

Local Area 5

Hi Plains

Kit Carson, Cheyenne, & Lincoln

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Recent changes to the plan:

1. The Required Monthly Test Schedule
2. Telephone numbers of KOA and National Weather Service, Goodland, KS (Section IV) and
3. Telephone number of PEP station KOA in Denver, (Section VI, Subpart B.)

Emergency Alert System

Plans and Procedures

April 1998 Edition

This Plan will be reviewed and revised as necessary.

This plan approved by FCC national EAS office in

February of 1998.

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Emergency Alert System (EAS) Plans and Procedures

I Introduction

Per Federal Communications Commission Rules and Regulations, broadcasters and cable systems (pending new FCC Rules) are required to participate in the Emergency Alert System. The participation of emergency management offices is **not required**, however their participation is encouraged. If they participate, they must adhere to the applicable guidelines in this plan.

This Plan provides specific procedures for the dissemination of emergency information to the general public in the Hi Plains Local Area, or any portion thereof, at the request of designated local, state, and federal officials by broadcast stations and cable systems. This local EAS Plan may be activated on a day-to-day basis in response to emergencies which pose a danger to life.

Participation in this plan shall not be deemed as a relinquishment of program control, nor shall it prohibit a broadcast licensee or cable operator from exercising independent discretion in any given situation. FCC Rules and Regulations allow each broadcast station/cable operator discretion regarding information and instructions to the public. Entities that originate EAS communications shall understand that they have conferred rebroadcast authority.

II Purpose

The purpose of this plan is to provide procedures agreed upon by the broadcast industry, cable systems, local area governmental offices, and other participating agencies, which will permit the dissemination of emergency information and instructions during potential or actual emergencies.

III Authority

A. Participation

All mandated participants in the Emergency Alert System must have the capability to conduct activations and tests. All voluntary participants may have the capability to conduct activations and test. Activations and tests may only be done by designated officials in accordance with the local and state plan. Typically, the designated officials will be broadcasters, cablecasters, emergency management and public safety officials representing their jurisdictional authority, and the National Weather Service.

Applicable Regulations:

47 CFR Part 73, Subpart G, FCC Rules and Regulations.

47 CFR Part 11, FCC EAS Rules, as amended.

FEMA Civil Preparedness Guide 1-40, 1-41

B. Message Priority

The priority for activations and tests and activations are:

1. National level messages
2. Local area messages
3. State messages
4. National Information Center (NIC) messages

A national level activation of the EAS for a Presidential message with the EAN Event Code takes priority over any message, and preempts any message that is in progress.

C. Updates and Plan Corrections

If any information listed in this document changes, such as an address, telephone number, person to contact, call sign change, etc. or if a person needs to request a change in their assigned monitoring source, such requests must be mailed or telephoned to the Local Co-chairman. The Hi Plains 5 Local Area chairmen are listed in Appendix F. Yearly or as needed, corrected appendices will be mailed to all participants.

IV Primary Monitoring Sources, LP-1 and LP-2

Per FCC Rule 47 CFR, 11.52 (d) all broadcast stations and subject cable systems **must monitor 2 EAS sources** assigned in accordance with the monitoring priorities in the EAS Operating Handbook.

LP-1: KNAB-AM

Station Contact: Personnel on duty

Telephone: 719-346-5566

719-346-8656(fax)
knab@rmi.net
On Air Hours: Daytime hours
Frequency: 1140 kHz

LP-2: KNAB-FM

Station Contact: Personnel on duty
Telephone: 719-346-5566
719-346-5566 (fax)
On Air Hours: 24-hours
Frequency: 104.1MHz

V Additional Monitoring Sources

KKCI

Contact: Marty Melia
Telephone: 785-899-2309
On air hours: 24 hours
Frequency: 102.5 MHz Goodland, KS

Nation Weather Service
Station Contact: Kevin Lynott
Telephone: 785-899-6412
785-899-3501 (fax)
On Air Hours: 24-hours
Frequency: 162.525 MHz

VI EAS Procedures

A. For Designated Officials

1. Designated officials should coordinate EAS activation requests by with the local primary source (LP-1), and with the LP-2 as a backup. An activation request assumes that a disaster/emergency event has reached a stage where EOC activation is in progress, and these actions need to be supplemented by public safety information from government entities.
2. The **following format is suggested** for designated officials to use when requesting an EAS activation:

"This is (name/title) of (organization). I request that the Emergency Alert System be activated for the (area) because of (description of emergency.)"

