

Weather Service, and EAS Participant personnel to transmit emergency information to the public during an emergency via the EAS, including the extent to which the state's dissemination strategy for state and local emergency alerts differs from its Presidential Alerting strategy;

(3) Procedures for state and local activations of the EAS, including a list of all authorized entities participating in the State or Local Area EAS;

(4) A monitoring assignment matrix, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for emergency action notification (EAN)/Presidential Alert messages from the PEP to all key EAS sources (using the uniform designations specified in §11.18) and to each station in the plan, organized by operational areas within the state. If a state's emergency alert system is capable of initiating EAS messages formatted in the Common Alerting Protocol (CAP), its EAS State Plan must include specific and detailed information describing how such messages will be aggregated and distributed to EAS Participants within the state, including the monitoring requirements associated with distributing such messages;

(5) State procedures for conducting special EAS tests and Required Monthly Tests (RMTs);

(6) A list of satellite-based communications resources that are used as alternate monitoring assignments and present a reliable source of EAS messages; and

(7) The SECC governance structure utilized by the state in order to organize state and local resources to ensure the efficient and effective delivery of a Presidential Alert, including the duties of the SECC, the membership selection process utilized by the SECC, and the administrative structure of the SECC.

(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 consolidation of the monitoring assignment matrices required in each State EAS Plan with the identifying data contained in the ETRS. The Mapbook organizes all EAS Participants according to their State, EAS Local Area, and EAS designation. EAS Participant monitoring assignments and EAS operations must be implemented in a manner consistent with guidelines established in a State EAS Plan submitted to the Commission in order for the Mapbook to accurately reflect actual alert distribution.

(d) EAS Participants are required to provide the following information to their respective State Emergency Communications Committees (SECC) within one year from the publication in the FEDERAL REGISTER of a notice announcing the approval by the Office of Management and Budget of the modified information collection requirements under the Paperwork Reduction Act of 1995 and an effective date of the rule amendment:

(1) A description of any actions taken by the EAS Participant (acting individually, in conjunction with other EAS Participants in the geographic area, and/or in consultation with state and local emergency authorities), to make EAS alert content available in languages other than English to its non-English speaking audience(s),

(2) A description of any future actions planned by the EAS Participant, in consultation with state and local emergency authorities, to provide EAS alert content available in languages other than English to its non-English speaking audience(s), along with an explanation for the Participant's decision to plan or not plan such actions, and

(3) Any other relevant information that the EAS Participant may wish to provide, including state-specific demographics on languages other than English spoken within the state, and identification of resources used or necessary to originate current or proposed multilingual EAS alert content.

(e) Within six months of the expiration of the one-year period referred to in subsection (d) of this section, SECCs shall, as determined by the Commission's Public Safety and Homeland Security Bureau, provide a summary of

such information as an amendment to or as otherwise included as part of the State EAS Plan filed by the SECC pursuant to this section 11.21.

(f) EAS Participants shall, within 60 days of any material change to the information they have reported pursuant to paragraphs (d)(1) and (2) of this section, submit letters describing such change to both their respective SECCs and the Chief, Public Safety and Homeland Security Bureau. SECCs shall incorporate the information in such letters as amendments to the State EAS Plans on file with the Bureau under this section 11.21.

[72 FR 62134, Nov. 2, 2007, as amended at 77 FR 16700, Mar. 22, 2012; 80 FR 37174, June 30, 2015; 81 FR 27351, May 6, 2016; 83 FR 37759, Aug. 2, 2018]

### 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. Unused characters must be ASCII space characters. 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-JJHHMM-LLLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC  
+ TTTTpJJHHMM-LLLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC  
+ TTTT-JJHHMM-LLLLLLLLL-(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 codes described in the American National Standards Institute (ANSI) standard, ANSI INCITS 31-2009 (“Information

§ 11.31

47 CFR Ch. I (10–1–20 Edition)

technology—Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas’). 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, 3 = Northeast, 4 = West, 5 = Central, 6 = East, 7 = Southwest, 8 = South, 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).

LLLLLLLLL—This is the identification of the EAS Participant, 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
EAS Participant .....	EAS
Civil authorities .....	CIV
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 (Required):	
Emergency Action Notification (National only) .....	EAN.
National Information Center .....	NIC
National Periodic Test .....	NPT.
Required Monthly Test .....	RMT.
Required Weekly Test .....	RWT.
State and Local Codes (Optional):	
Administrative Message .....	ADR.
Avalanche Warning .....	AVW.
Avalanche Watch .....	AVA.
Blizzard Warning .....	BZW.
Blue Alert .....	BLU.
Child Abduction Emergency .....	CAE.
Civil Danger Warning .....	CDW.
Civil Emergency Message .....	CEM.
Coastal Flood Warning .....	CFW.
Coastal Flood Watch .....	CFA.
Dust Storm Warning .....	DSW.
Earthquake Warning .....	EQW.
Evacuation Immediate .....	EVI.
Extreme Wind Warning .....	EWV.
Fire Warning .....	FRW.
Flash Flood Warning .....	FFW.
Flash Flood Watch .....	FFA.
Flash Flood Statement .....	FFS.
Flood Warning .....	FLW.
Flood Watch .....	FLA.
Flood Statement .....	FLS.
Hazardous Materials Warning .....	HMW.
High Wind Warning .....	HWV.
High Wind Watch .....	HWA.
Hurricane Warning .....	HUV.
Hurricane Watch .....	HUA.
Hurricane Statement .....	HLS.
Law Enforcement Warning .....	LEW.
Local Area Emergency .....	LAE.
Network Message Notification .....	NMN.
911 Telephone Outage Emergency .....	TOE.

**Federal Communications Commission**

**§ 11.31**

Nature of activation	Event codes
Nuclear Power Plant Warning .....	NUW.
Practice/Demo Warning .....	DMO.
Radiological Hazard Warning .....	RHW.
Severe Thunderstorm Warning .....	SVR.
Severe Thunderstorm Watch .....	SVA.
Severe Weather Statement .....	SVS.
Shelter in Place Warning .....	SPW
Special Marine Warning .....	SMW.
Special Weather Statement .....	SPS.
Storm Surge Watch .....	SSA.
Storm Surge Warning .....	SSW.
Tornado Warning .....	TOR.
Tornado Watch .....	TOA.
Tropical Storm Warning .....	TRW.
Tropical Storm Watch .....	TRA.
Tsunami Warning .....	TSW.
Tsunami Watch .....	TSA.
Volcano Warning .....	VOW.
Winter Storm Warning .....	WSW.
Winter Storm Watch .....	WSA.

(f) The All U.S., State, Territory and Offshore (Marine Area) ANSI number codes (SS) are as follows. County ANSI numbers (CCC) are contained in the State EAS Mapbook.

	ANSI No.
All U.S. ....	00
State:	
AL .....	01
AK .....	02
AZ .....	04
AR .....	05
CA .....	06
CO .....	08
CT .....	09
DE .....	10
DC .....	11
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