.13 Emergency Action Notification (EAN) and Emergency Action Termination (EAT).

11.14 EAN Network and Primary Entry Point (PEP) System.

11.15 EAS Operating Handbook.

11.16 National Control Point Procedures.

11.17 Authenticator Word Lists.

11.18 EAS Designations.


11.20 State Relay Network.

11.21 State and Local Area Plans and FCC Mapbook.

Subpart B—Equipment Requirements

11.31 EAS protocol.

11.32 EAS Encoder.

11.33 EAS Decoder.

11.34 Acceptability of the equipment.

11.35 Equipment operational readiness.

Subpart C—Organization

11.41 Participation in EAS.

11.42 Participation by communications common carriers.

11.43 National level participation.

11.44 EAS message priorities.

11.45 Prohibition of false or deceptive EAS transmissions.

11.46 EAS public service announcements.

11.47 Optional use of other communications methods and systems.
§ 11.11

the effective dates in the following tables:

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<thead>
<tr>
<th>Requirement</th>
<th>AM</th>
<th>FM</th>
<th>FM Class D</th>
<th>TV</th>
<th>LPTV</th>
</tr>
</thead>
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<tr>
<td>Two-tone encoder timing.</td>
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<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Two-tone decoder timing</td>
<td></td>
<td>Y</td>
<td>N</td>
<td>N</td>
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</tr>
<tr>
<td>Digital decoder (1/1/97)</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Audio message (1/1/97)</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>YY</td>
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<table>
<thead>
<tr>
<th>Requirement</th>
<th>AM</th>
<th>FM</th>
<th>FM Class D</th>
<th>TV</th>
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<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>YY</td>
</tr>
</tbody>
</table>

(b) Class D non-commercial educational FM stations as defined in §73.906 of this chapter and LPTV stations as defined in §74.703(f) of this chapter are not required to have or operate EAS encoders as defined in §11.32. LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment.

(c) Organizations using other communications systems or technologies such as, Direct Broadcast Satellite (DBS), low earth orbit satellite systems, paging, computer networks, etc. may join the EAS on a voluntary basis by contacting the FCC. Organizations that choose to voluntarily participate must
§ 11.12

comply with the requirements of this part.

NOTE: Compliance by Cable Systems with the July 1, 1997 date specified in this section is extended until a date to be specified by the Commission and published in the Federal Register.


§ 11.13 Emergency Action Notification (EAN) and Emergency Action Termination (EAT).

(a) The Emergency Action Notification (EAN) is the notice to all broadcast stations, subject cable systems, other regulated services of the FCC, participating industry entities, and to the general public that the EAS has been activated for a national emergency.

(b) The Emergency Action Termination (EAT) is the notice to all broadcast stations, subject cable systems, other regulated services of the FCC, participating industry entities, and to the general public that the EAN has terminated.

§ 11.14 EAN Network and Primary Entry Point (PEP) System.

(a) The EAN network is a dedicated communications service connecting industry networks, wire services and common carriers with government activation points. It is used to distribute EAN and EAT messages. The industry control locations retransmit the EAN message, the Presidential message, and the EAT message on their facilities to their affiliates.

(b) The PEP system is a nationwide network of broadcast stations connected with government activation points. It can also be used to distribute EAN and EAT.

§ 11.15 EAS Operating Handbook.

The EAS Operating Handbook states in summary form the actions to be taken by personnel at broadcast stations, and other participating entities upon receipt of an EAN, subject cable systems and other participating entities upon receipt of an EAN, an EAT, tests, or State and Local Area alerts. It is issued by the FCC and contains instructions for the above situations, monitoring guidelines, and EAS message examples. A copy of the Handbook must be located at normal duty positions or EAS equipment locations when an operator is required to be on duty and be immediately available to staff responsible for authenticating messages and initiating actions.

§ 11.16 National Control Point Procedures.

The National Control Point Procedures are written instructions issued by the FCC to national level EAS control points. They are for use by the participating radio and television networks, cable networks and program suppliers, common carriers and wire services. The procedures are divided into sections as follows:

(a) National Level EAS Activation. This section contains the activation and termination instructions for Presidential messages.

(b) EAS Test Transmissions. This section contains the instructions for testing the EAS at the National level.

(c) National Information Center (NIC). This section contains instructions for distributing United States Government official information messages after completion of the National Level EAS activation and termination actions.

§ 11.17 Authenticator Word Lists.

There are three lists issued by the FCC annually. The lists are to be used by EAS participants to ensure that the National level alerts and tests are legitimate. The lists must be used in accordance with directions in the EAS
Operating Handbook and the National Control Point Procedures. LPTV stations do not receive authenticator lists.

(a) Red Envelope Authenticator List. This list is used for authentication purposes in accordance with instructions in the EAS Operating Handbook and National Control Point Procedures. It is issued to all broadcast stations and specified control points of the radio and television networks, cable networks and program suppliers, common carriers, wire services and other specified entities. A current copy of this list must be located in the pocket on the inside front cover of the EAS Operating Handbook. This list should be opened only to authenticate receipt of an EAN message and an EAT message from the above control points. The FCC may request immediate return of the Red Envelope at any time.

(b) White Envelope Authenticator List. This list is used for caller identification purposes in accordance with instructions in the National Control Point Procedures. It is issued only to specified control points.

