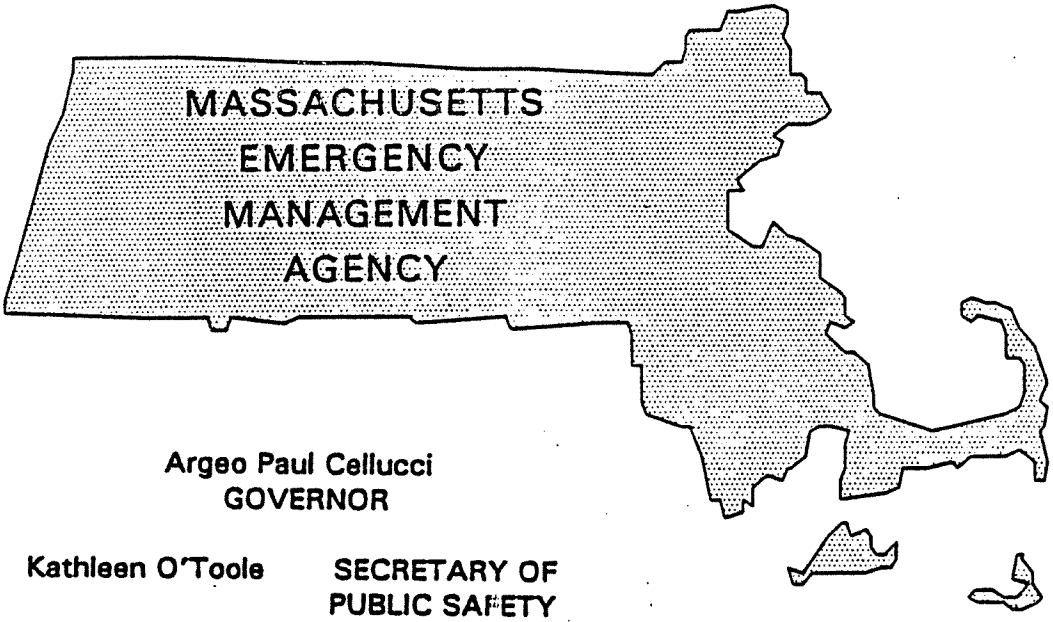
MASSACHUSETTS

Emergency Alert System



Argeo Paul Cellucci
GOVERNOR

Kathleen O'Toole SECRETARY OF PUBLIC SAFETY

Peter G. LaPorte
DIRECTOR

OPERATIONAL PLAN

JANUARY 1997

**EMERGENCY ALERT SYSTEM (EAS)
CHECKLIST FOR BROADCAST
STATIONS AND CABLE SYSTEMS**

EAS CHECKLIST

(Obtain EAS monitoring assignments from Paragraph IV. B. then enter assignments here for quick reference)

A. EAS Monitoring Assignment #1: _____
B. EAS Monitoring Assignment #2: _____
C. EAS Monitoring Assignment #3: _____

_____1. **All personnel trained in EAS procedures and in the use of EAS Equipment.**

_____2. **EAS encoder(s) and decoder(s) installed and operating.**

_____3. **Correct assignments monitored in accordance with this State EAS Plan.**

_____4. **Weekly and monthly EAS tests received and logged.**

_____5. **Weekly and monthly EAS test transmission conducted and logged.**

_____6. **Current Red Authenticator envelope immediately available.**

_____7. **If appropriate, state and/or local authentication material available.**

_____8. **EAS Operating Handbook immediately available.**

_____9. **A copy of the Commonwealth of Massachusetts EAS Plan.**

_____10. **A copy of each operational area plan served by this station. (To be developed at a later date).**

_____11. **Copy of the FCC EAS Rules and Regulations (Part 11)* and, if appropriate, AM station emergency operation (Section 73.1250) available at the control point.**

Note: A copy of the FCC Part 11 is included as an appendix to this document.

MASSACHUSETTS EMERGENCY ALERT SYSTEM

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RECORD OF PAGE CHANGES

Date	*Change #*	*Person Entering Change*

DISTRIBUTION LIST

STATE AGENCIES	NUMBER OF COPIES
Governor's Office	1
Executive Office of Public Safety	1
Massachusetts State Police	2
Massachusetts Emergency Management Agency	10
Massachusetts Community Antenna Television Commission	1
FEDERAL AGENCIES	
Federal Emergency Management Agency, Region I	1
National Weather Service, Southeast New England Forecast Office, Taunton, MA	2
National Weather Service, Weather Forecast Office, Albany, NY	1
National Weather Service, Eastern Region, Brookhaven, NY	1
Federal Communications Commission, Northeast District Office, Quincy MA	1
Federal Communications Commission, (FCC-EAS) Washington, DC	1
Municipal Governments	
County and Fire District Dispatch Centers	1 ea.
PRIVATE ORGANIZATIONS	
Massachusetts State Emergency Communications Committee (Chairmen)	2
Massachusetts Broadcasters Association (President)	2
New England Cable Television Association	1
All Massachusetts Broadcast Stations	1 ea.
Cable Television Providers	1 ea.

PREFACE

This Plan revises the **Commonwealth of Massachusetts Emergency Broadcast System (EBS) Plan** to the FCC recently enacted Emergency Alert System. It incorporates many memoranda, practices and innovations brought about by tests and activations of the predecessor EBS and the new EAS technology.

The plan was written for easy comprehension among those involved with: providing protective action guidance to the public, requesting and activating EAS officials and others who have an active role in the successful implementation of EAS in the Commonwealth of Massachusetts.

It is hoped this plan will receive the widest dissemination to all who are actively involved with informing the public during an emergency.

This plan is possible due to the outstanding cooperation the Massachusetts broadcasters and cable television providers have extended to the system.

DEFINITIONS

Definitions cited here are supplemented by the Attachment E "Glossary of Terms" and Attachment F "Acronyms".

EMERGENCY: A situation posing a threat to the safety of life and property. Examples are, but not limited to: hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread power failures, industrial explosions, civil disorders and nuclear incidents or attack.

SEVERE WEATHER: Wind gusts that are equal to or greater than 58 miles per hour, hail that could exceed three-quarters (3/4) of an inch in diameter, or the possibility of a tornado occurring.

SEVERE WEATHER WATCH: An NWS indication that the probabilities of severe weather are high, and is an alert to the public of such severe weather conditions.

SEVERE WEATHER WARNING: An NWS indication that severe weather has actually been sighted in the area or indicated by radar, and serves notice to the public that severe weather conditions are almost certain to occur.

AUTHORIZED GOVERNMENT OFFICIALS: The person or persons designated by government signatory to this procedure that have the authority to request activation of the Emergency Alert System and to make emergency announcements/broadcasts.

EMERGENCY BROADCAST SYSTEM (EBS)
TO
EMERGENCY ALERT SYSTEM (EAS)

HIERARCHY NETWORK CONVERSION

EBS DESIGNATIONS	EAS DESIGNATIONS
PEP (Primary Entry Point)	NP (National Primary)
OPRS (Originating Primary Relay Station)	SP (State Primary)
SNRS (State Network Relay Station)	SR (State Relay)
CPCS (Common Program Control Station)	LP (Local Primary)
PS (Primary Station)	PN (Participating National)
NS (Non-participating Station)	NN (Non-participating National)

I. PURPOSE:

The purpose of this Emergency Alert System (EAS) Plan is to define the procedures for the broadcast and cable services and designated government officials of the Commonwealth of Massachusetts to disseminate emergency information and instructions to the public for threatening or actual emergencies.

II. AUTHORITY:

This plan is authorized by Title 47 U.S.C. 151, 154 (i) and (o), 303(r), 524 (g) and 606; and 47 CFR, Part 11, Federal Communications Commission (FCC) Rules and Regulations, Emergency Alert System (EAS) as it pertains to day-to-day emergency operations.

III. INTRODUCTION:

This plan was prepared by the Massachusetts State Emergency Communications Committee (SECC) in cooperation with the Massachusetts Broadcasters Association, Massachusetts Emergency Management Agency, Massachusetts Community Antenna Television Commission, the Federal Communications Commission, The National Weather Service, the Federal Emergency Management Agency, and the New England Cable Television Association. It provides procedural guidance and background data for the broadcast and CATV media to disseminate emergency information and warning to the public in the Commonwealth of Massachusetts, or any portion thereof within the station's broadcast coverage or CATV system service area(s) at the request of approved government officials.

Acceptance of, or participation in this plan, shall not be deemed to prohibit a broadcast licensee or cable operator from exercising independent discretion and responsibility in any given situation. The discretion of management of each broadcast station or cable system, regarding the transmission of emergency messages and instructions to the public, is provided by the FCC Rules and Regulations, Part 11.

Broadcast stations and cable systems originating emergency communications, shall be deemed to have conferred rebroadcast authority, as specified in Section 11.54(d).

Detailed procedures to permit designated government officials to issue National, State-wide, Operational area and Community-specific emergency messages and instructions via the state EAS, in threatened, actual or post emergencies are encompassed in this plan, as agreed upon by the broadcast and cable television operators and state and Federal signatories.

