

Emergency Alert System Plans and Procedures

Denver Metro- Local Area 3

March 1997 Edition

This Plan will be reviewed and revised as necessary.

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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 Denver Metro 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

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

47 CFR Part 11, Federal Communication Commission EAS Rules, as amended.

47 CFR Part 76, FCC Rules when adopted, for cable television systems

FEMA Civil Preparedness Guide 1-40, 1-41

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: KOA-AM

Station Contact: Personnel on duty

Telephone: 303-892-4800

On Air Hours: 24-hours

Frequency: 850 kHz

LP-2: KYGO-FM

Station Contact: Personnel on duty

Telephone: 303-321-8893

On Air Hours: 24-hours

Frequency: 98.5 MHz

V Additional Monitoring Sources

National Weather Service

Contact: Larry Mooney

Telephone: 303-361-0700

On air hours: 24 hours

Frequency: 162.550 MHz Denver

162.475 MHz Boulder

Metro Area Emergency Alert System Repeater

Contact: KOA-AM

Telephone: 303-892-4800

On the air: 24 hours

Frequency: 450.1875 MHz output of repeater, 100 Hz PL tone

455.1875 MHz input to repeater, 100 Hz PL tone

VI EAS Procedures

A. For Designated Officials

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: KTWO-AM, Casper, WY Voice: 307-266-5252, FAX:307-235-9143.

C. EAS Message Format

An EAS message has four parts: (1) the preamble (EAS header codes); (2) audio attention signal (the 8-25 second two tone attention signal); (3) audio message; and (4) the end of message (EOM) codes. The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization.

D. Message Priorities

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.

E. 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.

F. 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.

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

5. Log the activation per FCC Rule requirements.

G. 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.

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

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

H. Interruption of Normal Programming: Airing EAS at a CATV System

In additions to the procedures outlined in Section VI, Part G above, a CATV must also do the following:

1. On July 1, 1997, or as the FCC Rules require, cable systems shall participate in EAS in the same manner as broadcast stations.

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

3. A visual EAS message must be displayed on at least one channel. The visual message shall contain the Originator, Event, Location and the valid time period of the 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.

4. A method must be provided to alert hearing impaired or deaf subscribers to EAS messages.

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 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
FSS: 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 of sign on for those stations who received the test while off the air.**
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. 1997 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 which will be conducted in the months of June, September, and December of 1997, and March of 1998. In these months, the state test will be the RMT for the Denver Metro Area.

Month	Date	Time	Originator
January	none		
February	none		
March	24	10:45 a.m.	KOA-AM
April	15	11:45 p.m.	KYGO-FM
May	7	10:15 a.m.	NWS
June	4	4:45 a.m.	KOA-AM
July	17	3:45 p.m.	CO. State Patrol
August	20	2:15 a.m.	KYGO-FM
September	17	9:45 a.m.	NWS
October	9	11:15 p.m.	KOA-AM
November	21	10:45 a.m.	KOA-AM
December	11	2:45 a.m.	CO. State Patrol

1998 Partial Schedule

January			
February			
March	26	1:45 p.m.	CO EOC

C. Required Monthly EAS Test Format

Audio intro	Required	You must inform your listening audience that you are performing a test of the EAS.
	Suggested	Also tell your listeners what area you serve.
EAS Header	Required	
EBS two tone	Required (8 to 25 seconds)	
Audio message	Required as written:	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 conclude the test of the Emergency Alert System.
EOM codes	Required	

D. 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 one 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	<i>The following is a test of the Emergency Alert System.</i>
EAS Header	Required	
EOM codes	Required	

E. 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: Designated Officials and their Telephone Numbers.

Appendix B: Monitoring Assignments

Appendix C: Approving Signatures for Denver Metro plan

Appendix D: Local Area Map.

Appendix E: Glossary and Abbreviations

Appendix A: Designated Officials and their Telephone Numbers.