(c) NIC Authenticator List. This booklet is used for authentication purposes in accordance with instructions in the National Control Point Procedures. It is issued only to participating control points.

§ 11.18 EAS Designations.

(a) National Primary (NP) is a source of EAS Presidential messages.

(b) Local Primary (LP) is a source of EAS Local Area messages. An LP source is responsible for coordinating the carriage of common emergency messages from sources such as the National Weather Service or local emergency management offices as specified in its EAS Local Area Plan. If it is unable to carry out this function, other LP sources in the Local Area may be assigned the responsibility as indicated in State and Local Area Plans. LP sources are assigned numbers (LP-1, 2, 3, etc.) in the sequence they are to be monitored by other broadcast stations in the Local Area.

(c) State Primary (SP) is a source of EAS State messages. These messages can originate from the Governor or a designated representative in the State Emergency Operating Center (EOC) or State Capital. Messages are sent via the State Relay Network.

(d) State Relay (SR) is a source of EAS State messages. It is part of the State Relay Network and relays National and State common emergency messages into Local Areas.

(e) Participating National (PN) sources transmit EAS National, State or Local Area messages. The EAS transmissions of PN sources are intended for direct public reception.

(f) Non-participating National (NN) sources have elected not to participate in the National level EAS and hold an authorization letter to that effect. Upon activation of the national level EAS, NN sources are required to broadcast the EAS codes, Attention Signal, the sign-off announcement in the EAS Operating Handbook and then stop operating. All NN sources are required to comply with §11.51, 11.52 and 11.61. They may transmit EAS State or Local Area messages at any time without prior notice.


This authorization letter is issued by the FCC to broadcast station licensees. It states that the licensee has agreed to go off the air during a national level EAS message. This authorization will remain in effect through the period of the initial license and subsequent renewals from the time of issuance unless returned by the holder or suspended, modified or withdrawn by the Commission.

§ 11.20 State Relay Network.

This network is composed of State Relay (SR) sources, leased common carrier communications facilities or any other available communication facilities. The network distributes State EAS messages originated by the Governor or designated official. In addition to EAS monitoring, satellites, microwave, FM subcarrier or any other communications technology may be used to distribute State emergency messages.
§ 11.21 State and Local Area Plans and FCC Mapbook.

EAS plans contain guidelines which must be followed by broadcast personnel, emergency officials and NWS personnel to activate the EAS. The plans include the EAS header code and messages that will be transmitted by key EAS sources (NP, LP, SP, and SR). State and local plans may contain unique methods of EAS message distribution such as the use of RBDS. The plans must be reviewed and approved by the Chief, Compliance and Information Bureau prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation.

(a) The State plan contains procedures for State emergency management and other State officials, the NWS, broadcast personnel to transmit emergency information to the public during a State emergency using the EAS.

(b) The Local Area plan contains procedures for local officials or the NWS to transmit emergency information to the public during a local emergency using the EAS. Local plans may be a part of the State plan. A Local Area is a geographical area of contiguous communities or counties that may include more than one state.

(c) The FCC Mapbook is based on the above plans. It organizes all broadcast stations and cable systems according to their State, EAS Local Area and EAS designation.

§ 11.31 EAS protocol.

(a) The EAS uses a four part message for an emergency activation of the EAS. The four parts are: Preamble and EAS Header Codes; audio Attention Signal; message; and, Preamble and EAS End Of Message (EOM) Codes.

(1) The Preamble and EAS Codes must use Audio Frequency Shift Keying at a rate of 520.83 bits per second to transmit the codes. Mark frequency is 2083.3 Hz and space frequency is 1562.5 Hz. Mark and space time must be 1.92 milliseconds. Characters are ASCII seven bit characters as defined in ANSI X3.4-1977 ending with an eighth null bit (either 0 or 1) to constitute a full eight-bit byte.

(2) The Attention Signal must be made up of the fundamental frequencies of 853 and 960 Hz. The two tones must be transmitted simultaneously. The Attention Signal must be transmitted after the EAS header codes.

(3) The message may be audio, video or text.

(b) The ASCII dash and plus symbols are required and may not be used for any other purpose. Unused characters must be ASCII space characters. FM or TV call signs must use a backslash ASCII character number 47 (/) in lieu of a dash.

(c) The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization. The EAS protocol and message format are specified in the following representation. Examples are also provided in the EAS Operating Handbook.

\[
\text{[PREAMBLE]} \text{ZCZC - ORG - EEE - PSSCCC +TTTT - JJJHHMM - LLLLLLLL - (one second pause)} \\
\text{[PREAMBLE]} \text{ZCZC - ORG - EEE - PSSCCC +TTTT - JJJHHMM - LLLLLLLL - (one second pause)} \\
\text{[PREAMBLE]} \text{ZCZC - ORG - EEE - PSSCCC +TTTT - JJJHHMM - LLLLLLLL - (one second pause)} \\
\text{transmission of 8 to 25 seconds of Attention Signal)} \\
\text{transmission of audio, video or text messages)} \\
\text{[PREAMBLE]} \text{NNNN (one second pause)} \\
\text{[PREAMBLE]} \text{NNNN (one second pause)} \\
\text{[PREAMBLE]} \text{NNNN (one second pause)} \\
\text{[PREAMBLE]} \text{NNNN (at least one second pause)} \\
\text{[PREAMBLE]} \text{This is a consecutive string of bits (sixteen bytes of AB hexadecimal [8 bit byte 10101011]) sent to clear the system, set AGC and set asynchronous decoder clocking cycles. The preamble must be transmitted before each header and End Of Message code.} \\
\text{ZCZC-} \text{This is the identifier, sent as ASCII characters ZCZC to indicate the start of ASCII code.} \\
\text{ORG-} \text{This is the Originator code and indicates who originally initiated the activation of the EAS. These codes are specified in paragraph (d) of this section.} \\
\]