This plan recognizes that CATV licensing agreements contain provisions for municipal officials to access CATV systems for emergency public information dissemination. These licensing agreement articles are supplemental to the provisions of this plan. In the unlikely event of a conflict, this plan takes precedence.

IV. GENERAL CONSIDERATION:

The instinctive reaction of the average person is to turn on the radio or television in time of emergency. Based upon that, the following describes the basic situation, physical characteristics and assumptions used in the development of this plan:

A. Situation:

Broadcast Radio and Television Stations are mainly privately owned corporations using the public "air waves" and operating in the public interest. Likewise, cable television service providers, through local licensing agreements and licensing renewal considerations, also have an interest in serving the public. One aspect of this public interest is to allow its facilities to be used by responsible government officials to communicate with the public in time of impending or actual emergency. Such a system, as prescribed by the Federal Communications Commission is the Emergency Alert System.

B. Physical Characteristics:

For EAS planning purposes, the Commonwealth of Massachusetts is subdivided into seven local EAS operational (geographical) areas.

FCC Rules require broadcast stations and cable television systems facilities to monitor two sources. Radio Station WBZ-AM, serves EAS as a National Primary (NP) for entering Presidential and national programming into EAS. The station also serves the Commonwealth of Massachusetts as the alternate State Primary (SP) facility; Radio Station WBMX-FM serves as the SP for the Commonwealth of Massachusetts. Therefore, Radio Station WBZ-AM shall monitor three sources: Radio Station WBMX-FM, NOAA Weather Radio* and (a source to be identified later). Radio Station WBMX-FM shall monitor, WBZ-AM, NOAA Weather Radio* and (a source to be identified later). All stations and cable television systems in the Greater Boston Operational Area are to monitor WBZ-AM and WBMX-FM. Broadcast stations and cable systems, although not required are strongly encouraged to monitor a third source such as NOAA Weather Radio.*

Local Primary (LP) stations in the **Central Massachusetts, Merrimac Valley and Southeast Massachusetts Operational Areas** are to monitor WBZ-AM, WBMX-FM and NOAA Weather Radio.* All other broadcast stations and cable systems in these operational areas are to monitor the operational area's LP and WBZ-AM or WBMX-FM. Those that are capable of monitoring NOAA Weather Radio* are encouraged to do so.

The LP station for the **Connecticut Valley Operational Area** shall monitor the LP facility for the Central Massachusetts Operational Area, WBZ-AM and NOAA Weather Radio. In addition, a fourth source is recommended, preferably in this order: LP facility for the Berkshires Operational Area, Connecticut State Primary, an Albany NY broadcast facility or another out-of-state

source. All other broadcast stations and cable systems in the Connecticut Valley Operational Area are to monitor the Connecticut Valley LP facility, Central Massachusetts Operational Area LP and NOAA Weather Radio.*

The LP station for **the Berkshire Operational Area** shall monitor the LP for the Connecticut Valley Operational Area LP, an Albany, NY station and NOAA Weather Radio (preferably programming originating from the Albany NY NWS Forecast Office). All other broadcast stations and cable systems in the Berkshire Operational Area shall monitor the Berkshire Operational Area LP facility and the Connecticut Valley Operational Area LP facility. Those capable of monitoring a third source are encouraged to monitor and NOAA Weather Radio from the Albany National Weather Forecast Office. Again, Albany, NY NWS Forecast Office has weather warning responsibility for the entire Berkshire County of Massachusetts. It is important that broadcasters and cable TV systems select NOAA Weather Radio programmed out of the Albany NY Forecast Office.

The LP for the **Cape Cod and Islands Operational Area** shall monitor the LP facility for the Southeast Massachusetts Operational Area, NOAA Weather Radio and, if possible, the Commonwealth's State Primary or Alternate State Primary.

FCC Regulations require broadcast stations and cable television service providers to record at least two-minutes of EAS message text. It also requires a monthly EAS test be retransmitted within fifteen minutes of receipt. Therefore, for test compliance and rapid dissemination of "real-world" EAS messages, the Massachusetts SECC recommends selecting a recording technology that uses a quick retransmission capability.

* **NOTE:** The NWS Southern New England Forecast Office, Taunton, MA employs console and transmitter specific NOAA Weather Radio programming. It is recommended that broadcast stations and cable television service consult Attachment # C.3. before selecting an NOAA Weather Radio monitoring assignment.

C. Assumptions:

Unless exempted by Federal regulations, all licensed broadcast stations and cable television service providers are required to install and operate an EAS decoder and encoder.

EAS may be activated for any "short-fused" situation which endangers the safety of life and property and requires those at risk to take protective actions.

Testing of the Commonwealth's EAS network will be done in accordance with FCC Part 11 criteria and the provisions of this plan. The monthly state-wide EAS test will continue to be held on the first week of the month and at the pre-established schedule set forth by the SP and approved by the SECC. This monthly test can be substituted for the weekly test for that week per FCC Regulation 11.61(2)(B)(iv).

V. The General Plan:

A. National Level:

The Federal Emergency Management Agency (FEMA) and the Federal Communications Commission (FCC) have joint responsibility for the national level EAS. FEMA, the FCC, and the National Weather Service (NWS) of the National Oceanic and Atmospheric Administration (NOAA) with advice, through the FCC, from the National Advisory Committee (NAC), are jointly responsible for developing and evaluating EAS plans and related capabilities at the state and local levels of EAS operations.

This section is intended to provide background information on the national level EAS to assist with planning and implementation support at the state and local level. In essence, the President requires a reliable means for communicating with the American public on short notice during periods of national crisis or major emergency to provide reassurance and direction regarding response and recovery. The President must be able to address the Nation on radio, TV and CATV within 10 minutes following an activation notice.

In addition, the President must be able to address the nation on live TV (audio & video), upon arrival at a designated TV studio. This capability must exist under a variety of conditions. Once activated, the national level EAS remains available for the dissemination of high priority national programming. These capabilities must also be available to Presidential successors. The authority to activate the national level EAS rests solely with the President of the United States.

B. State Level:

Activation of the Emergency Alert System within the Commonwealth of Massachusetts may be made at request of the Governor, the Director of the Massachusetts Emergency Management Agency, the Massachusetts State Police, or the National Weather Service. Such request shall be made directly to the State Primary, the alternate State Primary or the Local Primary station(s) of the affected operational areas.

Participation in the Massachusetts EAS is voluntary and at the discretion of the station management. This is accomplished by, but not limited to, the methods cited below:

1) Reception from an FCC required monitoring assignment.
2) Reception via a telephone call or radio remote pickup unit (RPU).
3) Monitoring of a news source e.g. AP or UPI.
4) Monitoring NOAA Weather Radio

C. Local Level:

The Commonwealth's Emergency Alert System is subdivided into portions of counties. Emergencies such as a hazardous materials incident, flooding or a large structural fire may only affect a single community. Local authorities may request EAS activation through the LP or the broadcast station/CATV system serving that area.

Participation in local-level EAS is voluntary and at the discretion of the broadcaster/CATV service provider. Many Massachusetts communities have EAS access privileges incorporated into CATV licensing agreements. Those with such licensing provisions should review their licensing agreements to ensure compliance with this EAS Plan.

VI. Implementation:

The Massachusetts EAS is activated by request from authorized officials (briefly referenced above and identified in more detail in Attachment K) to the State Primary, alternate State Primary or appropriate Local Primary broadcast facility when necessary for the protection of life and property. Designated officials as identified in Attachment K are the only individuals authorized to request a statewide, multi-operational area or an entire operational area activation of the Massachusetts EAS.

See Attachment G, for a summary of State Level emergency alert system origination and event codes that have been adopted for utilization by the KEY EAS source, the National Weather Service, Massachusetts State Police and Massachusetts Emergency Management Agency.

The National Weather Service Forecast office at Taunton, Massachusetts will generally issue such EAS messages for the Commonwealth, with the exception of Berkshire County which is served by the Albany NY National Weather Service Forecast Office.

Requests for EAS messages can also be accomplished via the State Police and the State Emergency Management Agency both located in Framingham, Massachusetts.

For unique local emergency situations, not extending beyond the geographical boundaries of a single community, local authorities may request EAS activation via the local broadcast station or CATV service provider. The assistance of local broadcast stations and CATV service providers without involving the State EAS is encouraged. It is suggested that arrangements be made through a Memorandum Of Understanding (MOU) between station management and local government officials and incorporated into local CATV Licensing Agreements between CATV service providers and local government officials for such operations.

Although local government officials have the right to request EAS activations for multi-community disasters and emergency situation, it is recommended such requests be channeled to Massachusetts Emergency Management Agency or the State Police who can aid in coordination of protective action measures among all affected jurisdictions.

A. Procedures for Requesting EAS Activation by Authorized Officials:

(It is recommended, whenever government officials believe an EAS activation is a strong possibility in the near future, they provide the broadcast station a "heads-up" advisory.)