3. Upon authentication, designated officials and EAS source personnel determine transmission details (e.g., live or recorded, immediate or delayed). Officials should provide emergency program material including a description of the emergency, actions being taken by local government, and instructions to the public.

B. For LP-1 Station if EAS Fails

1. The LP-1 station will immediately notify the LP-2 station of the equipment failure and will take steps to find replacement EAS equipment.
2. The LP-1 will contact the nearest Primary Entry Point (PEP) station and inform them to contact the LP-2 station by telephone in the event a national alert is transmitted. The nearest PEP station is KOA-AM Denver, CO, Voice: 303-713-8000 8AM-6 PM, News and After hours 303-713-8500, FAX:303-713-8894.

C. EAS Message Format

An EAS message has four parts:

1. Preamble (EAS header codes)
2. Audio Attention Signal (the 8-25 second two tone attention signal)
3. Audio Message
4. End of Message (EOM) codes.

The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization.

D. For LP-1 and LP-2 stations

1. Upon receipt of a request to activate the local EAS from a designated official the broadcast station should commence the EAS activation. Be sure to verify the authenticity of the message by the method described in Section VII, A, page 7.
2. A pre-announcement message is optional.
3. Transmit the EAS header codes and 8-25 second two-tone attention signal.
4. Transmit the emergency information.
5. To terminate the EAS message, send the EOM codes. A post announcement message is optional.

E. For Other Broadcast Stations and Cable Systems

1. Broadcast stations and cable systems monitoring key EAS sources via EAS equipment will be alerted by the header codes and attention signal. Each station and cable system, upon receipt of the signal, will review the message content, then release the message as appropriate.
2. **The text of messages that contain EAN, EAT and RMT event codes may not be changed except for the call sign of the re-broadcasting station or service.** The re-broadcasting entity may record new audio, but the text of the message may not be altered.
3. For **messages other than EAN, EAT and RMT**, the re-broadcasting entity may record new audio. The text of the message may be changed.

Note: The National Weather Service does not want the text of their messages changed, especially for warnings. Check with the National Weather Service before altering their messages.

4. Upon completion of the EAS message, resume normal programming.

5. Log the activation per FCC Rule requirements.

F. Interruption of Normal Programming: Airing EAS at Broadcast Stations

1. A broadcast station or cable system is **required to immediately interrupt normal programming either automatically or manually, when it receives an EAS message in which the header contains the EAN or EAT event code.** Automatic interruption of programming is required when facilities are unattended. Manual interrupt of programming and transmission of EAS messages may be used. Although not required, broadcast stations and cable systems are encouraged to give state and local emergency messages the same level of attention.

2. All radio and television stations shall transmit EAS messages in the main audio channel. In addition, 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 screen or where it will not interfere with other visual messages.

3. Messages with the RMT Event Code must be transmitted automatically or manually within 15 minutes.

4. All EAS actions (sending and receiving of messages) should be logged according to appropriate FCC Rule requirements.

G. Cable Participation: Wired and Wireless

In addition to the procedures outlined in Section VI, Part F above, CATV systems must comply with applicable FCC Regulations released September 29, 1997.

Wired Cable Systems

1. Systems that serve over 10,000 or more subscribers shall install EAS equipment and provide EAS audio and video messages on all channels by December 31, 1998.

2. Systems that serve 5,000 or more, but fewer than 10,000 subscribers shall install EAS equipment and provide EAS audio and video messages on all channels by October 1, 2002.

3. Systems that serve fewer than 5,000 subscribers shall either provide National Level EAS messages on all programmed channels (including the required EAS test messages), or shall install EAS equipment and provide a video interrupt and audio alert message on all programmed channels and EAS audio and video messages on at least one programmed channel by October 1, 2002.