VerDate 02<DEC>97 09:26 Dec 12, 1997 Jkt 174179 PO 00000 Frm 00585 Fmt 8010 Sfmt 8010 Y:\SGML\174179.TXT 179txt

§ 11.31

Federal Communications Commission

The Federal Communications Commission (FCC) has established a system of codes for identifying various entities and types of messages in the Emergency Alert System (EAS). These codes are used to ensure that messages are transmitted to the appropriate audiences and locations.

(c) The only originator codes are:

- EAS
- CIV
- WXR
- PEP
- WRSAME

(d) The only originator codes are:

- EAS
- CIV
- WXR
- PEP

(e) The following Event (EEE) codes are presently authorized:

- EAN
- EAT
- NIC
- NPT
- RMT
- RWT

(f) The State and Territory FIPS number codes (SS) are as follows. County FIPS numbers (CCC) are contained in the State EAS Mapbook.
§ 11.32  

EAS Encoder.

(a) EAS Encoders must at a minimum be capable of encoding the EAS protocol described in §11.31 and providing the EAS code transmission requirements described in §11.51. EAS encoders must additionally provide the following minimum specifications:

(1) Encoder programming. Access to encoder programming shall be protected by a lock or other security measures and be configured so that authorized personnel can readily select and program the EAS Encoder with Originator, Event and Location codes for either manual or automatic operation.

(2) Inputs. The encoder shall have two inputs, one for audio messages and one for data messages (RS-232C with standard protocol and 1200 baud rate).

(3) Outputs. The encoder shall have two outputs, one audio port and one data port (RS-232C with standard protocol and 1200 baud rate).

(4) Calibration. EAS Encoders must provide a means to comply with the modulation levels required in §11.51(f).

(5) Day-Hour-Minute and Identification Stamps. The encoder shall affix the JJJHHMM and LLLLLLLL codes automatically to all initial messages.

(6) Program Data Retention. Program data and codes shall be retained even with the power removed.

(7) Indicator. An aural or visible means that it activated when the Preamble is sent and deactivated at the End of Message code.

(8) Spurious Response. All frequency components outside 200 to 4000 Hz shall be attenuated by 40 dB or more with respect to the output levels of the mark or space frequencies.

(9) Attention Signal Generator. The encoder must provide an attention signal that complies with the following:

(i) Tone Frequencies. The audio tones shall have fundamental frequencies of 853 and 960 Hz and not vary over ±0.5 Hz.

(ii) Harmonic Distortion. The total harmonic distortion of each of the audio tones may not exceed 5% at the encoder output terminals.

(iii) Minimum Level of Output. The encoder shall have an output level capability of at least +48 dBm into a 600 Ohm load impedance at each audio tone. A means shall be provided to permit individual activation of the two tones for calibration of associated systems.

(iv) Time Period for Transmission of Tones. The encoder shall have timing circuitry that automatically generates the two tones simultaneously for a time period of not less than 8 nor longer than 25 seconds. NOTE: Prior to July 1, 1995, the Attention Signal must be at least 20 and not more than 25 seconds.

(v) Inadvertent Activation. The switch used for initiating the automatic generation of the simultaneous tones shall be protected to prevent accidental operation.

(vi) Indicator Display. The encoder shall be provided with a visual and/or aural indicator which clearly shows that the Attention Signal is activated.

(b) Operating Temperature and Humidity. Encoders shall have the ability to operate with the above specifications...
within an ambient temperature range of 0 to +50 degrees C and a range of relative humidity of up to 95%.

(c) Primary Supply Voltage Variation. Encoders shall be capable of complying with the requirements of this section during a variation in primary supply voltage of 85 percent to 115 percent of its rated value.

(d) Testing Encoder Units. Encoders not covered by §11.34(e) of this part shall be tested in a 10 V/m minimum RF field at an AM broadcast frequency and a 0.5 V/m minimum RF field at an FM or TV broadcast frequency to simulate actual working conditions.

§ 11.33 EAS Decoder.

(a) An EAS Decoder must at a minimum be capable of decoding the EAS protocol described in §11.31, provide the EAS monitoring functions described in §11.52, and the following minimum specifications:

(1) Inputs. Decoders must have the capability to receive at least 2 audio inputs from EAS monitoring assignments, and one data input (RS-232C with standard protocol and 1200 baud rate). The data input may be used to monitor other communications modes such as Radio Broadcast Data System (RBDS), NWR, satellite, public switched telephone network, or any other source that uses the EAS protocol.

