

Act are waived insofar as such provisions require the issuance of a construction permit prior to the issuance of the student authorization provided for in this subpart.

**§ 5.404 [Reserved]**

**§ 5.405 Power limitation.**

No authorization under this subpart will be issued unless the description of the project shows that the dc plate power input to the final radio frequency stage does not exceed 5 watts: *Provided, however,* That a greater power may be authorized if a satisfactory showing is made that such greater power is necessary and that appropriate measures will be taken to prevent interference.

**§ 5.406 Frequencies.**

(a) Frequencies in the following bands are available for assignment in authorizations issued under this subpart:

27.23–27.28 MHz.  
460–461 MHz.  
462.525–467.475 MHz.  
2450–2500 MHz.

(b) In each case, the carrier frequency must be far enough inside the band so as to keep the sideband energy within the band limits specified.

[28 FR 12506, Nov. 22, 1963, as amended at 35 FR 5618, Apr. 7, 1970]

**§ 5.407 Measurements required.**

The frequency of operation must be measured or checked prior to each time of operation.

**§ 5.408 Waiver of technical and operating requirements.**

Subject to the provisions of §§ 5.405, 5.406, and 5.407, the provisions in subparts C and D of this part are waived insofar as such provisions require a station authorized under this subpart to observe the technical and operating requirements set forth therein.

**§ 5.409 Noninterference condition.**

Each authorization issued to a student under this subpart is subject to the condition that no harmful inter-

ference, as defined in § 5.3(h), is caused to any authorized station.

[38 FR 12744, May 15, 1973]

**§ 5.410 Record of operation.**

(a) The licensee holding an authorization issued under this subpart shall maintain a record of operation containing the following information:

(1) The date and time of each period of operation.

(2) The frequency of operation as measured or checked at the beginning of each period of operation.

(3) A brief description of the experimentation being conducted.

(b) Each entry shall be signed by the person operating the equipment.

(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.
- 11.19 EAS Non-participating National Authorization Letter.
- 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.

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- 11.41 Participation in EAS.
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- 11.43 National level participation.
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- 11.51 EAS code and Attention Signal Transmission requirements.
- 11.52 EAS code and Attention Signal Monitoring requirements.
- 11.53 Dissemination of Emergency Action Notification.
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**Subpart E—Tests**

- 11.61 Tests of EAS procedures.
- 11.62 Closed Circuit Tests of National Level EAS facilities.

AUTHORITY: 47 U.S.C. 151, 154 (i) and (o), 303(r), 544(g) and 606.

SOURCE: 59 FR 67092, Dec. 28, 1994, unless otherwise noted.

**Subpart A—General**

**§ 11.1 Purpose.**

This part contains rules and regulations providing for an Emergency Alert

System (EAS). The EAS provides the President with the capability to provide immediate communications and information to the general public at the National, State and Local Area levels during periods of national emergency. The rules in this part describe the required technical standards and operational procedures of the EAS for AM, FM and TV broadcast stations, cable systems and other participating entities. The EAS may be used to provide the heads of State and local government, or their designated representatives, with a means of emergency communication with the public in their State or Local Area.

**§ 11.11 The Emergency Alert System (EAS).**

(a) The EAS is composed of broadcast networks; cable networks and program suppliers; AM, FM and TV broadcast stations; Low Power TV (LPTV) stations; cable systems; wireless cable systems which may consist of Multipoint Distribution Service (MDS), Multichannel Multipoint Distribution Service (MMDS), or Instructional Television Fixed Service (ITFS) stations; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels. It requires that at a minimum all participants use a common EAS protocol, as defined in § 11.31, to send and receive emergency alerts in accordance with the effective dates in the following tables:

Timetable

BROADCAST STATIONS

Requirement	AM & FM	TV	FM Class D	LPTV <sup>1</sup>
Two-tone encoder <sup>2,3</sup> .....	Y	Y	N	N
Two-tone decoder <sup>4,5</sup> .....	Y	Y	Y	Y
EAS decoder .....	Y 1/1/97	Y 1/1/97	Y 1/1/97	Y 1/1/97
EAS encoder .....	Y 1/1/97	Y 1/1/97	N	N
Audio message .....	Y 1/1/97	Y 1/1/97	Y 1/1/97	Y 1/1/97
Video message .....	N/A	Y 1/1/97	N/A	Y 1/1/97

<sup>1</sup> LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment.