Wireless Cable Systems

Wireless cable systems shall participate in EAS on the same basis as wired cable systems.

1. Wireless cable operators that serve 5,000 or more subscribers per fixed station transmission site or headend shall install EAS equipment and provide EAS audio and video messages on all channels by October 1, 2002.

2. Wireless cable operators that serve less than 5,000 subscribers are subject to the same requirements as wired cable systems that serve fewer than 5,000 subscribers.

VII. Authentication of Messages

A. From Designated Officials

All telephone or radio requests by designated officials for EAS activations will be authenticated by standard operating procedures established between the callers. LP-1 and LP-2 personnel should be familiar with persons who may request activation of the EAS. An EAS message should not be sent unless the originator is absolutely certain as to the validity of the messages, and the identity and authority of the requester.

B. For National Level Alerts (EAT, EAN)

1. Authenticator word lists are used by EAS participants to ensure that the national level alerts and tests are legitimate. The list must be used in accordance with directions in the EAS Operating Handbook.
2. The Red Envelope authenticator list is issued to all broadcast stations, specified control points of radio and television networks, cable networks, 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 or EAT message.** The FCC may request immediate return of the sealed Red Envelope at any time.

C. EAS Originator Codes: (ORG)

Originator codes included in the EAS message header indicate who originally initiated the activation. The following codes have been approved for use by the FCC. The list may only be amended by the FCC.

EAS: Broadcast Stations or Cable Systems
CIV: Civil Authorities
EAN: Emergency Action Notification Network
WXR: National Weather Service
PEP: Primary Entry Point System

D. EAS Event Codes (EEE)

Event codes included in the message header indicate the nature of the EAS activation. The following national and local codes have been approved for use by the FCC. This list in the next page may only be amended by the FCC.

Highlighted national codes must be aired immediately or as noted.

1. National Codes:

EAN: Emergency Action Notification (Nat'l Only)
EAT: Emergency Action Termination (Nat'l Only)
NIC: National Information Center
NPT: National Periodic Test

RMT: Required Monthly Test (air within 15 minutes)

RWT: Required Weekly Test

2. Local Codes:

It is **recommended** that entities that receive an EAS alert with the following highlighted local codes in the header, air the information as soon as practical.

ADR: Administrative Message

BZW: Blizzard Warning

CEM: Civil Emergency Message

EVI: Evacuation Immediate

FFS: Flash Flood Statement

FFW: Flash Flood Warning

FFA: Flash Flood Watch

FLS: Flood Statement

FLW: Flood Warning

FLA: Flood Watch

HWW: High Wind Warning

HWA: High Wind Watch

DMO: Practice/Demo Warning

SVR: Severe Thunderstorm Warning

SVA: Severe Thunderstorm Watch

SVS: Severe Weather Statement

SPS: Special Weather Statement

TOR: Tornado Warning

TOA: Tornado Watch

WSW: Winter Storm Warning

WSA: Winter Storm Watch

VIII Tests

A. Required Monthly Tests (RMT): General Information

1. Required Monthly Tests will conform with the procedures in the EAS Operating Handbook and shall include the EAS header codes, Attention Signal, Test Script and EOM Code. Federal and state tests will be made at the discretion of those government entities.

2. The RMT must be transmitted within 15 minutes of receipt by broadcast stations (and cable systems) and within 15 minutes.

For day time only stations: A RMT may only be aired if it is current. If you receive the test when you are off the air, and sign on during the 15 minute window of the RMT, it must be aired. If your sign on is after the 15 minute window of the RMT, air a RWT test for that week, and note in your log, why the RMT was not aired.

3. RMTs in odd numbered months, shall occur between 8:30 a.m. and local sunset, on random days and at random times.

4. RMTs in even numbered months shall occur between local sunset and 8:30 a.m., on random days and at random times.

5. Origination of RMT will be coordinated between the State and Local officials, the National Weather Service, and the LP-1 and LP-2. A yearly schedule will be devised.