(2) Valid codes. There must be a means to determine if valid EAS header codes are received and to determine if preselected header codes are received.

(3) Storage. Decoders must provide the means to:

(i) Record and store, either internally or externally, at least two minutes of audio or text messages. A decoder manufactured without an internal means to record and store audio or text must be equipped with a means (such as an audio or digital jack connection) to couple to an external recording and storing device.

(ii) Store at least 10 preselected event and originator header codes, in addition to the eight mandatory event/originator codes for tests and national activations, and store any preselected location codes for comparison with incoming header codes. A non-preselected header code that is manually transmitted must be stored for comparison with later incoming header codes. The header codes of the last ten received valid messages which still have valid time periods must be stored for comparison with the incoming valid header codes of later messages. These last received header codes will be deleted from storage as their valid time periods expire.

(4) Display. A visual message shall be developed from any valid EAS header codes received. The message will include the Originator, Event, Location, the valid time period of the message and the local time the message was transmitted. The message shall be in the primary language of the broadcast station or cable system and be fully displayed on the decoder and readable in normal light and darkness.

(5) Indicators. EAS decoders must have a distinct and separate aural or visible means to indicate when any of the following conditions occurs:

(i) Any valid EAS header codes are received as specified in §11.33(a)(10).

(ii) Preprogrammed header codes, such as those selected in accordance with §11.52(d)(2) are received.

(iii) A signal is present at each audio input that is specified in §11.33(a)(1).

(6) Program Data Retention. The program data must be retained even with power removed.

(7) Outputs. Decoders shall have the following outputs: a data port or ports (RS-232C with standard protocol and 1200 baud rate) where received valid EAS header codes and received preselected header codes are available; one audio port that is capable of monitoring each decoder audio input; and, an internal speaker to enable personnel to hear audio from each input.

(8) Decoder Programming. Access to decoder programming shall be protected by a lock or other security measures and be configured so that authorized personnel can readily select and program the EAS Decoder with preselected Originator, Event and Location codes for either manual or automatic operation.

(9) Reset. There shall be a method to automatically or manually reset the decoder to the normal monitoring condition. Operators shall be able to select
§ 11.34 Acceptability of the equipment.

(a) An EAS Encoder used for generating the EAS codes and the Attention Signal must be Certified in accordance with the procedures in part 2, subpart J, of this chapter. The data and information submitted must show the capability of the equipment to meet the requirements of this part as well as the requirements contained in part 15 of this chapter for digital devices.

(b) Decoders used for the detection of the EAS codes and receiving the Attention Signal must be Certified in accordance with the procedures in part 2, subpart J, of this chapter. The data and information submitted must show the capability of the equipment to meet the requirements of this part as well as the requirements contained in part 15 of this chapter for digital devices.

(c) The functions of the EAS decoder, Attention Signal generator and receiver, and the EAS encoder specified in §§ 11.31, 11.32 and 11.33 may be combined and Certified as a single unit provided that the unit complies with all specifications in this rule section.

(d) Manufacturers must include instructions and information on how to install, operate and program an EAS Encoder, EAS Decoder, or combined unit and a list of all State and county FIPS numbers with each unit sold or marketed in the U.S.

(e) Waiver requests of the Certification requirements for EAS Encoders or EAS Decoders which are constructed for use at a broadcast station or subject cable system, but are not offered for sale will be considered on an individual basis in accordance with part 1, subpart G, of this chapter.

§ 11.35 Equipment operational readiness.

(a) Broadcast stations and subject cable systems are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS is installed so that the monitoring and transmitting functions are available during the times the broadcast station or cable system is in
Federal Communications Commission

§ 11.42 Participation by communications common carriers.

(a) During activation of the National level EAS, communications common carriers which have facilities available in place may, without charge, connect:

(1) An originating source from the nearest service area to a selected Test Center and then to the radio and television broadcast networks, and cable networks and program suppliers for the duration of the emergency, provided an Emergency Action Notification is issued by the White House and the originating source has a local channel from the originating point to the nearest service area.

(2) An independent broadcast station to the radio and television broadcast networks, and cable networks and program suppliers provided the station has in service a local channel from the station's studio or transmitter directly to the broadcast source.

(b) Upon receipt of the Emergency Action Termination, the common carriers shall disconnect the originating source and the participating independent stations and restore the networks and program suppliers to their original configurations.

(c) During a National level EAS Closed Circuit Test, common carriers which have facilities in place may, without charge, connect an originating source from the nearest service area to a selected Test Center and then to the radio networks and, if participating,
§ 11.43 National level participation.

The industry entities voluntarily participating in the national level EAS are:

(a) Radio Networks.
   (1) ABC.
   (2) Associated Press (APR).
   (3) CBS.
   (4) CNN.
   (5) Jones Satellite Audio.
   (6) Moody Broadcasting Network.
   (7) Mutual Broadcasting System (MBS).
   (8) MUZAK.
   (9) NBC.
   (10) National Public (NPR).
   (11) Unistar.
   (12) United Press International (UPIR).
   (13) USA.
(b) Television Networks.
   (1) ABC.
   (2) CBS.
   (3) FOX.
   (4) NBC.
   (5) PBS.
(c) Cable Program Suppliers.
   (1) Cable News Network (CNN) and CNN Headline News.
   (2) Cinemax.
   (3) Disney Channel.
   (4) Entertainment and Sports Programming Network (ESPN).
   (5) Home Box Office (HBO).
   (6) Movie Channel.
   (7) MTV.
   (8) The Nashville Network.
   (9) Nickelodeon.