<sup>2</sup> Effective July 1, 1995, the two-tone signal must be 8–25 seconds.

<sup>3</sup> Effective January 1, 1998, the two-tone signal may only be used to provide audio alerts to audiences before EAS emergency messages and the required monthly tests.  
<sup>4</sup> Effective July 1, 1995, the two-tone decoder must respond to two-tone signals of 3–4 seconds duration.  
<sup>5</sup> Effective January 1, 1998, the two-tone decoder will no longer be used.

EAS REQUIREMENTS  
 CABLE SYSTEMS

A. Cable systems serving fewer than 5,000 subscribers from a headend must either provide the national level EAS message on all programmed channels—including the required testing—by October 1, 2002, or comply with the following EAS requirements. All other cable systems must comply with B.

B. EAS Equipment Requirement	System size and effective dates		
	≥10,000 subscribers	≥5,000 but <10,000 subscribers	<5,000 subscribers
Two-tone signal from storage device <sup>1</sup> .....	Y 12/31/98	Y 10/1/02	Y 10/1/02
Two-tone decoder .....	N	N	N
EAS decoder .....	Y 12/31/98	Y 10/1/02	Y 10/1/02
EAS encoder .....	Y 12/31/98	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels.	Y 12/31/98	Y 10/1/02	N
Video interrupt and audio alert message on all channels; <sup>2</sup> Audio and Video EAS message on at least one channel.	N	N	Y 10/1/02

<sup>1</sup> Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8–25 seconds in duration.  
<sup>2</sup> The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.  
**Note:** Programmed channels do not include channels used for the transmission of data such as interactive games.

WIRELESS CABLE SYSTEMS  
 (MDS/MMDS/ITFS STATIONS)

A. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the national level EAS message on all programmed channels—including the required testing—by October 1, 2002, or comply with the following EAS requirements. All other wireless cable systems must comply with B.

B. EAS Equipment Requirement	System size and effective dates	
	≥5,000 subscribers	<5,000 subscribers
EAS decoder .....	Y 10/1/02	Y 10/1/02
EAS encoder <sup>1</sup> .....	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels .....	Y 10/1/02	N
Video interrupt and audio alert message on all channels; <sup>2</sup> Audio and Video EAS message on at least one channel.	N	Y 10/1/02

<sup>1</sup> Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8–25 seconds in duration.  
<sup>2</sup> The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.  
**Note:** Programmed channels do not include channels used for the transmission of data services such as Internet.

(b) Class D non-commercial educational FM stations as defined in § 73.506 and LPTV stations as defined in § 74.701(f) are not required to comply with § 11.32. LPTV stations that operate as television broadcast translator stations, as defined in § 74.701(b) are not required to comply with the requirements of this part. FM broadcast booster stations as defined in § 74.1201(f) of this chapter and FM translator stations as defined in § 74.1201(a) of this chapter which entirely rebroadcast the programming of other local FM broadcast stations are not required to comply with the requirements of this part.

(c) For purposes of the EAS, Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) stations operated in accordance with subpart K of part 21 of this chapter and Instructional Television Fixed Service (ITFS) stations operated as part of wireless cable systems in accordance with subpart I of part 74 of this chapter are defined as follows:

(1) A “wireless cable system” is a collection of channels in the MDS, MMDS, or ITFS used to provide video programming services to subscribers. The channels may be licensed to or leased by the wireless cable system operator.

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(2) A “wireless cable operator” is the entity that has acquired the right to use the channels of a wireless cable system for transmission of programming to subscribers.

(d) Local franchise authorities and cable television system operators may enter into mutual agreements that require the installation of EAS equipment before the required dates listed in the tables in paragraph (a). Additionally, local franchise authorities may use any EAS codes authorized by the FCC in any agreements.

(e) 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 comply with the requirements of this part.