To avoid unnecessary escalation of public confusion, all Emergency Alert System requesters must be cautious in providing information and news, pertaining to the emergency. All messages must be based on definite and confirmed facts. The public must not be left to decide what is, or is not, factual.

1. Request activation of EAS via the State Primary WBMX-FM ___/___ ____). If unable to contact the SP contact the alternate (WBZ-AM ___/___ ____). The phone numbers will be provided under separate correspondence along with state authenticator codes. Space is provided here for manual insertion and quick reference.

2. Work out the broadcast details including live or recorded, immediate or delayed broadcast, effective period etc. with the broadcast station personnel.

3. It is recommended that authorized government officials use the following format when delivering the emergency announcement. The format is deliberately general in nature to allow flexibility for adaptation to any emergency situation. Because of technical limitations of encoding/decoding EAS equipment, it is advisable EAS messages do not exceed a minute and a half in length.

   a. "This is _____ of _____
   (Name/Title) (Organization)
   with a request to activate the Massachusetts Emergency Alert System. I authenticate as follows: _____
   (State Authenticator Code)

   b. When the broadcaster is ready to copy the message. Read the warning message which should be brief (maximum voice message length is 1.5 minutes) and be prepared to indicate the **time period** the message is valid for in **15 minute increments**, up to one hour, and in thirty minute increments beyond one hour.

   c. Include in the message: the situation summary (briefly describe the problem, affected area(s) and if appropriate the duration); Actions (who's affected and what action they should take); Source (Government entity providing the guidance); Further instructions.

   d. If it is not practical to convey all information in 90 seconds, the announcement should say when a press conference is being scheduled to explain response and protective actions, this should be articulated in the text, including where and when residents can tune for emergency information, including actions being taken by state and/or local government(s). It is understood that more than one EAS message may be necessary during large scale disasters or that an EAS message may be necessary to draw attention to more lengthy, public information briefings which may be carried on radio and TV stations.

4. Keep the line open, to determine the SP has all the information it needs to distribute the EAS warning, prior to hanging up.

5. The SP station will end the message, regardless of its length, with the EAS termination code (NNNN) which ends the activation.

The preceding procedures are for state-wide activations. For a localized emergency contact the appropriate LP(s) or the local broadcast facility and/or CATV service provider for the affected community and use the same format. The phone numbers will be provided under separate correspondence along with state authenticator codes. Space is provided here for manual insertion and quick reference.

Operational Area Number	Call Sign	Telephone
Berkshire (OA#1)	WBEC	
Cape Cod and Islands (OA#7)	WQRC	
Central Massachusetts (OA#3)	WSRS	
Connecticut Valley (OA#2)	WHYN	
Metro Boston (OA#5)	WBMX WBZ-AM (alt.)	
Merrimac Valley (OA#4)	WEGQ	
Southeast Massachusetts (OA#6)	WPLM	

B. EAS ACTIVATION BY THE NATIONAL WEATHER SERVICE

1. Activation of the Emergency Alert System may be requested by National Weather Service.

2. When requesting activation of the EAS, the duty operator at the NWS will normally enter emergency information into their Specific Area Message Encoder (SAME). This will provide EAS header codes, including the source of the information (WXR - National Weather Service), the event code, the time frame of the emergency condition, and the area to be notified.

3. In the event that the NWS' SAME encoder is not functioning properly, the NWS will call the appropriate LP

Station to request activation of the EAS, without entering the information into the encoder.

C. GENERAL PROCEDURES FOR USE OF BROADCAST STATION AND CABLE SYSTEMS

Procedures for the SP station, EAS Broadcast stations and Cable systems during attended operations.

1. Upon receipt of a request to activate EAS, the duty operator at the State Primary or receiving broadcast station personnel will authenticate, determine if the message needs statewide distribution, enter all header codes in the EAS encoder, record the emergency message, enter the termination code and proceed as follows:

a. Air the following announcement:

"WE INTERRUPT THIS PROGRAM BECAUSE OF A STATE EMERGENCY. IMPORTANT INFORMATION WILL FOLLOW:"

b. Transmit the Emergency Alert System header codes and the two-tone Attention Signal: (FCC Regulations, Section 11.51)

c. Transmit the following announcement:

"WE INTERRUPT THIS PROGRAM TO ACTIVATE THE COMMONWEALTH OF MASSACHUSETTS EMERGENCY ALERT SYSTEM AT THE REQUEST OF: _____ (authority) AT _____(time)."

d. Play the emergency announcement recording from activating official into the EAS encoder. Be certain to include the source of information in header code, time frame of emergency condition, the area to be notified.

e. The next step is to enter the EAS End of Message (EOM) code (see regulations, Section 11.31). FCC type accepted EAS equipment will automatically send the End of Message (NNNN) code at 2 minutes after activation, so longer announcements and press conferences must be accomplished outside EAS. Operators should make every effort to reduce EAS activation time to the minimum necessary to complete the task by entering the End of Message code, as soon as practical, to prevent dead air between end of message and system "time out".

2. Each broadcast station and cable system, upon receipt of a State level Emergency Alert System message, when manned, will at the discretion of management, perform the same procedures as outlined in B.1. above, including recording all emergency voice messages. Unattended facilities will receive such messages on the EAS decoder and the circuitry will permit such messages to automatically interrupt programming and be carried over the main program channel(s) intact. TV Stations will also receive a video crawl that will appear in the upper two thirds of the video explaining the interruption.

3. To avoid unnecessary escalation of public confusion, all broadcast stations and cable systems must be cautious in providing information and news, pertaining to the emergency. All messages must be based on definite and confirmed facts. The public must not be left to decide what is, or is not, factual.

4. Upon completion of the above transmission procedures, resume normal programming. Appropriate notations should be made in station and cable records and logs of all significant events. These records should be carefully preserved for two years in the event they are required at some later date (FCC Regulations, Section 11.55). Stations and cable systems may send a very brief summary of EAS usage to the FCC, for informational purposes. The address is: FCC EAS office; 1919 "M" St., Room 736, Washington, DC 02554 telephone: 202-418-1220.

5. If operations were not concluded as specified in B.1.e. above, (this should not be necessary under EAS), upon receipt of the termination notice from the activating official, make the following announcement and then transmit the EOM code:

"THIS CONCLUDES OPERATIONS UNDER THE MASSACHUSETTS EMERGENCY ALERT SYSTEM. ALL BROADCAST STATIONS AND CABLE SYSTEMS WILL NOW RESUME NORMAL OPERATIONS." NNNN.

VII. TESTS

Commonwealth-wide tests of the Massachusetts Alert System will be conducted on Monday or Tuesday of the first week of the month to assure the successful operation of the system. Tests will be initiated by either of the State Primary stations, the National Weather Service, the Massachusetts Emergency Management Agency or the Massachusetts State Police. In the unlikely event, no Commonwealth-wide test is conducted, stations have permission to conduct their on-air required monthly test Wednesday through Saturday of the first week of the month.

For the required monthly test, the SECC is recommending the test script in (Attachment K). Any station desiring to use a alternative script shall obtain concurrence from the Massachusetts SECC.

All tests will be done in accordance to testing criteria cited in 47 CFR, Part 11, Federal Communications Commission (FCC) Rules and Regulations and the provisions of this plan. In addition, all tests that are not the required monthly test (RMT) and the required weekly test (RWT) will be coordinated in advance and have the approval of the State Emergency Communications Committee Chairmen.

SIGNATURE PAGE

Argeo Paul Cellucci
Governor,
Commonwealth of Massachusetts

A. David Rodham
Undersecretary
Executive Office of Public Safety

Peter LaPorte
Director, Massachusetts
Emergency Management Agency

Douglas Rowe, Co-Chairman
Massachusetts State Emergency
Communications Committee

Andrew C. Barret
Defense Commissioner
Federal Communications
Commission

Reed V. Hillman
Superintendent, Massachusetts
State Police

Robert M. Thompson
Meteorologist-In-Charge
NWS Forecast Office
Taunton, MA

Paul R. Cianelli
New England Cable Television
Association

B. Allan Sprague
President
Massachusetts Broadcasters
Association

Appendix 1: Authentication Instructions for the Massachusetts Emergency Alert System

Massachusetts Emergency Management Agency (MEMA) has developed and will distribute annually two Lists of Authenticator Code Words to selected broadcast facilities. One list is for tests and the other for actual emergencies.

Therefore, should a broadcast station receive a phone call for an EAS activation and the caller is unknown, lacks the Authenticator Code Word or that the station may have reason to suspect it is a fraudulent call, an immediate phone call to the calling organization (Emergency Management, State Police, National Weather Service, etc.) and to the individual who placed the original call should be made and the emergency situation verified.

Appendix 3: Procedures for Emergency Management Officials to Request EAS Activation for Nuclear Power Facilities

1. Perform all internal coordination procedures as prescribed by the affected Pilgrim Nuclear Power Station (PNPS), Seabrook Nuclear Power Station (SNPS) or Vermont Yankee Nuclear Power Station (VYNPS)) Radiological Emergency Response Plan.