(d) Wire Services.
   (1) Associated Press (AP).
   (2) Reuters.
   (3) United Press International (UPI).
   (4) Common Carriers.
      (1) American Telephone and Telegraph (AT&T).
      (2) [Reserved]
   (f) Entities that wish to voluntarily participate in the national level EAS may submit a written request to the FCC.

§ 11.44 EAS message priorities.

(a) A national activation of the EAS for a Presidential message with the Event code EAN as specified in §11.31 must take priority over any other message and preempt it if it is in progress.

(b) EAS participants should transmit other EAS messages in the following order: first, Local Area Messages; second, State Messages; and third, National Information Center (NIC) Messages.

(c) Key EAS sources (NP, LP, SP and SR) and Participating National (PN) sources that remain on the air during a National emergency must carry Presidential Messages “live” at the time of transmission or immediately upon receipt. Activation of the National level EAS must preempt State and Local Area EAS operation.

(d) During a national emergency, the radio and television broadcast network program distribution facilities must be reserved exclusively for distribution of Presidential Messages. NIC messages received from national networks which are not broadcast at the time of original transmission must be recorded locally by LP sources for transmission at the earliest opportunity consistent with the message priorities in paragraph (b) of this section.

§ 11.45 Prohibition of false or deceptive EAS transmissions.

No person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized
Federal Communications Commission

§ 11.46 EAS public service announcements.

Broadcast stations may use Public Service Announcements or obtain commercial sponsors for announcements, infomercials, or programs explaining the EAS to the public. Such announcements and programs may not be a part of alerts or tests, and may not simulate or attempt to copy alert tones or codes.

§ 11.47 Optional use of other communications methods and systems.

(a) Broadcast stations may additionally transmit EAS messages through other communications means than the main audio channel. For example, on a voluntary basis, FM stations may use subcarriers to transmit the EAS codes including 57 kHz using the RBDS standard produced by the National Radio Systems Committee (NRSC) and television stations may use subsidiary communications services.

(b) Other technologies and public service providers, such as DBS, low earth orbiting satellites, etc., that wish to participate in the EAS may contact the FCC’s EAS Office or their State Emergency Communication Committee for information and guidance.

(c) Effective January 1, 1997, all radio and television stations shall transmit EAS messages in the main audio channel.

(d) By the above date, television stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. If the message is a video crawl, it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

(e) Class D non-commercial educational FM stations as defined in §73.506 of this chapter and low power TV stations as defined in §74.701(f) of this chapter are not required to have equipment capable of generating the EAS codes and Attention Signal specified in §11.31.

(f) Broadcast stations are responsible for ensuring that the equipment for generating the EAS codes and the Attention Signal shall modulate a broadcast station transmitter so that the signal broadcast to other broadcast stations and cable systems alerts them that the EAS is being activated or tested at the National, State or Local Area level. The minimum level of modulation for EAS codes, measured at peak modulation levels using the internal calibration output specified in §11.32(a)(4) shall modulate the transmitter at no less than 80% of full channel modulation limits. Measured at peak modulation levels, each of the Attention Signal tones shall be calibrated separately to modulate the transmitter at no less than 40%. These two calibrated modulation levels shall have values that are within 1 dB of each other.

Subpart D—Emergency Operations

§ 11.51 EAS code and Attention Signal Transmission requirements.

(a) Broadcast stations must transmit, either automatically or manually, national level EAS messages and required tests by sending the EAS header codes, Attention Signal, emergency message and End of Message (EOM) using the EAS Protocol. The Attention Signal must precede any emergency audio message. After January 1, 1998, the shortened Attention Signal may only be used as an audio alert signal and the EAS codes will become the minimum signalling requirement for National level messages and tests.

(b) Broadcast stations may transmit only the EAS header codes and the EOM code without the Attention Signal and emergency message for State and local emergencies. Television stations and cable systems should ensure that pauses in video programming before EAS message transmission do not cause television receivers to mute EAS audio messages. No Attention Signal is warranted for EAS messages that do not contain audio programming, such as a Required Weekly Test.

(c) Effective January 1, 1997, all radio and television stations shall transmit EAS messages in the main audio channel.

(d) By the above date, television stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. If the message is a video crawl, it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

(e) Class D non-commercial educational FM stations as defined in §73.506 of this chapter and low power TV stations as defined in §74.701(f) of this chapter are not required to have equipment capable of generating the EAS codes and Attention Signal specified in §11.31.