[63 FR 29662, June 1, 1998]

### **§ 11.12 Two-tone Attention Signal encoder and decoder.**

Existing two-tone Attention Signal encoder and decoder equipment type accepted for use as Emergency Broadcast System equipment under part 73 of this chapter may be used by broadcast stations until January 1, 1998, provided that such equipment meets the requirements of § 11.32(a)(9) and 11.33(b). Effective January 1, 1998, the two-tone Attention Signal decoder will no longer be required and the two-tone Attention Signal will be used to provide an audio alert.

[60 FR 55999, Nov. 6, 1995]

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

(a) The Emergency Action Notification (EAN) is the notice to all broadcast stations, cable systems and wireless 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, cable systems and wireless cable systems, other regulated

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services of the FCC, participating industry entities, and to the general public that the EAN has terminated.

[63 FR 29663, June 1, 1998]

### **§ 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, cable systems and wireless 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. 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.

[63 FR 29663, June 1, 1998]

### **§ 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 and cable systems and wireless cable systems 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.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29663, June 1, 1998]

#### § 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.

#### § 11.19 EAS Non-participating National Authorization Letter.

This authorization letter is issued by the FCC to broadcast station licensees and cable systems and wireless cable systems. It states that the licensee, cable operator or wireless cable operator has agreed to go off the air or in

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the case of cable discontinue programming on all channels during a national level EAS message. For Broadcast licensees 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.

[63 FR 29663, June 1, 1998]

§ 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 and cable personnel, emergency officials and National Weather Service (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, and broadcast and cable 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 com-

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munities 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.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995; 63 FR 29663, June 1, 1998]

Subpart B—Equipment Requirements

§ 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. FM or TV call signs must use a slash 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 provided in FCC Public Notices.

[PREAMBLE] ZCZC - ORG - EEE - PSSCCC  
+ TTTT - JJJHHMM - LLLLLLLL -  
(one second pause)  
[PREAMBLE] ZCZC - ORG - EEE - PSSCCC  
+ TTTT - JJJHHMM - LLLLLLLL -  
(one second pause)

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[PREAMBLE] ZCZC - ORG - EEE - PSSCCC + TTTT - JJJHHMM - LLLLLLLL - (at least a one second pause) (transmission of 8 to 25 seconds of Attention Signal) (transmission of audio, video or text messages) (at least a one second pause) [PREAMBLE] NNNN (one second pause) [PREAMBLE] NNNN (one second pause) [PREAMBLE] NNNN (at least one second pause)

[PREAMBLE] 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.

ZCZC- This is the identifier, sent as ASCII characters ZCZC to indicate the start of ASCII code.

ORG- 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.

EEE- This is the Event code and indicates the nature of the EAS activation. The codes are specified in paragraph (e) of this section. The Event codes must be compatible with the codes used by the NWS Weather Radio Specific Area Message Encoder (WRSAME).

PSSCCC- This is the Location code and indicates the geographic area affected by the EAS alert. There may be 31 Location codes in an EAS alert. The Location code uses the Federal Information Processing Standard (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6-4. Each state is assigned an SS number as specified in paragraph (f) of this section. Each county and some cities are assigned a CCC number. A CCC number of 000 refers to an entire State or Territory. P defines county subdivisions as follows: 0 = all or an unspecified portion of a county, 1 = Northwest, 2 = North Central, 3 = Northeast, 4 = West Central, 5 = Central, 6 = East Central, 7 = Southwest, 8 = South Central, 9 = Southeast. Other numbers may be designated later for special applications. The use of county subdivisions will probably be rare and generally for oddly shaped or unusually large counties. Any subdivisions must be defined and agreed to by the local officials prior to use.

+TTTT- This indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour; i.e., +0015, +0030, +0045, +0100, +0430 and +0600.

JJJHHMM- This is the day in Julian Calendar days (JJJ) of the year and the time in hours and minutes (HHMM) when the message was initially released by the originator using 24 hour Universal Coordinated Time (UTC).

LLLLLLLL—This is the identification of the broadcast station, cable system, MDS/ MMDS/ITFS station, NWS office, etc., transmitting or retransmitting the message. These codes will be automatically affixed to all outgoing messages by the EAS encoder.

NNNN- This is the End of Message (EOM) code sent as a string of four ASCII N characters.