6. Each participating broadcast station and cable system must send and receive at least one monthly test of the EAS.

7. The Required Monthly Tests must be logged, per FCC Rules, by broadcast stations and cable systems.

B. Required Monthly EAS Test Format

Audio intro Suggested Inform your listening audience that you are performing a test of the EAS and what area you serve.

EAS Header Required

EBS two tone Required (8 to 25 seconds)

Audio message Required This is a coordinated monthly test of the Emergency Alert System by broadcast stations (and cable systems) in your area. If this had been an actual emergency, an official message would have followed the alert tone. This concludes the test of the Emergency Alert System.

EOM codes Required

C. Required weekly tests (RWT)

1. Required Weekly Tests will conform with the procedures in the EAS Operating Handbook and shall include the EAS header codes and EOM code only.

2. All participating broadcast stations and cable systems are required to conduct at least 1 test of the EAS each week on random days and at random times.

3. An RWT is not required during the week that a monthly test is conducted.

4. The weekly tests must be logged, per FCC Rules, by broadcast stations and cable systems.

Required Weekly Test Format

Audio intro Suggested *The following is a test of the Emergency Alert System.*

EAS Header Required

EOM codes Required

D. Activations for Training Purposes

The DMO event code must be used for the purpose of training staff on the sending of EAS activations. Such activations should be kept to a minimum.

IX. Appendices

Appendix A: Required Monthly Test Schedule

Appendix B: Broadcast Monitoring Assignments

Appendix C: Cable Systems Monitoring Assignments

Appendix D: Approving Signatures for Hi Plains plan

Appendix E: Local Area Map

Appendix F: Local Area Co-Chairmen

Appendix G: Designated Officials and their Telephone Numbers

Appendix H: Glossary, Abbreviations, and Acronyms

Appendix A: Required Monthly Test Schedule

RMT Schedule

In order to test the dissemination of EAS alerts throughout the state, the Colorado State EAS plan calls for four (4) statewide alerts will be conducted in the months of March, June, September, and December. (These months are highlighted in **boldface** type) In these months, the state test will be the RMT for the Hi Plains Area.

Month	Date	Time	Originator
January	8	1:25 p.m.	KNAB-FM
February	16	11:00 p.m.	KNAB-AM
March	26	1:45 p.m.	KOA-AM
April	15	12:05 a.m.	KNAB-FM
May	7	10:15 a.m.	KNAB-AM
June	4	4:45 a.m.	KOA-AM
July	17	9:20 a.m.	KNAB-FM
August	20	2:15 a.m.	KNAB-AM
September	17	9:45 a.m.	KOA-AM
October	9	11:15 p.m.	KNAB-FM
November	21	10:45 a.m.	KNAB-AM
December	11	2:45 a.m.	KOA-AM

Appendix B: Broadcast Stations Monitoring Assignments

Per FCC Rule 47 CFR, 11.52(d) all broadcast stations and subject cable systems **must monitor 2 EAS sources** assigned in accordance with the monitoring priorities in the EAS Operating Handbook.

Call Sign	FIPS Codes	License	Freq (Ch)	Facilities (N)ight (D)ay	EAS Title	Monitoring Assignments	
KNAB-AM	08063	Burlington	1140	1 kw	LP-1	KOA	NWS
KNAB-FM	08063	Burlington	104.1	50.7 kw	LP-2	KOA	NWS
KRGD	08063	Burlington	99.3	52 kw	PN	KOA	NWS

BSPP: Broadcast Station Protection Program

LP-1: Local Primary source (KOA-AM)

LP-2: Local Primary second source (National Weather Service, Goodland, KS)

NN: Non-participating National Station

NP: National Primary Station

NWS: National Weather Service

PN: Participating National Station

SP: State Primary Station

Appendix C: Cable Systems Monitoring Assignments

[Includes Counties of Kit Carson, Cheyenne, & Lincoln]

Community Unit ID	Cable System Operator	FIPS Code	Cable Community City	EAS Title	Monitoring Assignments	
	Charter Communications	08036	BURLINGTON	PN	LP-1	LP-2

Appendix D: Approving Signatures for Hi Plains Plan

The Hi Plains Operational Area 5 EAS plan was developed by

Bette Bailly and approved by:

EAS committee co-chairs:

Jeff Pinkerton and Hal Crutchfield

and State EAS Committee:

Jeff Gulick and Hal Crutchfield

This Plan is coordinated with and distributed to all designated officials listed in Appendix G, all broadcast stations listed in Appendix B, and Cable Systems listed in Appendix C.