(f) Broadcast stations are responsible for ensuring that the equipment for generating the EAS codes and the Attention Signal shall modulate a broadcast station transmitter so that the signal broadcast to other broadcast stations and cable systems alerts them that the EAS is being activated or tested at the National, State or Local Area level. The minimum level of modulation for EAS codes, measured at peak modulation levels using the internal calibration output specified in §11.32(a)(4) shall modulate the transmitter at no less than 80% of full channel modulation limits. Measured at peak modulation levels, each of the Attention Signal tones shall be calibrated separately to modulate the transmitter at no less than 40%. These two calibrated modulation levels shall have values that are within 1 dB of each other.
(g) Effective July 1, 1997, cable systems shall transmit EAS audio messages in the same order specified in paragraph (a) of this section. The Attention Signal may be produced from a storage device. Additionally, subject cable systems must:

1. Install, operate, and maintain equipment capable of generating the EAS codes. The modulation levels for the EAS codes and Attention Signal for cable systems shall comply with the aural signal requirements in §76.605 of this chapter. This will provide sufficient signal levels to operate cable subscriber television or radio receivers equipped with EAS decoders and to audibly alert subscribers.

2. Provide a video interruption and an audio EAS message on all channels. The audio message must state which channel is carrying the visual EAS message.

3. Subject cable systems shall transmit a visual EAS message on at least one channel. The message shall contain the Originator, Event, Location and the valid time period of the EAS message. If the visual message is a video crawl, it shall be displayed at the top of the subscriber’s television screen or where it will not interfere with other visual messages.

4. Cable systems shall provide a method to alert hearing impaired or deaf subscribers to EAS messages. Methods may include: a box that displays EAS messages and activates other alerting mechanisms or lights; visual messages on all channels; etc.

5. Cable systems may elect not to interrupt EAS messages from broadcast stations based on a written agreement between all concerned.

(h) If manual interrupt is used as specified in paragraph (l) of this section, EAS Encoders must be located so that station or cable staff, at normal duty locations, can initiate the EAS code and Attention Signal transmission.

(i) Broadcast stations or cable systems are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT), with the accompanying location codes for their State and county. These EAS messages shall be retransmitted unchanged except for the LLLLLLLL- code which identifies the broadcast station or cable system retransmitting the message. See §11.31(c). If an EAS source originates any EAS messages with the above Event codes, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, broadcast stations and subject cable systems will use the event code RWT. The location codes will be the state and county for the broadcast station city of license or subject cable system community. Other location codes may be included upon approval of station or cable system management approval. EAS code requirements and examples are provided in the EAS Operating Handbook. Operations may be conducted automatically or manually.

1. Automatic interrupt of programming and transmission of EAS messages is required when facilities are unattended and must include a permanent record that contains at a minimum the following information: Originator, Event, Location and valid time period of the message. The decoder performs the functions necessary to determine which EAS messages are automatically transmitted by the encoder.

2. Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN and EAT Event codes must be transmitted immediately and Monthly EAS test messages within 15 minutes. All actions must be logged or recorded.

(k) Broadcast stations and cable systems may employ a minimum delay feature, not to exceed 15 minutes, for automatic interrupt of EAS codes but
not for the EAN Event which must be transmitted immediately.

(l) Either manual or automatic operation of EAS equipment may be used at broadcast stations or cable systems that use remote control. If manual operation is used, an EAS decoder must be located at the remote control location and directly monitor the signals of the two assigned EAS sources. If direct monitoring of the assigned EAS sources is not possible at the remote location, automatic operation is required. If automatic operation is used, the remote control location may be used to override the transmission of an EAS message. Broadcast stations and cable systems may change back and forth between automatic and manual operation.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 56000, Nov. 6, 1995]

§ 11.52 EAS code and Attention Signal Monitoring requirements

(a) Before January 1, 1998, broadcast stations must be capable to receiving the Attention Signal required by §11.32(a)(9) and emergency messages of other broadcast stations during their hours of operation. Effective January 1, 1997, all broadcast stations must install and operate during their hours of operation, equipment capable of receiving and decoding, either automatically or manually, the EAS header codes, emergency messages and EOM code. The effective date for subject cable systems is July 1, 1997.

NOTE TO PARAGRAPH (A). After January 1, 1998, the two-tone Attention Signal will not be used to activate two-tone decoders but will be used as an aural alert signal.

(b) If manual interrupt is used as specified in §11.51(l)(2), decoders must be located so that operators at their normal duty stations at broadcast stations and cable systems can be alerted immediately when EAS messages are received.

(c) Broadcast stations or cable systems that are co-owned and co-located with a combined studio or control facility, (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may provide the EAS monitoring requirements contained in this section for the combined station or cable system with one EAS Decoder. The requirements of §11.33 must be met for the combined station or cable system.

(d) Broadcast stations and subject cable systems must monitor the two EAS sources assigned in accordance with the monitoring priorities in the EAS Operating Handbook. The off-air monitoring assignments of each broadcast station and cable system are specified in the State EAS Plan and FCC Mapbook.

(1) If the required EAS sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the FCC’s EAS office. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.

(2) Broadcast station and cable system management will determine which header codes will automatically interrupt their programming for State and Local Area emergency situations affecting their audiences.

(e) A broadcast station or cable system is required to interrupt normal programming either automatically or manually when it receives an EAS message in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), or Required Monthly Test (RMT) for its State or State/county location.

(1) Automatic interrupt of programming is required when facilities are unattended. Automatic operation must provide a permanent record of the EAS message that contains at a minimum the following information: Originator, Event, Location and valid time period of the message.

(2) Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 15 minutes. All actions must be logged or recorded. Decoders must be programmed for the EAN and EAT Event header codes for EAS National level emergencies and the RMT and RWT Event header codes for required monthly and weekly tests, with
§ 11.53 Dissemination of Emergency Action Notification.