(d) The only originator codes are:

Originator	ORG code
Broadcast station or cable system .....	EAS
Civil authorities .....	CIV
Emergency Action Notification Network .....	EAN
National Weather Service .....	WXR
Primary Entry Point System .....	PEP

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

Nature of activation	Event codes
National Codes:	
Emergency Action Notification (National only) .....	EAN
Emergency Action Termination (National only) .....	EAT
National Information Center .....	NIC
National Periodic Test .....	NPT
Required Monthly Test .....	RMT
Required Weekly Test .....	RWT
Local Codes:	
Administrative Message .....	ADR
Blizzard Warning .....	BZW
Civil Emergency Message .....	CEM
Evacuation Immediate .....	EVI
Flash Flood Statement .....	FFS
Flash Flood Warning .....	FFW
Flash Flood Watch .....	FFA
Flood Statement .....	FLS
Flood Warning .....	FLW
Flood Watch .....	FLA
High Wind Warning .....	HWW
High Wind Watch .....	HWA
Hurricane Statement .....	HLS
Hurricane Warning .....	HUW
Hurricane Watch .....	HUA
Practice/Demo Warning .....	DMO
Severe Thunderstorm Warning .....	SVR
Severe Thunderstorm Watch .....	SVA
Severe Weather Statement .....	SVS
Special Weather Statement .....	SPS
Tornado Warning .....	TOR
Tornado Watch .....	TOA
Tsunami Warning .....	TSW
Tsunami Watch .....	TSA
Winter Storm Warning .....	WSW
Winter Storm Watch .....	WSA

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

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State	FIPS #
AL .....	01
AK .....	02
AZ .....	04
AR .....	05
CA .....	06
CO .....	08
CT .....	09
DE .....	10
FL .....	12
GA .....	13
HI .....	15
ID .....	16
IL .....	17
IN .....	18
IA .....	19
KS .....	20
KY .....	21
LA .....	22
ME .....	23
MD .....	24
MA .....	25
MI .....	26
MN .....	27
MS .....	28
MO .....	29
MT .....	30
NE .....	31
NV .....	32
NH .....	33
NJ .....	34
NM .....	35
NY .....	36
NC .....	37
ND .....	38
OH .....	39
OK .....	40
OR .....	41
PA .....	42
RI .....	44
SC .....	45
SD .....	46
TN .....	47
TX .....	48
UT .....	49
VT .....	50
VA .....	51
WA .....	53
WV .....	54
WI .....	55
WY .....	56

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Terr.	FIPS #
AS .....	60
PR .....	72
FM .....	64
PW .....	70
GU .....	66
UM .....	74
MH .....	68
VI .....	78
MP .....	69

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995; 61 FR 54952, Oct. 23, 1996; 63 FR 29663, June 1, 1998]

§ 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 Pre-amble 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  $\pm 0.5$  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 +8 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 a time interval, not less than two minutes, in which the decoder would automatically reset if it received an EAS header code but not an end-of-message (EOM) code. Messages received with the EAN Event codes shall disable the reset function so that lengthy audio messages can be handled. The last message received with valid header codes shall be displayed as required by paragraph (a)(4) of this section before the decoder is reset.

(10) *Message Validity.* An EAS Decoder must provide error detection and validation of the header codes of each message to ascertain if the message is valid. Header code comparisons may be accomplished through the use of a bit-by-bit compare or any other error detection and validation protocol. A header code must only be considered valid when two of the three headers match exactly. Duplicate messages must not be relayed automatically.

(11) A header code with the EAN Event code specified in § 11.31(c) that is received through any of the audio inputs must override all other messages.

(b) *Attention Signal.* EAS Decoders at broadcast stations shall have detection and activation circuitry that will demute a receiver upon detection of the two audio tones of 853 Hz and 960 Hz. To prevent false responses, decoders designed to use the two tones for

broadcast receiver demuting shall comply with the following:

(1) *Time Delay.* A minimum time delay of 8 but not more than 16 seconds of tone reception shall be incorporated into the demuting or activation process to insure that the tones will be audible for a period of at least 4 seconds. After July 1, 1995, the time delay shall be 3-4 seconds.

(2) *Operation Bandwidth.* The decoder circuitry shall not respond to tones which vary more than  $\pm 5$  Hz from each of the frequencies, 853 Hz and 960 Hz.