2. Provide advance notification to the following broadcast facilities and advise them if the situation is an actual event or an exercise. If it is an exercise, provide extent-of-play guidance (e.g. simulate broadcast, enter a substitute message etc) to the receiving broadcast facility operator.

PNPS: State Primary (SP) & alternate
Local Primary for the Southeast Massachusetts Operational Area
Local Primary for the Cape and Islands Operational Area

SNPS: Local Primary for the Merrimac Valley Operational Area

VYNPS: Local Primary for the Connecticut Valley Operational Area and
Radio Stations WHAI & WRSI/WGAM

3. Obtain all EAS header required information. Ensure that such information is provided to the EAS message header programmer. EAS header information is explained in Attachment H of this plan.

4. Follow implementation procedures in Section IV of this plan.

5. Encoded into the EAS message header is the activation time and message duration. Earlier termination needs to be coordinated with the station using the following procedure:

"This is _____ of _____
(name/title) (organization)
with a request to terminate Mass. EAS Message(s)
_____
(describe specific message(s) for termination)
at _____."

6. MEMA HQ, MEMA Area Office or other designated facility should monitor the EAS broadcast for accuracy and completeness.

Appendix 3: Procedures for Emergency Management Officials to Request EAS Activation for Nuclear Power Facilities

Inaccuracies should be brought to the broadcasting facility (ies)'s attention immediately.

7. Perform internal EAS message distribution in accordance with the appropriate Radiological Emergency Response Plan criteria.

8. The EAS system technology is not designed for recurring EAS message broadcasts. Each retransmission requires a separate request to the broadcaster.

Attachment A: FCC Part 11, Emergency Alert System

PART 11 - EMERGENCY ALERT SYSTEM (EAS) **October 4, 1995**

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 Non-participating National Authorization Letter.
11.19 EAS Designations.
11.20 State Relay Network.
11.21 State and Local Area Plans and FCC Mapbook.

Subpart B - Equipment Requirements

11.31 EAS protocol.
11.32 EAS Encoder.
11.33 EAS Decoder.
11.34 Acceptability of the equipment.
11.35 Equipment operational readiness.

Subpart C - Organization

11.41 Participation in EAS
11.42 Participation by communications common carriers.
11.43 National level participation.
11.44 EAS message priorities.
11.45 Prohibition of false or deceptive EAS transmissions.
11.46 EAS public service announcements.

Subpart D - Emergency Operations

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.
11.54 EAS operation during a National Level emergency.
11.55 EAS operation during a State or Local Area emergency.

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.

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; and other entities and industries operating on an organized basis during emergencies at the National, State, or 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:

Attachment A: FCC Part 11, Emergency Alert System

TIMETABLE

BROADCAST STATIONS

Requirement	Until 7/1/95	7/1/95	1/1/97	1/1/98
Two-tone encoder timing	20-25 seconds	8-25 seconds	8-25 seconds	8-25 seconds 1/
Two-tone decoder timing	8-16 seconds required. 3-4 seconds optional.	All decoders at 3-4 seconds.	3-4 seconds	Two-tone decoder no longer used.
Digital decoder and encoder	Use is optional	Use is optional	Use is required	Use is required

CABLE SYSTEMS

Requirement	Before 7/1/97	7/1/97 2/
Two-tone signal from storage device 1/	Use is optional, 8-25 seconds	Use is required, 8-25 seconds
Digital decoder and encoder	Use is optional	Use is required 2/

1/ Two-tone signal used only to provide audio alert to audience before EAS emergency messages and required monthly test.
2/ On this date, subject cable systems shall provide: (1) a video message on all channels or other alerting techniques to hearing impaired and deaf subscribers, (2) an audio message and video interruption on all channels, and (3) a video message on at least one channel to all subscribers.

EAS TIMETABLE AND REQUIREMENTS

BROADCAST STATIONS

Requirement	AM	FM	FM Class D	TV	LPTV 1/
Two-tone decoder (until 1/1/98)	Y	Y	Y	Y	Y
Two-tone encoder	Y	Y	N	Y	N
Digital decoder (1/1/97)	Y	Y	Y	Y	Y
Digital encoder (1/1/97)	Y	Y	N	Y	N
Audio message (1/1/97)	Y	Y	Y	Y	Y
Video message (1/1/97)				Y	Y

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CABLE SYSTEMS

Requirement	
Two-tone decoder	N
Two-tone encoder	N
Digital decoder (7/1/97)	Y
Digital encoder (7/1/97)	Y
Audio message on all channels (7/1/97)	Y 2/
Video interruption on all channels, video message on one channel (7/1/97)	Y 3/

1/ LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment.
2/ Shall transmit two-tone signal, but it may be from a storage device.
3/ Shall provide video on all channels or other alerting techniques to certified hearing impaired and deaf subscribers.

NOTE: Class D FM and low power TV stations are not required to have two-tone or digital encoders. LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment. FM translator stations are exempt from the requirement to have EAS equipment.

(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.

(c) Organizations using other communications systems or technologies such as, Direct Broadcast Satellite (DBS), low earth orbit satellite systems, 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.

§ 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 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.

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

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

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

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

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

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§ 11.15 EAS Operating Handbook.

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

§ 11.16 National Control Point Procedures.

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

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

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

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

§ 11.17 Authenticator Word Lists.

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

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

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

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

§ 11.18 EAS Designations.

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

(b) Local Primary (LP) is a source of EAS Local Area messages. An LP source is responsible for coordinating the carriage of common emergency messages from sources such as the NWS 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 relay 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 of this part. 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. It states that the licensee has agreed to go off the air during a national level EAS message. This authorization will remain in effect through the period of the initial license and subsequent renewals from the time of issuance unless returned by the holder or suspended, modified or withdrawn by the Commission.

§ 11.20 State Relay Network.

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

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§ 11.21 State and Local Area Plans and FCC Mapbook.

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

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

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

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

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 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 1~~ or 0) 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 depending on the transmission medium.

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

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

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-
(one second pause)
[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-
(one second pause)
[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 System (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication 772. Each state is assigned an SS number as specified in paragraph (f) of this section. Each county is 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

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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 call sign or other identification of the broadcast station, or NWS office 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
Emergency Action Notification Network	EAN
Primary Entry Point System	PEP
National Weather Service	NWS
Civil authorities	CIV
Broadcast station or cable system	EAS

(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:	
Tornado Watch	TOA
Tornado Warning	TOR
Severe Thunderstorm Watch	SVA
Severe Thunderstorm Warning	SVR
Severe Weather Statement	SVS
Special Weather Statement	SPS
Flash Flood Watch	FFA
Flash Flood Warning	FFW
Flash Flood Statement	FFS
Flood Watch	FLA
Flood Warning	FLW
Flood Statement	FLS
Winter Storm Watch	WSA
Winter Storm Warning	WSW
Blizzard Warning	BZW
High Wind Watch	HWA
High Wind Warning	HWW
Hurricane Watch	HUA
Hurricane Warning	HUW
Hurricane Statement	HLS
Tsunami Watch	TOA
Tsunami Warning	TSW
Evacuation Immediate	EVI
Civil Emergency Message	CEM
Practice/Demo Warning	DMO
Administrative Message	ADR

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

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

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

§ 11.32 EAS Encoders.

(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 is activated when the Preamble is sent and deactivated at the End of Message code.

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

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

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

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

(iii) Minimum Level of Output. The encoder shall have an output level capability of at least +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.

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§ 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 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) of this part that is received through either of the two audio inputs must override all other EAS 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 ± 0.5 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).

§ 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.

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

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

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

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

§ 11.35 Equipment operational readiness.

(a) Broadcast stations and subject cable systems are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS is installed so that the monitoring and transmitting functions are available during the times the broadcast station or cable system is in operation. Additionally, broadcast stations and subject 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 in § 76.305 of this chapter indicating reasons why any tests were not received.

(b) If the EAS Encoder or EAS Decoder becomes defective the broadcast station or subject cable system may operate without the defective equipment pending its repair or replacement for a period not in excess of 60 days without further FCC authority. Entries shall be made in the broadcast station log or subject cable system 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) An informal request may be made to the Engineer-in-charge of the FCC field office serving area in which the broadcast station or subject cable system is located for additional time to complete repairs to the defective equipment. These requests 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.

Subpart C - Organization

§ 11.41 Participation in EAS.

(a) All broadcast stations and 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 or 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.

(1) Any existing station that is a Non-participating National (NN) source under § 11.18(f) of this part 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 management and will be in accordance with the provisions of State and Local Area EAS Plans.

(c) All sources, including NN, must have access to an EAS Operating Handbook and a Red Envelope Authenticator List and be placed on the EAS mailing list maintained by the FCC.

§ 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 exchange 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 exchange.

(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 exchange 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.

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§ 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).

(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.

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§ 11.46 EAS public service announcements.

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

§ 11.47 Optional use of other communications methods and systems.

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

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

Subpart D - Emergency Operations

§ 11.51 EAS code and Attention Signal Transmission requirements.