Initiation of the EAN by any one of the following sources is sufficient to begin the emergency actions in §11.54.

(a) National Level. The EAN is issued by the White House. The EAN message is sent from an origination point to control points of the participating radio and television networks, cable networks and program suppliers, wire services, communications common carriers and other entities. It is then disseminated via:

1. Radio and television broadcast networks to all affiliates with the use of internal alerting facilities.
2. Cable networks and program suppliers to cable systems and subscribers.
3. Wire services to all subscribers (AM, FM, TV, LPTV and other stations).
4. Off-air monitoring of EAS sources.

(b) State Level and Local Area Levels. EAN dissemination arrangements at these levels originate from State and local governments in accordance with State and Local Area plans.

(c) Broadcast stations must, prior to commencing routine operation or originating any emissions under program test, equipment test, experimental, or other authorizations, determine whether the EAS has been activated by any of the following methods:

1. Monitor the radio and TV networks and cable systems.
2. Check the wire services.
3. Monitor the assigned EAS sources.

§ 11.54 EAS operation during a National Level emergency.

(a) The EAS Operating Handbook summarizes the procedures to be followed upon receipt of a National level EAN or EAT Message.

(b) Immediately upon receipt of an EAN message, broadcast stations and cable systems must:

1. Monitor the radio and television networks, cable networks and program suppliers, and wire services for further instructions.

2. Verify the authenticity of the EAN message with the current Red Envelope Authenticator List (broadcast stations only).

3. Monitor the two EAS sources assigned in the State or Local Area plan or FCC Mapbook for any further instructions.

4. Discontinue normal programming and follow the transmission procedures in the appropriate section of the EAS Operating Handbook. Announcements may be made in the same language as the primary language of the station.

(i) Key EAS sources (National Primary (NP), Local Primary (LP), State Primary (SP), State Relay (SR) and Participating National (PN) sources) follow the transmission procedures and make the announcements in the National Level Instructions of the EAS Operating Handbook.

(ii) Non-participating National (NN) sources follow the transmission procedures and make the sign-off announcement in the EAS Operating Handbook’s National Level Instructions section for NN sources. After the sign-off announcement, NN sources are required to remove their carriers from the air and monitor for the Emergency Action Termination message. NN sources using automatic interrupt under §11.51(l)(1) must transmit the header codes, Attention Signal, sign-off announcement and EOM code after receiving the appropriate EAS header codes for a national emergency.

5. After completing the above transmission procedures, key EAS and Participating National sources must transmit a common emergency message until receipt of the Emergency Action Termination Message. Message priorities are specified in §11.44. If LP or SR sources of a Local Area cannot provide an emergency message feed, any source in the Local Area may elect to provide a message feed. This should be done in an organized manner as designated in State and Local Area EAS Plans.

6. The Standby Script shall be used until emergency messages are available. The text of the Standby Script is in the EAS Operating Handbook’s section for Participating sources.

7. TV broadcast stations shall display an appropriate EAS slide and then
transmit all EAS announcements visually and aurally as specified in § 73.1250(h) of this chapter.

(8) Announcements may be made in the same language as the primary language of the station.

(9) Broadcast Stations in the International Broadcast Service must cease broadcasting immediately upon receipt of an Emergency Action Notification and must maintain radio silence until an EAT is issued. Such stations may be issued an emergency authorization by the FCC with concurrence of the Director, Office of Science and Technology Policy, to transmit Federal government broadcasts or communications.

(10) Broadcast stations may transmit their call letters and cable systems may transmit the names of the communities they serve during an EAS activation. EAS State and Local Area identifications must be given as provided in State and Local Area EAS plans.

(11) All broadcast stations and cable systems operating and identified with a particular Local Area must transmit a common national emergency message until receipt of the Emergency Action Termination.

(12) Broadcast stations, except those holding an EAS Non-participating National Authorization letter, are exempt from complying with §§ 73.62 and 73.1560 of this chapter (operating power maintenance) while operating under this part.

(13) National Primary (NP) sources must operate under the procedures in the National Control Point Procedures.

(14) The time of receipt of the EAN and Emergency Action Termination messages shall be entered in the broadcast station logs (as specified in §§ 73.1820 and 73.1840 of this chapter), or the cable system records (as specified in § 76.305 of this chapter).

(c) Upon receipt of an Emergency Action Termination Message, broadcast stations and cable systems must follow the termination procedures in the EAS Operating Handbook.

(d) Broadcast stations and cable systems originating emergency communications under this section shall be considered to have conferred rebroadcast authority, as required by Section 325(a) of the Communications Act of 1934, 47 U.S.C. 325(a), to other participating broadcast stations and cable systems.

§ 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 §11.54(b)(7). Broadcast stations providing foreign language programming shall comply with §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.
§ 11.61

(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 §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 §11.54(d).

Subpart E—Tests

§ 11.61 Tests of EAS procedures.

(a) Tests shall be made at regular intervals as indicated below. Additional tests may be performed anytime. EAS activations and special tests may be performed in lieu of required tests as specified in paragraph (a)(6) of this section. All tests will conform with the procedures in the EAS Operating Handbook.