Adams County

Adams County Emergency Preparedness

Doug Darr

450 S. 4th Avenue

Brighton, CO 80601

Telephone: 303-289-5441

Arapahoe County

Arapahoe County Emergency Preparedness

Sheriff

5686 S. Court Place

Littleton, CO 80120-1200

Telephone: 303-795-4711

Boulder County

Boulder County/City Office of Emergency Management

Larry Stern

1805 33rd Street

Boulder, CO 80301

Telephone: 303-441-4444 or 441-3374

Clear Creek County

Office of Emergency Management

Laura Oman

Box 2000

Georgetown, CO 80444

Telephone: 303-569-3232

Denver County

Office of Emergency Preparedness

Greg Champlin

1437 Bannock Street, Rm 3

Denver, Co 80202

Telephone: 303-640-9999

Douglas County

Douglas County Office of Emergency Preparedness
James Raymond
355 S. Wilcox Street
Castle Rock, CO 80104

Telephone: 303-660-7500

Elbert County

Elbert County Office Of Emergency Management
Robert Robinson
Box 597
Kiowa, CO 80117

Telephone: 303-621-2027

Gilpin County

Gilpin County Office of Emergency Preparedness
Everette Rossback
Box EE
Blackhawk, CO 80422

Telephone: 303-582-5511

Jefferson County

Jefferson County Dept. of Emergency Management
Terry Green
100 Jefferson Parkway, Suite 1530
Golden, CO 80419

Telephone: 303-277-0211

Park County

Park County Emergency Services
Kathy Hamer
Box 177
Lake George, CO 80827-0177

Telephone: 719-836-4121

Appendix B: Monitoring Assignments

LOCAL AREA 3: METRO
Includes: Adams, Arapahoe, Boulder, Clear Creek,
Denver, Douglas, Elbert, Gilpin, Jefferson, Park Counties

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 Code	City of License	Freq (CH)	Facilities (N)ight (D)ay	EAS Title	Monitoring Assignments	
KALC	08031	DENVER	105.9	100. KW 448 Meters	PN	LP-1	LP-2
KBCO	08013	BOULDER	1190	0.11/5. KW ND-1 U	PN	LP-1, LP-2	NWS
KBCO-FM	08013	BOULDER	97.3	100. KW 470 Meters	PN	LP-1, LP2	NWS
KBDI-TV	08013	BROOMFIELD	Ch 12	229 KW 738 Meters	PN	LP-1	LP-2
KBNO	08031	DENVER	1220	0.012/0.66 KW ND-1U	PN	LP-1	LP-2
KBPI	08031	DENVER	106.7	100. KW 301 Meters	PN	LP-1,LP-2	NWS
KBVI	08013	BOULDER	1490	1. KW ND-1 U	PN, BSPP	LP-1	LP-2
KCDC	08013	LONGMONT	90.7	.100 KW 82 Meters	PN	LP-1	LP-2
KCEC	08031	DENVER	Ch 50	2510 KW 233 Meters	PN	LP-1	LP-2
KCFR	08031	DENVER	90.1	50. KW 277 Meters	PN	LP-1,LP-2	NWS
KCNC-TV	08031	DENVER	Ch 4	100 KW 451 Meters	PN	LP-1	LP-2
KCUV	08005	ENGLEWOOD	1150	1./5. KW DA-N U	PN	LP-1	LP-2
KDKO	08005	LITTLETON	1510	1.3/10. KW DA-2 U	PN	LP-1	LP-2
KDVR	08031	DENVER	Ch 31	5000 KW 317 Meters	PN	LP-1	LP-2
KEZW	08031	AURORA	1430	5./5. KW DA-N U	PN	LP-1, LP-2	NWS
KGNU	08013	BOULDER	88.5	1.30 KW 66 Meters	PN	LP-1	LP-2
KHHT	08059	LAKWOOD	107.5	100. KW 365 Meters	PN	LP-1, LP-2	NWS
KHIH	08031	DENVER	95.7	100. KW 490 Meters	PN	LP-1, LP-2	NWS
KHOW	08031	DENVER	630	5./5. KW DA-2 U	PN	LP-1,LP-2	NWS
KIMN	08031	DENVER	100.3	100. KW 345 Meters	PN	LP-1	LP-2
KJME	08031	DENVER	1390	0.139/5. KW ND-1 U	PN	LP-1	LP-2