(3) *Reset Ability.* The decoder shall have a means to manually or automatically reset the associated broadcast receiver to a muted state.

(c) Decoders shall be capable of operation within the tolerances specified in this section as well as those in § 11.32 (b), (c) and (d).

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995]

#### § 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.

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

#### **§ 11.35 Equipment operational readiness.**

(a) Broadcast stations and cable systems and wireless cable systems are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation. Additionally, broadcast stations and cable systems and wireless cable systems must determine the cause of any failure to receive the required tests or activations specified in §§ 11.61(a) (1) and (2). Appropriate entries must be made in the broadcast station log as specified in § 73.1820 and § 73.1840 of this chapter, cable system record as specified in § 76.305 of this chapter, MDS/MMDS station records as specified in § 21.304 of this chapter, indicating reasons why any tests were not received.

(b) If the EAS Encoder or EAS Decoder becomes defective, the broadcast station, cable system or wireless cable system may operate without the defective equipment pending its repair or replacement for 60 days without further FCC authority. Entries shall be made in the broadcast station log, cable system or wireless cable system station records showing the date and time the equipment was removed and restored to service. For personnel training purposes, the required monthly test script must still be transmitted even though the equipment for generating the EAS message codes, Attention Signal and EOM code is not functioning.

(c) If repair or replacement of defective equipment is not completed within 60 days, an informal request shall be submitted to the District Director of

the FCC field office serving the area in which the broadcast station, cable system or wireless cable system is located for additional time to repair the defective equipment. This request must explain what steps have been taken to repair or replace the defective equipment, the alternative procedures being used while the defective equipment is out of service, and when the defective equipment will be repaired or replaced.

[63 FR 29664, June 1, 1998]

### **Subpart C—Organization**

#### **§ 11.41 Participation in EAS.**

(a) All broadcast stations and cable systems and wireless cable systems specified in § 11.11 are categorized as Participating National (PN) sources unless authorized by the FCC to be a Non-Participating (NN) sources.

(b) A broadcast station and cable system and wireless cable system may submit a written request to the FCC asking to be a Non-Participating National (NN) source. The FCC may then issue a Non-participating National Authorization letter. NN sources must go off the air during a national EAS activation after transmitting specified information.

(1) A station or system that is a Non-participating National (NN) source under § 11.18(f) that wants to become a Participating National (PN) source in the national level EAS must submit a written request to the FCC.

(2) NN sources may voluntarily participate in the State and Local Area EAS. Participation is at the discretion of broadcast station and cable system and wireless cable system management and should comply with State and Local Area EAS Plans.

(c) All sources, including NN, must have immediate access to an EAS Operating Handbook. They should contact the FCC to ensure that they are on the FCC EAS mailing list. Broadcast stations must also have a current copy of the Red Envelope Authenticator List.

[63 FR 29664, June 1, 1998]

#### **§ 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, any television networks and cable networks and program suppliers. Independent stations will not be connected during the test unless authorized by the FCC. Upon test termination, participants shall be restored to their original configurations.

(d) A common carrier rendering free service shall file with the FCC, on or before July 31st and January 31st of each year, reports covering the six months ending on June 30th and December 31st respectively. These reports shall state what free service was rendered under this rule and the charges in dollars which would have accrued to the carrier for this service if charges had been collected at the published tariff rates if such carriers are required to file tariffs.

#### § 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.
  - (10) Showtime.
  - (11) VH-1.
  - (12) Weather Channel.
- (d) *Wire Services.*
  - (1) Associated Press (AP).
  - (2) Reuters.
  - (3) United Press International (UPI).
- (e) *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 test of the EAS. Broadcast station licensees should also refer to §73.1217 of this chapter.