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

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

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

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

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

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

(g) Effective July 1, 1997, subject cable systems shall transmit EAS audio messages in the same order specified in paragraph (a) of this section. The Attention Signal may be produced from a storage device. Additionally, subject cable systems must:

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

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

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

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

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

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

(i) Broadcast stations or cable systems 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 station or cable system with one EAS Encoder. The requirements of § 11.32 must be met for both the broadcast station and cable system.

(j) Broadcast stations and cable systems are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT), with the accompanying location codes for their State and State/county. These EAS messages shall be retransmitted unchanged except for the

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LLLLLLLL- code which identifies the broadcast station or cable system retransmitting the message. See § 11.31(c) of this part. If an EAS source originates any EAS messages with the above Event codes, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, broadcast stations and subject cable systems will use the event code RWT. The location codes will be the state and county for the broadcast station city of license or subject cable system community. Other location codes may be included upon approval of station or cable system management approval. EAS code requirements and examples are provided in the EAS Operating Handbook. Operations may be conducted automatically or manually.

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

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

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

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

§ 11.52 EAS code and Attention Signal Monitoring requirements.

(a) Before January 1, 1998, broadcast stations must be capable of receiving the Attention Signal required by §11.32(a)(9) and emergency messages of other broadcast stations during their hours of operation. Effective January 1, 1997, all broadcast stations must install and operate during their hours of operation, equipment capable of receiving and decoding, either automatically or manually, the EAS header codes, emergency messages and EOM code. The effective date for subject cable systems is July 1, 1997. NOTE: 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 specified in § 11.51(k)(2) of this part, decoders must be located so that operators at their normal duty stations at broadcast stations and cable systems can be alerted immediately when EAS messages are received.

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

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

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

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

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

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

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

§ 11.53 Dissemination of Emergency Action Notification.

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

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

(1) Radio and television broadcast networks to all affiliates with the use of internal alerting facilities.

(2) Cable networks and program suppliers to cable systems and subscribers.

(3) Wire services to all subscribers (AM, FM, TV, LPTV and other stations).

(4) Off-air monitoring of EAS sources.

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

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

(1) Monitor the radio and TV networks and cable systems.

(2) Check the wire services.

(3) Monitor the assigned EAS sources.

§ 11.54 EAS operation during a National Level emergency.

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

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

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

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

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

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

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

(ii) Non-participating National (NN) sources follow the transmission procedures and make the sign-off announcement in the EAS Operating Handbook's National Level Instructions section for NN sources. After the sign-off announcement, NN sources are required to remove their carriers from the air and monitor for the Emergency Action Termination message. NN sources using automatic interrupt under § 11.51(k)(1) of this part, 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 of this part. If LP or SR sources of a Local Area cannot provide an emergency message feed, any source in the Local Area may elect to provide a message feed. This should be done in an organized manner as designated in State and Local Area EAS Plans.

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

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

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

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

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

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

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

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

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

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

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

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

(a) The EAS may be activated at the State or Local Area levels by broadcast stations and cable systems at their discretion for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant activation are: tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

(b) EAS operations must be conducted as specified in State and Local Area EAS Plans. The plans must list all authorized entities participating in the State or Local Area EAS.

(c) Immediately upon receipt of a State or Local Area EAS message, participating broadcast stations and cable systems must do the following:

(1) State Relay (SR) sources monitor the State Relay Network or follow the State EAS plan for instructions from the State Primary (SP) source.

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(2) Local Primary (LP) sources monitor the Local Area SR sources or follow the State EAS plan for instructions.

(3) Participating National (PN) and Non-participating National (NN) sources monitor the Local Area LP sources for instructions.

(4) Broadcast stations and cable systems participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans. Television stations must comply with § 11.54(b)(7). Broadcast stations providing foreign language programming shall comply with § 11.54(b)(8) of this part.

(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 or cable system records as specified in § 11.54(b)(15) of this part. FCC Form 201 may be used to report EAS activations.

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

Subpart E - Tests

§ 11.61 Tests of EAS procedures.

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

(1) Required Monthly Tests of the EAS header codes, Attention Signal, Test Script and EOM code.

(i) Effective January 1, 1997, AM, FM and TV stations.

(ii) Effective July 1, 1997, subject cable systems.

(iii) Tests in odd numbered months shall occur between 8:30 a.m. and local sunset. Tests in even numbered months shall occur between local sunset and 8:30 a.m. They will originate from Local or State Primary sources. Time and script content will be developed by State Emergency Communications Committees in cooperation with affected broadcast stations, cable systems, and other participants. Script content can be in the primary language of the broadcast station or cable system. These monthly tests must be transmitted within 15 minutes of receipt by broadcast stations and cable systems in an EAS Local Area or State. Class D non-commercial educational FM and LPTV stations need to transmit only the test script.

(2) Required Weekly Tests:

(i) Attention Signal. Until January 1, 1997, broadcast stations must conduct tests of the Attention Signal and Test Script at least once a week at random days and times between 8:30 a.m. and local sunset. Class D non-commercial educational FM and LPTV stations do not need to transmit the Attention Signal. Script content can be in the primary language of the station.

(ii) EAS Header Codes and EOM Codes:

(A) Effective January 1, 1997, AM, FM and TV stations must conduct tests of the EAS header and EOM codes at least once a week at random days and times.

(B) Effective July 1, 1997, subject cable systems must conduct tests of the EAS header and EOM codes at least once a week at random days and times.

(iii) Class D non-commercial educational FM and LPTV stations are not required to transmit this test but must log receipt.

(iv) The EAS weekly test is not required during the week that a monthly test is conducted.

(3) Periodic Wire Service Tests. AP, Reuters and UPI shall separately conduct test transmissions to broadcast stations and cable systems on their wire networks. Tests may occur no more than once a month at random times selected by the wire services. These tests shall conform with the procedures in the EAS Operating Handbook and the National Control Point Procedures.

(4) Weekly Emergency Action Notification (EAN) network transmissions. Tests of the National level interconnection facilities shall be conducted on a random basis once each week. They shall originate from the Federal government over a dedicated network to specified control points of the radio and television networks, cable networks and program suppliers, wire services, common carriers and other organizations. The tests shall conform with the National Control Point Procedures.

(5) Periodic National Tests. National Primary (NP) sources shall participate in tests as appropriate. The FCC may request a report of these tests.

(6) EAS activations and special tests. The EAS may be activated at the State or Local Area level by a broadcast station or cable system in lieu of the monthly or weekly tests required by this section. Such activation must comply with the include transmission of the EAS header codes, Attention Signal, emergency message and EOM code for substitution of the monthly test. Activation must include transmission of the Attention Signal and emergency message for substitution of the weekly test in paragraph (2)(i) of this section. Activation must include transmission of the EAS header and EOM codes for substitution of the weekly test in paragraph (2)(ii) of this section. Television stations and cable systems shall comply with the visual message requirements in § 11.51 of this part. Special EAS tests at the State and Local Area levels may be conducted on a day-to-day basis following procedures in State and Local Area EAS plans.

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

§ 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

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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) of this part 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."

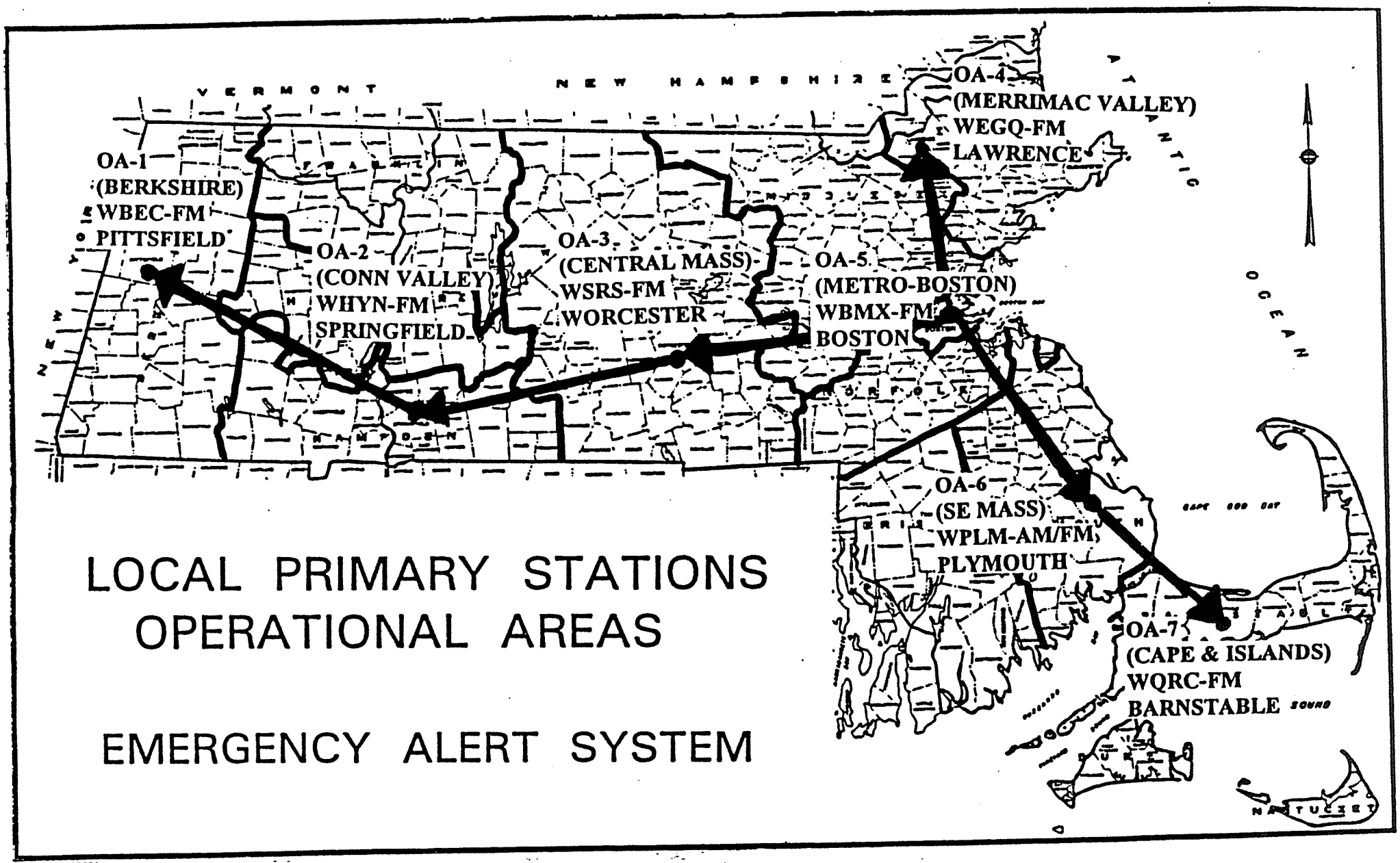
(6) Following the closing cue, wire service subscribers will receive a "Closed Circuit Test Termination Message". Record the time of receipt as indicated above.