Appendix E: Local Area Map

Appendix F: Local Area Co-Chairmen

Bette Bailly
KNAB, Inc.
17534 Co. Rd. 49
Burlington, CO 80807
Telephone: 719-346-5566
Fax: 719-346-8656
E-mail: knab@rmi.net

Gloria Lamle
Charter Communications
1371 Rose Ave
Burlington, CO 80807
Telephone: 719-346-8101
Fax: 719-346-8101
E-mail:

Appendix G: Designated Officials and their Telephone Numbers.

Cheyenne County County

Cheyenne County Emergency Preparedness
James Lafferty
91 South 1st North
Cheyenne Wells, CO 80810
Telephone: 719-767-9633

Kit Carson County

Kit Carson County Emergency Preparedness
Darcy Jansen
23200 US Hwy 385
Burlington, CO 80807
Telephone: 719-346-8538

Lincoln County

Lincoln County Emergency Preparedness
Le Roy Yowell
103 3rd
Hugo, CO 80821
Telephone: 719-743-2426

Appendix H: Glossary, Abbreviations, and Acronyms

Activation: The initiation of the EAS by transmission of the EAS codes.

ASCII: A standard set of text characters with numerical equivalents.

Attention Signal: An eight to twenty-five second two tone signal (853 and 960 Hz) used as an audio alert.

AFSK: Audio Frequency Shift Keying: A digital modulation technique that uses two shifting audio frequencies to transmit binary data.

Authenticator Word Lists: A list of words that federal officials send prior to official EAS national activation; used to substantiate the information being sent.

Automatic Interruption: The automatic encoding and transmission of EAS codes for preselected events.

Baud Rate: The speed of data transmitted, equal to number of elements sent per second (equal to bits per second if a bit is the element).

Bit Rate: The speed of binary data transmitted, equal to the number of digital bits sent per second.

Certification: An equipment authorization issued by the FCC based on representations and test data submitted by the applicant for equipment designated to be operated without individual license under Parts 15 and 18 of the rules.

Class D FM Station: A station whose output power is 10 watts or less.

Decoder (EAS): An electronic device used by EAS participants to receive EAS alerts. The device reacts to the digital header codes and to the "two-tone" audio signal.

EAN: Emergency Action Notification: The message for national EAS activation.

EAT: Emergency Action Termination: The message for national EAS termination.

Encoder (EAS): An electronic device used by EAS participants to originate EAS alerts by creating the EAS codes for transmission to other participants and the public. The encoder also produces the "two-tone" audio signal.

EOM: End of Message Code: In ASCII form 'NNNN', this burst of data, sent three times signifies the end of an EAS message and EAS activation.

Event Codes: A three character ASCII code in the EAS headers that denotes the type of emergency event.

FEMA: Federal Emergency Management Agency: One of the three federal agencies that administers EAS.

FIPS Number: A five character ASCII code in the EAS headers that represent those counties affected by an EAS activation, as defined by the Federal Information Processing System. Each state and territory has their own five digit number.

Header Code: A single string of intelligent digital EAS ASCII data that includes the originator, event, location, time period, and other basic information concerning an emergency; three header codes precede the voice warning message.

Julian Calendar: A method of specifying the date by the number of days which have passed since the first day of January in a year.

Key Source: A source which is central to the dissemination of emergency alerts and information, such as an NP, SP, or LP broadcast station or cable system.

LP: Local Primary: A key source within an EAS local area that is the primary source of EAS programming for that area.

Location Code: An ASCII code in an EAS header that specifies the location of an emergency utilizing the five character FIPS code of a state and county, and a sixth character to designate nine divisions of a county.

LPTV: Low Power Television: A television signal translator station which may also originate programming.

Mapbook: A list of broadcast stations and cable systems and their EAS designation delineated by state and local area for use by other stations to determine the best source of EAS monitoring; an FCC generated attachment to every state plan.