Call Sign	FIPS Code	City of License	Freq (CH)	Facilities (N)ight (D)ay	EAS Title	Monitoring Assignments	
KKFN	08031	DENVER	950	5. KW DA-1 U	PN	LP-1, LP-2	NWS
KKHK	08031	DENVER	99.5	100. KW 85 Meters	PN	LP-1, LP-2	NWS
KKYD	08031	DENVER	1340	1. KW ND-1 U	PN	LP-1	LP-2
KLDC	08001	BRIGHTON	800	0.007/1. KW DA-D U	PN	LP-1	LP-2
KLMO	08013	LONGMONT	1060	10. KW ND-D D	PN	LP-1	LP-2
KLTT	08001	COMMERCE CITY	670	1.4/50. KW DA-2 U	PN	LP-1	LP-2
KLZ	08031	DENVER	560	5. KW DA-1 U	PN	LP-1	LP-2
KMGH-TV	08031	DENVER	CH 7	316 KW 308 Meters	PN	LP-1	LP-2
KMXA	08031	AURORA	1090	0.5/50. KW DA-2 U	PN	LP-1, LP-2	NWS
KNUS	08031	DENVER	710	5. KW DA-1 U	PN	LP-1	LP-2
KOA	08031	DENVER	850	50. KW ND-1 U	NP,SP, LP-1,BSPP	LP-2	NWS
KOSI	08031	DENVER	101.1	100. KW 495 Meters	PN	LP-1, LP-2	NWS
KPOF	08031	DENVER	910	1./5. KW ND-1 U	PN	LP-1	LP-2
KQKS	08013	LONGMONT	104.3	58. KW 367 Meters	PN	LP-1, LP-2	NWS
KQXI	08059	ARVADA	1550	0.166/10. KW ND-1 U	PN	LP-1	LP-2
KRFX	08031	DENVER	103.5	100. KW 320 Meters	PN	LP-1, LP-2	NWS
KRKS	08031	DENVER	990	0.39/5. KW DA-N U	PN	LP-1	LP-2
KRKS	08013	BOULDER	94.7	100. KW 300 Meters	PN	LP-1	LP-2
KRMA-TV	08031	DENVER	CH 6	100 KW 268 Meters	PN	LP-1	LP-2
KRMT	08031	DENVER	Ch 41	741 KW 351 Meters	PN	LP-1	LP-2
KRRF	08031	DENVER	1280	5./5. KW DA-2 U	PN	LP-1	LP-2
KTLK	08001	THORNTON	760	1./50. KW DA-2 U	PN	LP-1, LP-2	NWS
KTMG	08005	DEER TRAIL	1370	0.16/5. KW DA-2 U	PN	LP-1	LP-2
KTVD	08031	DENVER	Ch 20	5000 KW 383 Meters	PN	LP-1	LP-2
KUBD	08031	DENVER	Ch 59	5000 KW 96 Meters	PN	LP-1	LP-2

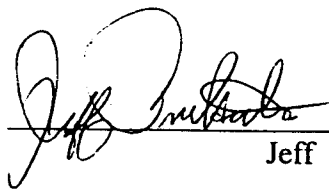
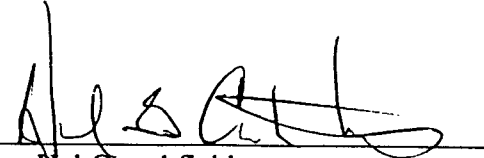
Call Sign	FIPS Code	City of License	Freq (CH)	Facilities (N)ight (D)ay	EAS Title	Monitoring Assignments	
KUVO	08031	DENVER	89.3	22.5 KW 278 Meters	PN	LP-1, LP-2	NWS
KWBI	08059	MORRISON	91.1	100. KW 356 Meters	PN	LP-1, LP-2	NWS
KWGN-TV	08031	DENVER	Ch 2	100 KW 319 Meters	PN	LP-1, LP-2	NWS
KWHD	08035	CASTLE ROCK	Ch 53	5000 KW 193 Meters	PN	LP-1	LP-2
KXKL	08031	DENVER	105.1	100. KW 356 Meters	PN	LP-1, LP-2	NWS
KXPK	08059	EVERGREEN	96.5		PN	LP-1, LP-2	NWS
KYGO	08059	LAKWOOD	1600	5.75. KW DA-N U	PN	LP-1, LP-2	NWS
KYGO-FM	08031	DENVER	98.5	100. KW 555 Meters	PN	LP-1, LP-2	NWS