(1) Required Monthly Tests of the EAS header codes, Attention Signal, Test Script and EOM code.
   (i) Effective January 1, 1997, AM, FM and TV stations.
   (ii) Effective July 1, 1997, cable systems.
   (iii) Tests in odd numbered months shall occur between 8:30 a.m. and local sunset. Tests in even numbered months shall occur between local sunset and 8:30 a.m. They will originate from Local or State Primary sources. Time and script content will be developed by State Emergency Communications Committees in cooperation with affected broadcast stations, cable systems, and other participants. Script content can be in the primary language of the broadcast station or cable system. These monthly tests must be transmitted within 15 minutes of receipt by broadcast stations and cable systems in an EAS Local Area or State. Class D non-commercial educational FM and LPTV stations need to transmit only the test script.
   (2) Required Weekly Tests:
      (i) Attention Signal. Until January 1, 1997, broadcast stations must conduct tests of the Attention Signal and Test Script at least once a week at random days and times between 8:30 a.m. and local sunset. Class D non-commercial educational FM and LPTV stations do not need to transmit the Attention Signal. Script content can be in the primary language of the station.
      (ii) EAS Header Codes and EOM Codes:
         (A) Effective January 1, 1997, AM, FM and TV stations must conduct tests of the EAS header and EOM codes at least once a week at random days and times.
         (B) Effective July 1, 1997, subject cable systems must conduct tests of the EAS header and EOM codes at least once a week at random days and times.
      (iii) Class D non-commercial educational FM and LPTV stations are not required to transmit this test but must log receipt.
      (iv) The EAS weekly test is not required during the week that a monthly test is conducted.
   (3) Periodic Wire Service Tests. AP, Reuters and UPI shall separately conduct test transmissions to broadcast stations and cable systems on their wire networks. Tests may occur no more than once a month at random times selected by the wire services. These tests shall conform with the procedures in the EAS Operating Handbook and the National Control Point Procedures.
   (4) Weekly Emergency Action Notification (EAN) network transmissions. Tests of the National level interconnection facilities shall be conducted on a random basis once each week. They shall originate from the Federal government over a dedicated network to specified control points of the radio and television networks, cable networks and program suppliers, wire services, common carriers and other organizations. The tests shall conform with the National Control Point Procedures.
   (5) Periodic National Tests. National Primary (NP) sources shall participate in tests as appropriate. The FCC may request a report of these tests.
   (6) EAS activations and special tests. The EAS may be activated at the State or Local Area level by a broadcast station or cable system in lieu of the monthly or weekly tests required by this section. Such activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code for substitution of the monthly test. Activation must include transmission of the Attention
Signal and emergency message for substitution of the weekly test in paragraph (a)(2)(i) of this section.Activation must include transmission of the EAS header and EOM codes for substitution of the weekly test in paragraph (a)(2)(ii) of this section. Television stations and cable systems shall comply with the visual message requirements in §11.51 of this part. Special EAS tests at the State and Local Area levels may be conducted on a day-to-day basis following procedures in State and Local Area EAS plans.

(b) Entries shall be made in the broadcast station or cable system records as specified in §11.54(b)(14) concerning EAS tests received and transmitted.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 56000, Nov. 6, 1995]


(a) Closed Circuit Tests (CCT) of National Level EAS facilities shall be conducted on a random or scheduled basis not more than once a month and not less than once every three months. Test times will be selected by the White House in coordination with participating industry personnel, the Federal Emergency Management Agency (FEMA), and the FCC. The FCC will notify the participating networks, wire services, cable networks and program suppliers and common carriers of the selected time window for the test at least four working days (holidays excluded) before the test.

(b) The EAS Operating Handbook and National Control Point Procedures contain the CCT procedures.

(c) The control points of the participating radio and television networks, cable networks and program suppliers, wire services and common carriers will receive notification of a CCT by a “Closed Circuit Test Activation Message”.

(d) Test announcements will originate from a point selected by the White House with program feed circuitry connected to the telephone company Toll Test Center at points coordinated for each test. Participating common carriers will connect, as required, the facilities of the radio networks and other test participants. Telephone companies are not authorized to add any participating independent broadcast stations unless authorized by the FCC. Authentication will be provided to the Toll Test Center or other program entry location responsible for test arrangements. Authentication used in the CCT Message will be the test words on the outside of the Red Envelope Authenticator List.

(e) CCT procedures for radio network affiliates, wire service subscribers, and, if participating, television network affiliates and cable systems are as follows:

(1) Notification of a CCT will be disseminated as specified in §11.53 (a)(1) and (a)(3) and the EAS Operating Handbook.

(2) Recipients immediately monitor their radio network, and if participating, their television network or cable system, and check their wire service for the receipt of the CCT Activation Message. Verify authenticity using the current Red Authenticator List.

(3) Continue to monitor for the CCT audio talkup and program.

(4) Enter the time of receipt of the CCT message in the broadcast station log or cable system records.

(5) The CCT terminates on the following aural closing cue in the text of the test program: “This concludes the Closed Circuit Test of the EAS.”

(6) Following the closing cue, wire service subscribers will receive a “Closed Circuit Test Termination Message”. Record the time of receipt as indicated above.

(f) The FCC may request a CCT report in a prescribed format.