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

Attachment B: Operational Area Plans

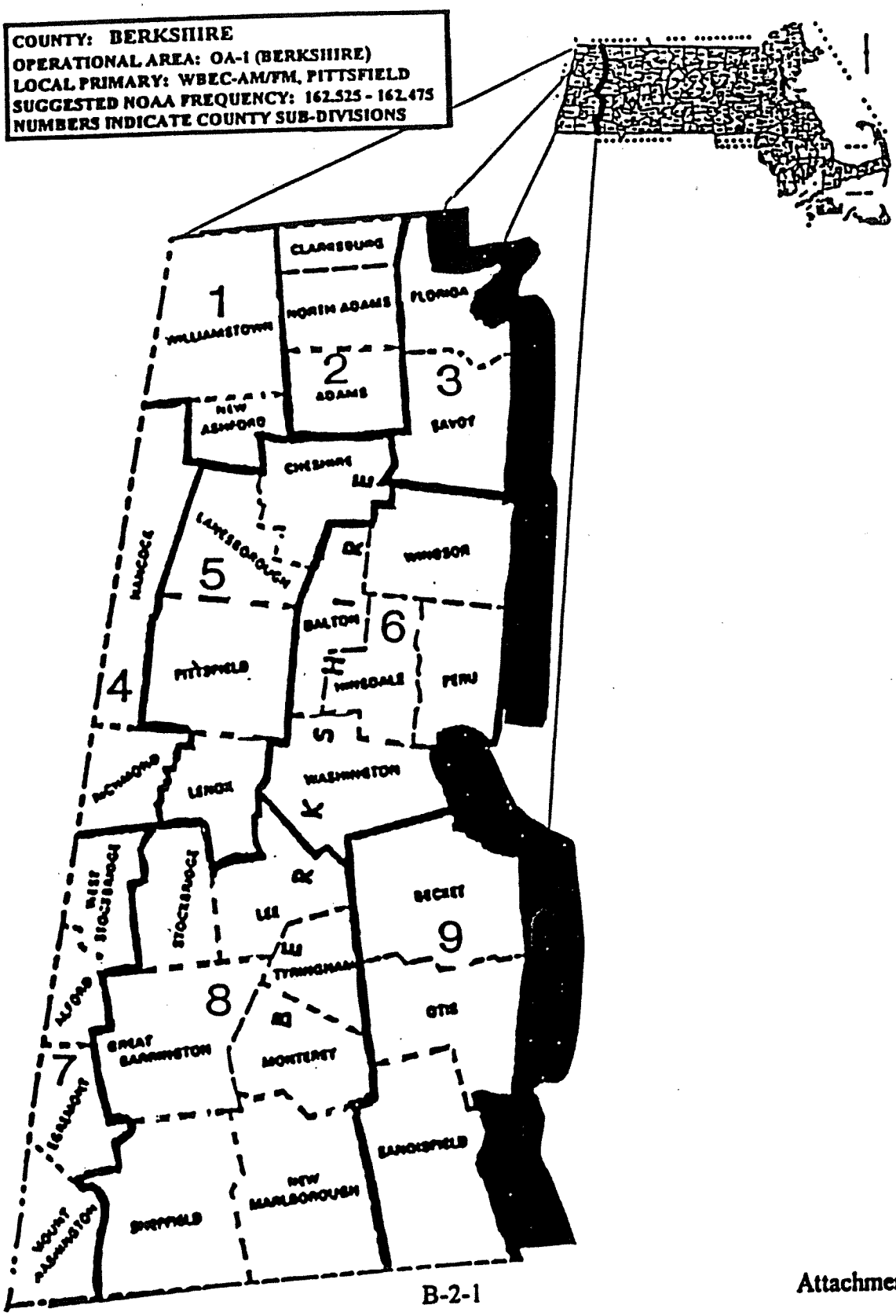
Operational Area Maps for Massachusetts

Page	Map Title	
B-1-1	Local Primary Stations - Operational Areas (Emergency Alert System)	
B-2	County Subdivision, and Suggested NOAA Frequencies	
	B-2-1	Berkshire
	B-2-2	Franklin
	B-2-3	Hampshire
	B-2-4	Hampden
	B-2-5	Worcester
	B-2-6	Middlesex
	B-2-7	Essex
	B-2-8	Suffolk
	B-2-9	Norfolk
	B-2-10	Bristol
	B-2-11	Plymouth
	B-2-12	Barnstable
	B-2-13	Dukes-Nantucket