BSPP: Broadcast Station Protection Program
 LP-1: Local Primary source (KOA-AM)
 LP-2: Local Primary second source (KYGO-FM)
 NN: Non-participating National Station
 NP: National Primary Station
 NWS: National Weather Service
 PN: Participating National Station
 SP: State Primary Station

Appendix C: Approving Signatures for Denver Metro Plan

The Denver Metro Operational Area 3 EAS plan was developed by
Jeff Gulick and Brad Hart and approved by:

EAS committee co-chairs:

 
Jeff Pinkerton Hal Crutchfield

and

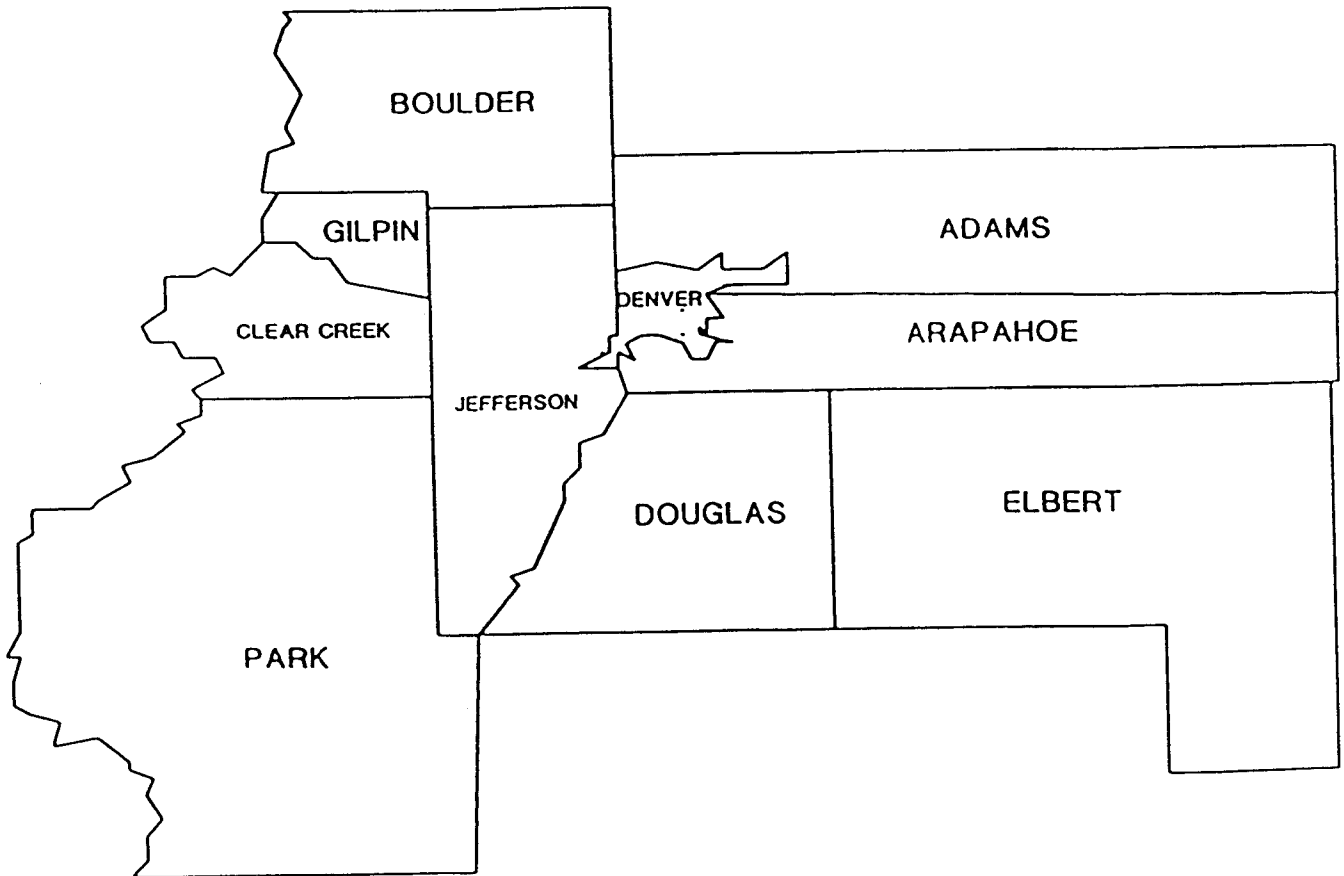
State EAS Committee

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This Plan is coordinated with and distributed to all designated officials listed in Annex A
and all broadcast stations listed in Annex B.

Appendix D: Local Area Map

LOCAL AREA 3 : METRO



Appendix E: Glossary 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.

Originator Code: A three character ASCII code in an EAS header which denotes the source of an activation.

PN: Participating National: Broadcast stations, cable systems, or MDS stations which monitor primary sources of EAS programming and directly feed emergency alerts to the public.

Pre-selected Code: An EAS event which the operator of EAS equipment has chosen to be automatically encoded and retransmitted upon reception.

PEP: Primary Entry Point : Key broadcast stations throughout the U.S. which together can provide national emergency information in the event that the primary national alerting methods are inoperable.

Program Priorities: The precedence of the information that must be transmitted during an EAS activation, namely national, local, and state activation's in that order.

Radio Broadcast Data System (RBDS): A defined protocol for data that is transmitted on the 57 kHz subcarrier of FM radio broadcast stations utilized mainly by consumer devices equipped to receive it.

RMT: Required Monthly Test: A coordinated monthly test of EAS operations involving the full receiving and transmission of EAS codes, Attention Signal, EAS test programming, and EAS EOM codes.