**§11.46 EAS public service announcements.**

Broadcast stations, cable systems and wireless cable systems 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.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29664, June 1, 1998]

**§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.

[60 FR 56000, Nov. 6, 1995]

**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) When relaying EAS messages, broadcast stations and cable systems and wireless cable systems 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, cable systems and wireless 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 required 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 station equipment 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 and wireless 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 required 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 October 1, 2002, cable systems with fewer than 5,000 subscribers per headend and wireless cable systems with fewer than 5,000 subscribers shall transmit EAS audio messages in the same order specified in paragraph (a) of this section on at least one channel. The Attention Signal may be produced from a storage device. Additionally, cable systems and wireless 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 shall comply with the aural signal requirements in §76.605 of this chapter,

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

(3) Cable systems and wireless 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 and wireless cable systems may elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, cable systems and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

(h) Effective December 31, 1998, cable systems with 10,000 or more subscribers; and, effective October 1, 2002, cable systems serving 5,000 or more, but less than 10,000 subscribers per headend and wireless cable systems with 5,000 or more subscribers; 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, after the dates indicated, these cable systems and wireless 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 and radio receivers equipped with EAS decoders and to audibly alert subscribers. Wireless cable systems shall also provide sufficient signal levels to operate subscriber television and radio receivers equipped with EAS decoders and to audibly alert subscribers.

(2) The cable systems and wireless cable systems in this paragraph (h) shall transmit the EAS audio message required in paragraph (a) of this section on all downstream channels.

(3) The cable systems and wireless cable systems in this paragraph (h)

shall transmit the EAS visual message on all downstream channels. The visual message shall contain the Originator, Event, Location and the valid time period of the EAS message. These are elements of the EAS header code and are described in §11.31. 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 and wireless cable systems may elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, cable systems and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

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

(j) Broadcast stations, and cable systems and wireless 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 transmitting requirements contained in this section for the combined stations or cable systems or wireless cable systems with one EAS Encoder. The requirements of §11.32 must be met by the combined facility.

(k) Broadcast stations and cable systems and wireless 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), and when the accompanying location codes include their State or State/county. These EAS messages shall be retransmitted unchanged except for the LLLLLLLL-code which identifies the broadcast station, cable system, wire-

less cable system, or other entity retransmitting the message. See §11.31(c). If an EAS source originates an EAS message with the Event codes in this paragraph, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, broadcast stations and cable systems and wireless cable systems shall use the event code RWT. The location codes are the state and county for the broadcast station city of license or cable system or wireless cable system community or city. Other location codes may be included upon approval of broadcast station, cable system or wireless cable system management. EAS messages may be transmitted automatically or manually.

(1) *Automatic* interrupt of programming and transmission of EAS messages are required when facilities are unattended. Automatic transmissions 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 Event code must be transmitted immediately and Monthly EAS test messages within 15 minutes. All actions must be logged and include the minimum information required for EAS video messages.

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

(m) Either manual or automatic operation of EAS equipment may be used at broadcast stations and cable systems and wireless cable systems that use remote control. If manual operation is used, an EAS decoder must be located at the remote control location and it must 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 alert. Broadcast stations and cable systems and wireless 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; 63 FR 29664, June 1, 1998]

**§ 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 dates for cable and wireless cable systems to install and operate EAS equipment are set forth in § 11.11.

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

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

(c) Broadcast stations and cable systems and wireless 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 comply with the EAS monitoring requirements contained in this section for the combined station or system with one EAS Decoder. The requirements of § 11.33 must be met by the combined facility.

(d) Broadcast stations and cable systems and wireless cable systems must monitor two EAS sources. The monitoring assignments of each broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.

(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 and wireless cable system management shall determine which header codes will automatically interrupt their programming for State and Local Area emergency situations affecting their audiences.

(e) Broadcast stations and cable systems and wireless cable systems are required to interrupt normal programming either automatically or manually when they receive an EAS message in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT) for their 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



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the appropriate accompanying State and State/county location codes.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 56000, Nov. 6, 1995; 63 FR 29665, June 1, 1998]

### § 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, wireless 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.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998]

### § 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 and wireless 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) Cable systems and wireless cable systems shall transmit all EAS announcements visually and aurally as specified in §11.51 (g) and (h) of this part.

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

(10) 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.

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

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

(13) 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.

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

(15) The time of receipt of the EAN and Emergency Action Termination messages shall be entered by broadcast station logs in their logs (as specified in §73.1820 and §73.1840 of this chapter),

by cable systems in their records (as specified in §76.305 of this chapter), and by subject wireless cable systems in their records (as specified in §21.304 of this chapter).