Mark Frequency: The audio frequency of AFSK modulation that corresponds to a digital bit of one (1) the mark frequency of EAS codes is $6250/3$ Hz, or approximately 2083.33 Hz.

Monitoring Assignment: The off-air broadcast or cable sources of EAS activation's and programming as given in the FCC Mapbook and the state plans.

NIC: National Information Center : A source of official federal government information.

NOAA: National Oceanic and Atmospheric Administration (NOAA): One of the three federal agencies that participate in EAS.

NP: National Primary: A primary source of Presidential or other national EAS activation's and programming, including broadcast stations involved with the PEP system and EAN Networks:

NWS: National Weather Service: An operation of NOAA that is directly responsible for issuing local weather-related emergency alerts and warnings in addition to day-to-day forecasts and other weather activities.

NWR: NOAA Weather Radio: A service of the National Weather Service that provides to a local area continuous broadcasts of the latest weather information and any weather-related emergency warnings using one of seven VHF radio channels.

NN: Non-participating National: An EAS source (usually a broadcast station) that has elected

not to participate in the National-level EAS and removes its carrier from the air if a national-level activation occurs.

Operating Handbook: A document issued by the FCC that instructs broadcast station and cable personnel of the actions they must take during an activation of EAS.

Operator Interruption: The transmission of the EAS activation which has been manually initiated by broadcast station or cable system personnel.

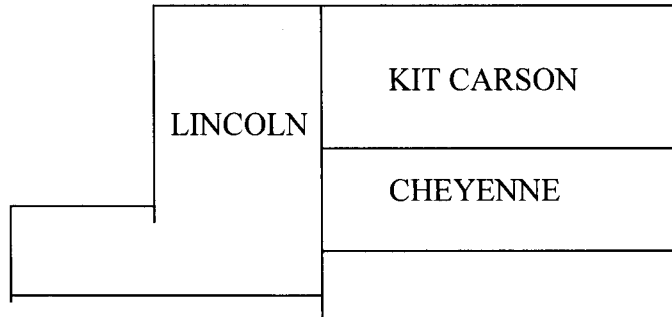
.. Audio Frequency Shift Keying

AM Amplitude Modulation
AP Associated Press
ASCII American Standard Code for Information Interchange
BPS Bits per Second
CATV Cable Television
CFR Code of Federal Regulations
EBS Emergency Broadcast System
EOC Emergency Operations Center
EOM End of Message
FCC Federal Communications Commission
FEMA Federal Emergency Management Agency
FIPS Federal Information Processing Standards
FM Frequency Modulation
LP Local Primary
LPTV Low Power Television
MDS Multi point Distribution System
NAC National Advisory Committee
NAWAS National Warning System
NIC National Information Center
NN Non-participating National
NOAA National Oceanic and Atmospheric Administration
NP National Primary
NWR NOAA Weather Radio
NWS National Weather Service
LECC Local Area Emergency Communications Committee
PEP Primary Entry Point
PN Participating National
SAME Specific Area Message Encoding
SECC State Emergency Communications Committee
SP State Primary
SR State Relay
UTC Coordinated Universal Time
VHF Very High Frequency
WHCA White House Communications Agency
WRSAME Weather Radio Specific Area Message Encoding

[[Up](#)] [[Colorado EAS Home](#)]

LOCAL AREA 5 : HI PLAINS

(INCLUDES COUNTIES OF CHEYENNE, KIT CARSON, AND LINCOLN)



Call Sign	FIPS Codes	License	Freq (Ch)	Facilities (N)ight (D)ay	EAS Title	Monitoring Assignments	
KNAB-AM	08063	Burlington	1140	1 Kwd	LP-1	KOA	NWS
KNAB-FM	08063	Burlington	104.1	50.7 Kw	LP-2	KOA	NWS
KRGD	08063	Burlington	99..3	52. Kw	PN	KOA	NWS

Co-chair, Colorado Emergency Communication Committee


Hal Crutchfield

Chairman, Local Area 5, Hi Plains


Bette Bailly