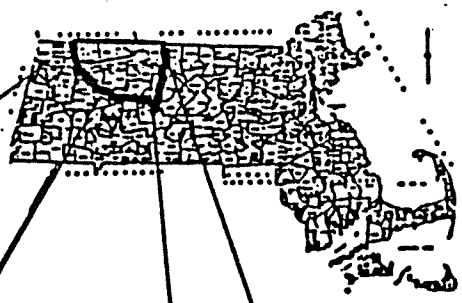


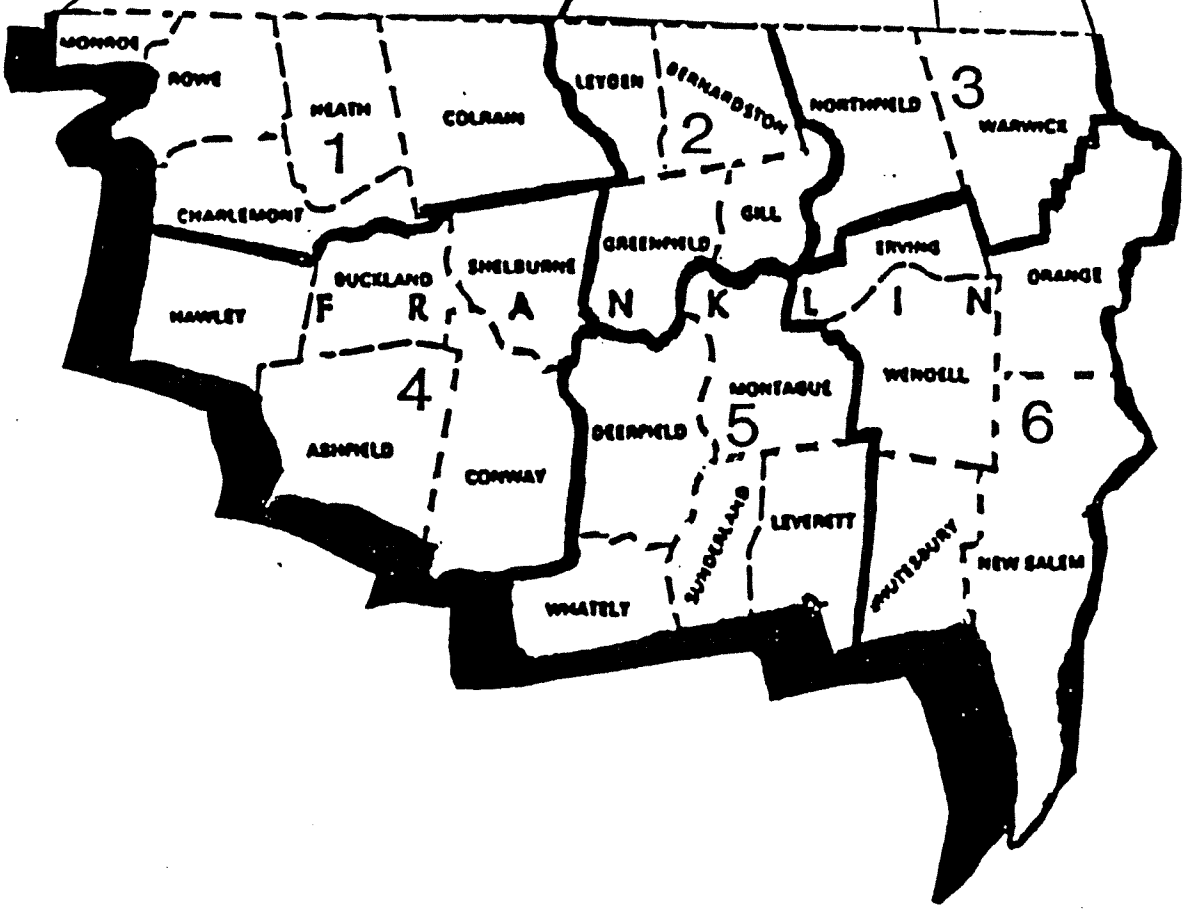
Attachment B

COUNTY: BERKSHIRE
OPERATIONAL AREA: OA-1 (BERKSHIRE)
LOCAL PRIMARY: WBEC-AM/FM, PITTSFIELD
SUGGESTED NOAA FREQUENCY: 162.525 - 162.475
NUMBERS INDICATE COUNTY SUB-DIVISIONS

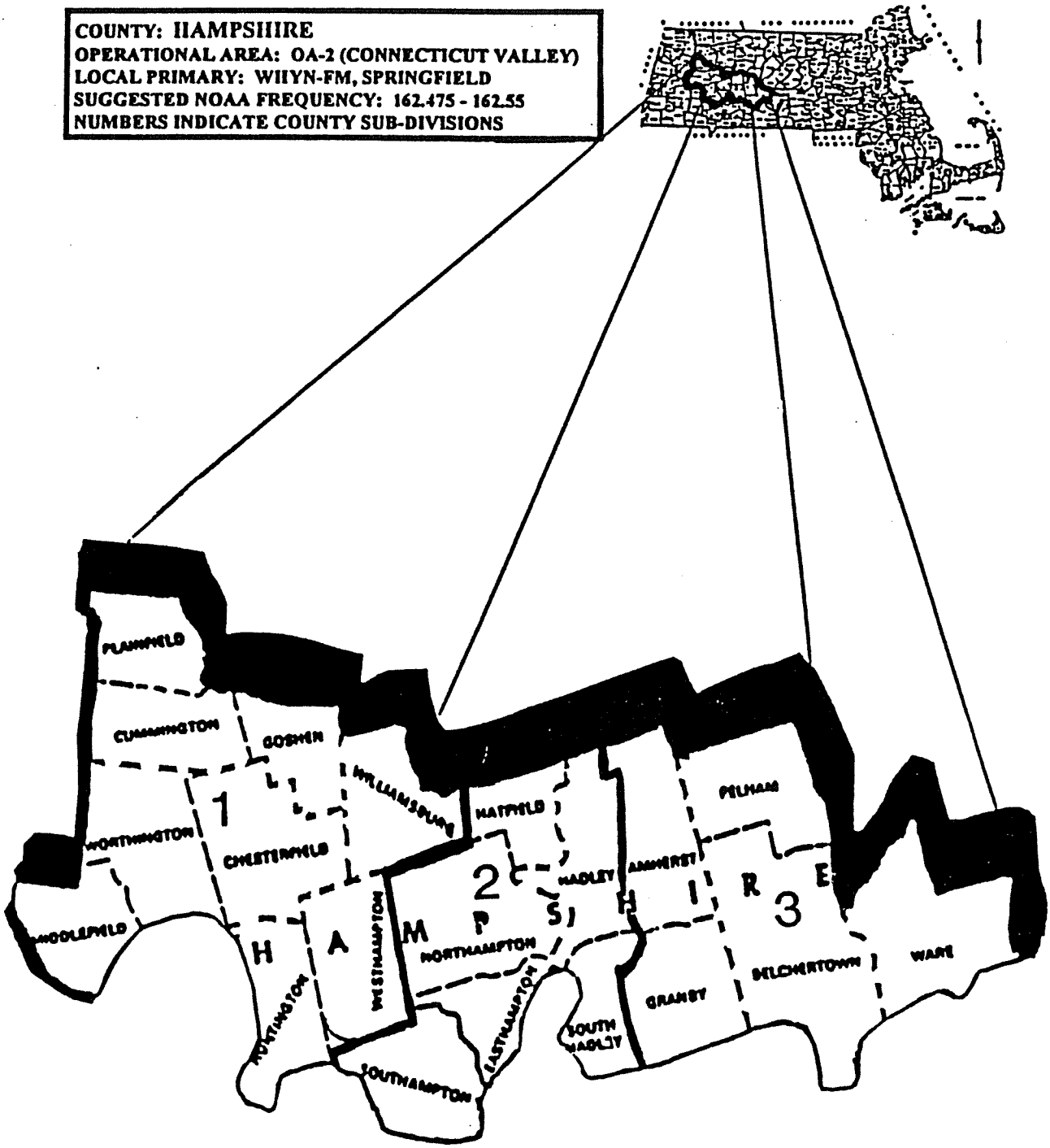


COUNTY: FRANKLIN
OPERATIONAL AREA: OA-2 (CONNECTICUT VALLEY)
LOCAL PRIMARY: WHYN-FM, SPRINGFIELD
SUGGESTED NOAA FREQUENCY: 162.55 - 162.425 - 162.525
NUMBERS INDICATE COUNTY SUB-DIVISIONS