RWT: Required Weekly Test: An independent weekly test of EAS equipment only involving the decoding and encoding of EAS header codes and EOM codes.

RS-232: A common interface standard which specifies the mechanical connection, electrical signals, and the function of the signals carried across the interface.

Space Frequency: The audio frequency of AFSK modulation that corresponds to a digital bit of zero (0); the space frequency of EAS codes is $6250/4$ Hz, or 1562.5 Hz.

State/Local Plan: A document that details monitoring assignments, actions to be taken in emergency activation's, and other guidance for broadcasters and cable personnel in use of the EAS.

SP: State Primary : A primary source of EAS state programming which can originate with a Governor or designated representative, such as a state's emergency operations officer.

SR: State Relay: An entity which receives and retransmits EAS activation's in a State Relay Network to assist in bringing a state activation to all EAS local areas of a state.

State Relay Network: A system of facilities used to distribute state EAS activation's and programming across a state.

Subcarrier: An inaudible portion of the broadcast signal that is added to the program signal of the AM, FM, or TV sound and these may include 57 kHz, 67 kHz, 69 kHz, and 92 kHz subcarriers

Subsidiary Communications Services: A subcarrier of television and FM stations providing a second audio programming source.

UTC: Coordinated Universal Time, the world-wide common time standard that is used in EAS headers for time stamp.

Valid Code: An EAS header which has been matched bit-for-bit with one of two other received headers thereby checked for validity.

Weather Radio Specific Area Message Encoder (WRSAME): A device used by National Weather Service to broadcast WRSAME data on the National Weather Radio for day-to-day forecasts and weather-related emergency announcements.

Acronyms

AFSK	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

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