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

(d) Broadcast stations and cable systems and wireless 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, cable systems and wireless cable systems.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998; 63 FR 39035, July 21, 1998]

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

(a) The EAS may be activated at the State and Local Area levels by broadcast stations, cable systems and wireless 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, broadcast stations, cable systems and wireless cable systems participating in the State or Local Area EAS 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, cable systems and wireless 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) and cable systems and wireless cable systems must comply with § 11.54(b)(8). Broadcast stations providing foreign language programming shall comply with § 11.54(b)(9).

(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, cable system or wireless cable system records as specified in § 11.54(b)(14). FCC Form 201 may be used to report EAS activations to the FCC.

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

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998]

### 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 October 1, 2002, cable systems with fewer than 5,000 subscribers per headend.

(iii) Effective December 31, 1998, cable systems with 10,000 or more subscribers; and, effective October 1, 2002, cable systems serving 5,000 or more, but less than 10,000 subscribers per headend.

(iv) Effective October 1, 2002, all wireless cable systems.

(v) 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 EAS Local or State Primary sources. The time of the test and script content will be developed by State Emergency Communications Committees in cooperation with affected broadcast stations, cable systems, wireless cable systems, and other participants. Script content may be in the primary language of the broadcast station. These monthly tests must be transmitted within 15 minutes of receipt by broadcast stations and cable systems and wireless cable systems in an EAS Local Area or State. Class D non-commercial educational FM and LPTV stations are required 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 December 31, 1998, cable systems with 10,000 or more subscribers per headend must conduct tests of the EAS header and EOM codes at least once a week at random days and times on all programmed channels:

(C) Effective October 1, 2002, cable systems serving fewer than 5,000 subscribers per headend must conduct tests of the EAS header and EOM codes

at least once a week at random days and times on at least one programmed channel.

(D) Effective October 1, 2002, the following cable systems and wireless cable systems must conduct tests of the EAS header and EOM codes at least once a week at random days and times on all programmed channels:

(1) Cable systems serving 5,000 or more, but less than 10,000 subscribers per headend; and,

(2) Wireless cable systems with 5,000 or more subscribers.

(E) Effective October 1, 2002, the following cable systems and wireless cable systems must conduct tests of the EAS header and EOM codes at least once a week at random days and times on at least one programmed channel:

(1) Cable systems with fewer than 5,000 subscribers per headend; and,

(2) Wireless cable systems with fewer than 5,000 subscribers.

(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.

(v) TV stations, cable television systems and wireless cable systems are not required to transmit a video message when transmitting the required weekly test.

(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 for emergencies or special tests at the State or Local Area level by a broadcast station, cable system or wireless cable system instead of the monthly or weekly tests required by this section. To substitute for a monthly test, activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code and comply with the visual message requirements in §11.51. To substitute for a weekly test of the Attention Signal in paragraph (a)(2)(i) of this section, activation must include transmission of the Attention Signal and emergency message. To substitute for the weekly test of the EAS header codes and EOM codes in paragraph (a)(2)(ii) of this section, activation must include transmission of the EAS header and EOM codes. Television stations and cable systems and wireless cable systems shall comply with the aural and visual message requirements in §11.51. Special EAS tests at the State and Local Area levels may be conducted on daily basis following procedures in State and Local Area EAS plans.

(b) Entries shall be made in broadcast station and cable system and wireless 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; 63 FR 29666, June 1, 1998]

**§ 11.62 Closed Circuit Tests of National Level EAS facilities.**

(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.

## PART 13—COMMERCIAL RADIO OPERATORS

### GENERAL

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AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082 as amended; 47 U.S.C. 154, 303.

SOURCE: 58 FR 9124, Feb. 19, 1993, unless otherwise noted.

#### §13.1 Basis and purpose.

(a) *Basis.* The basis for the rules contained in this part is the Communications Act of 1934, as amended, and applicable treaties and agreements to which the United States is a party.

(b) *Purpose.* The purpose of the rules in this part is to prescribe the manner and conditions under which commercial radio operators are licensed by the Commission.

#### §13.3 Definitions.

The definitions of terms used in part 13 are:

(a) *COLEM.* Commercial operator license examination manager.