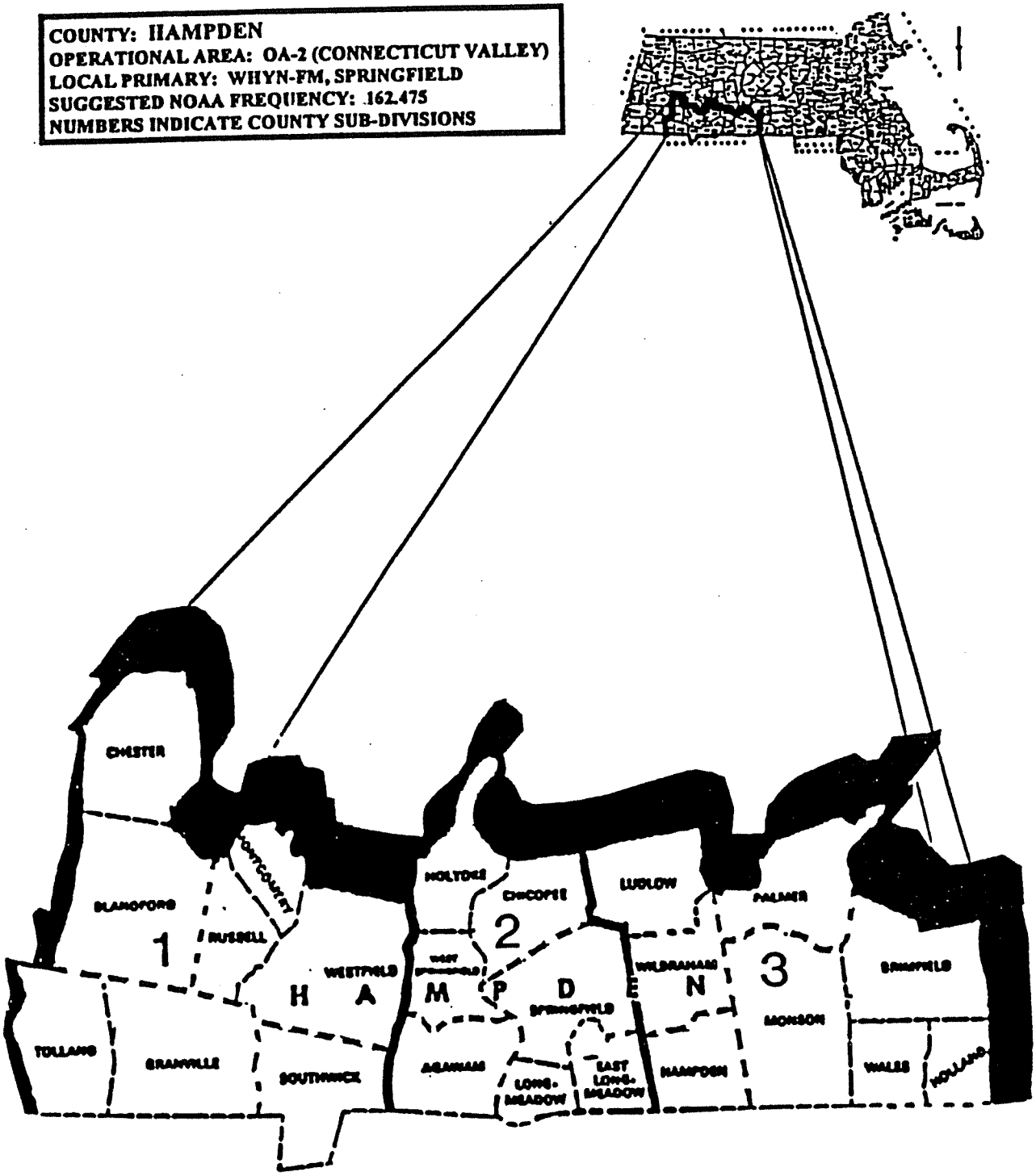




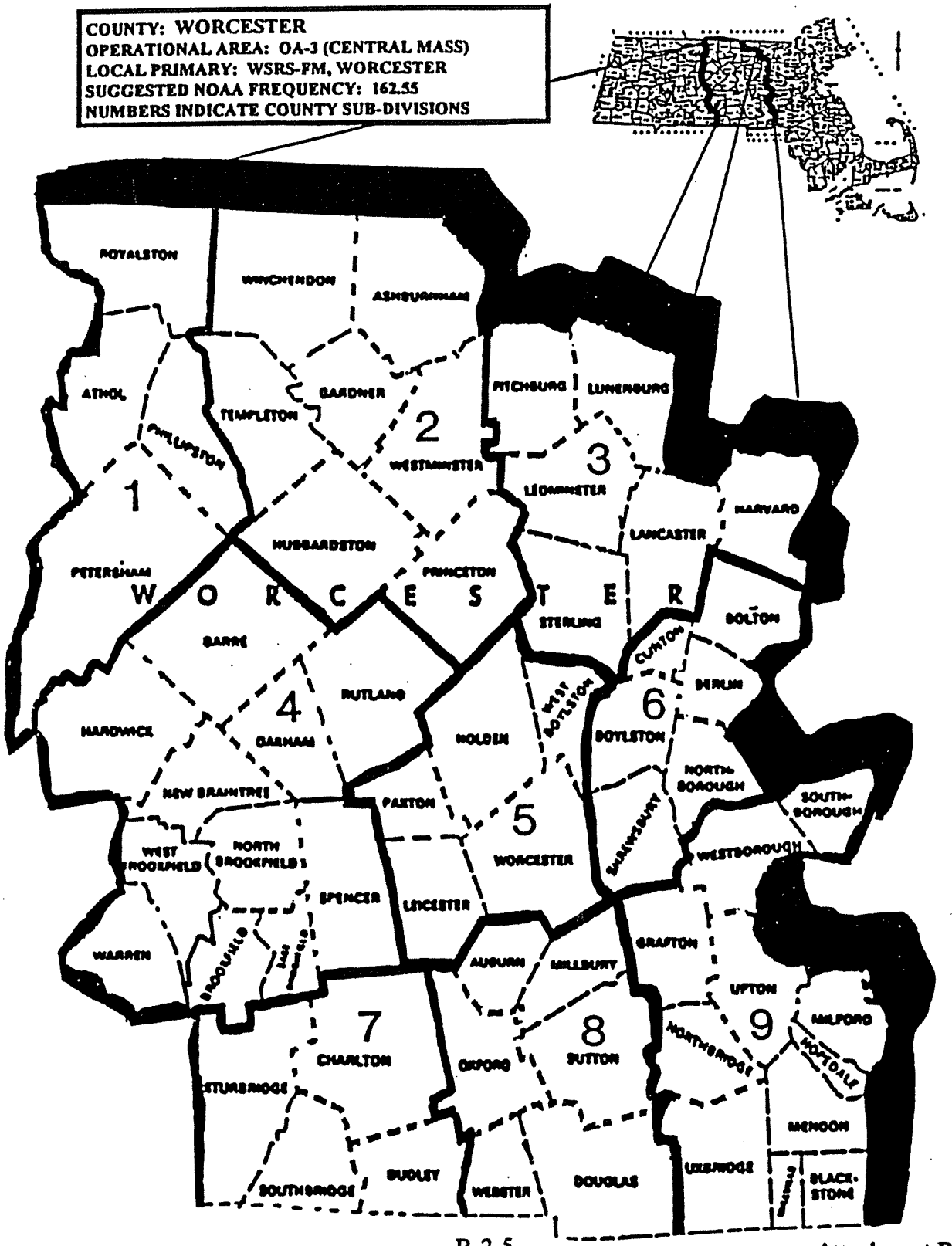
COUNTY: HAMPSHIRE
OPERATIONAL AREA: OA-2 (CONNECTICUT VALLEY)
LOCAL PRIMARY: WHYN-FM, SPRINGFIELD
SUGGESTED NOAA FREQUENCY: 162.475 - 162.55
NUMBERS INDICATE COUNTY SUB-DIVISIONS



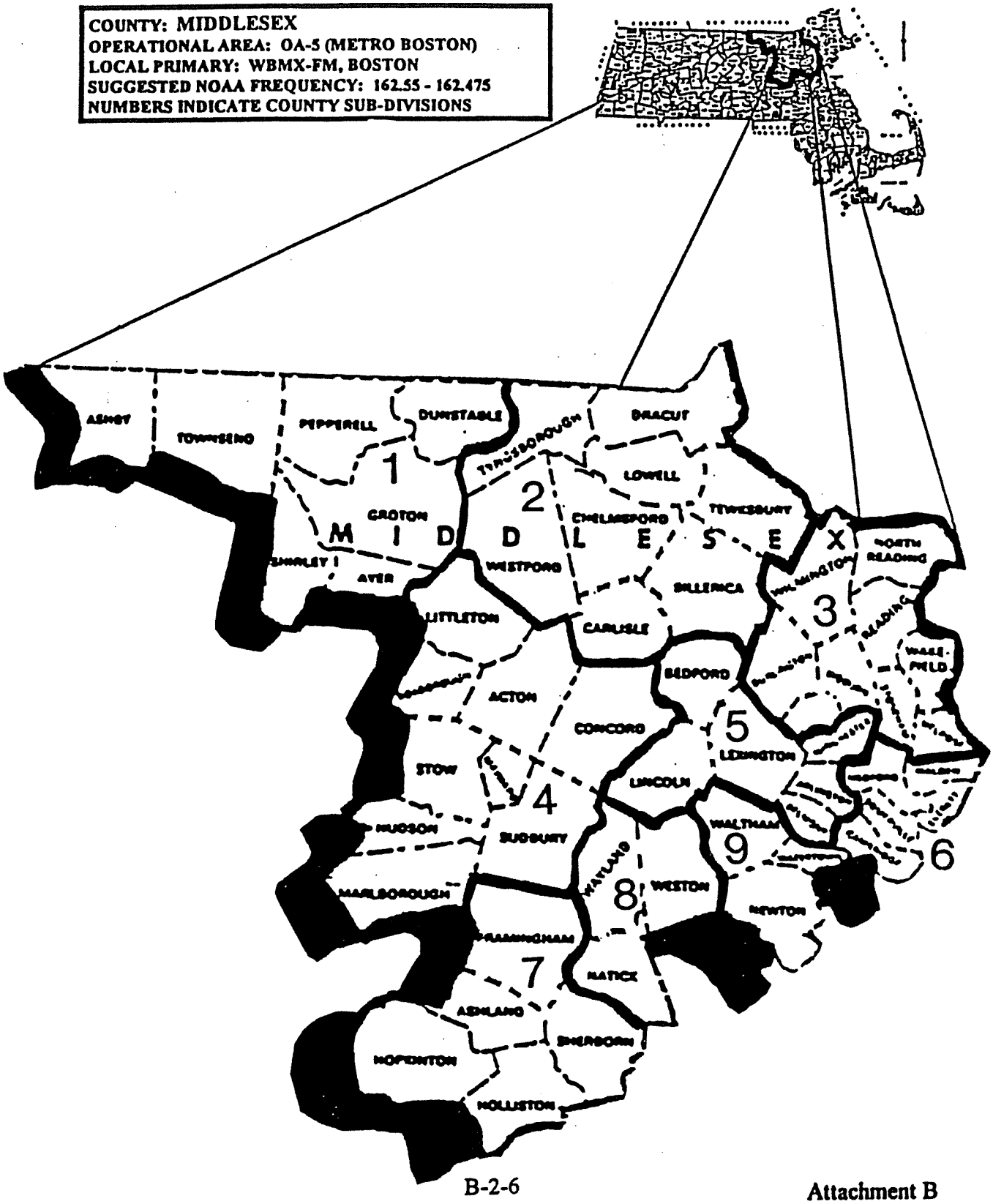
COUNTY: HAMPDEN
OPERATIONAL AREA: OA-2 (CONNECTICUT VALLEY)
LOCAL PRIMARY: WHYN-FM, SPRINGFIELD
SUGGESTED NOAA FREQUENCY: 162.475
NUMBERS INDICATE COUNTY SUB-DIVISIONS



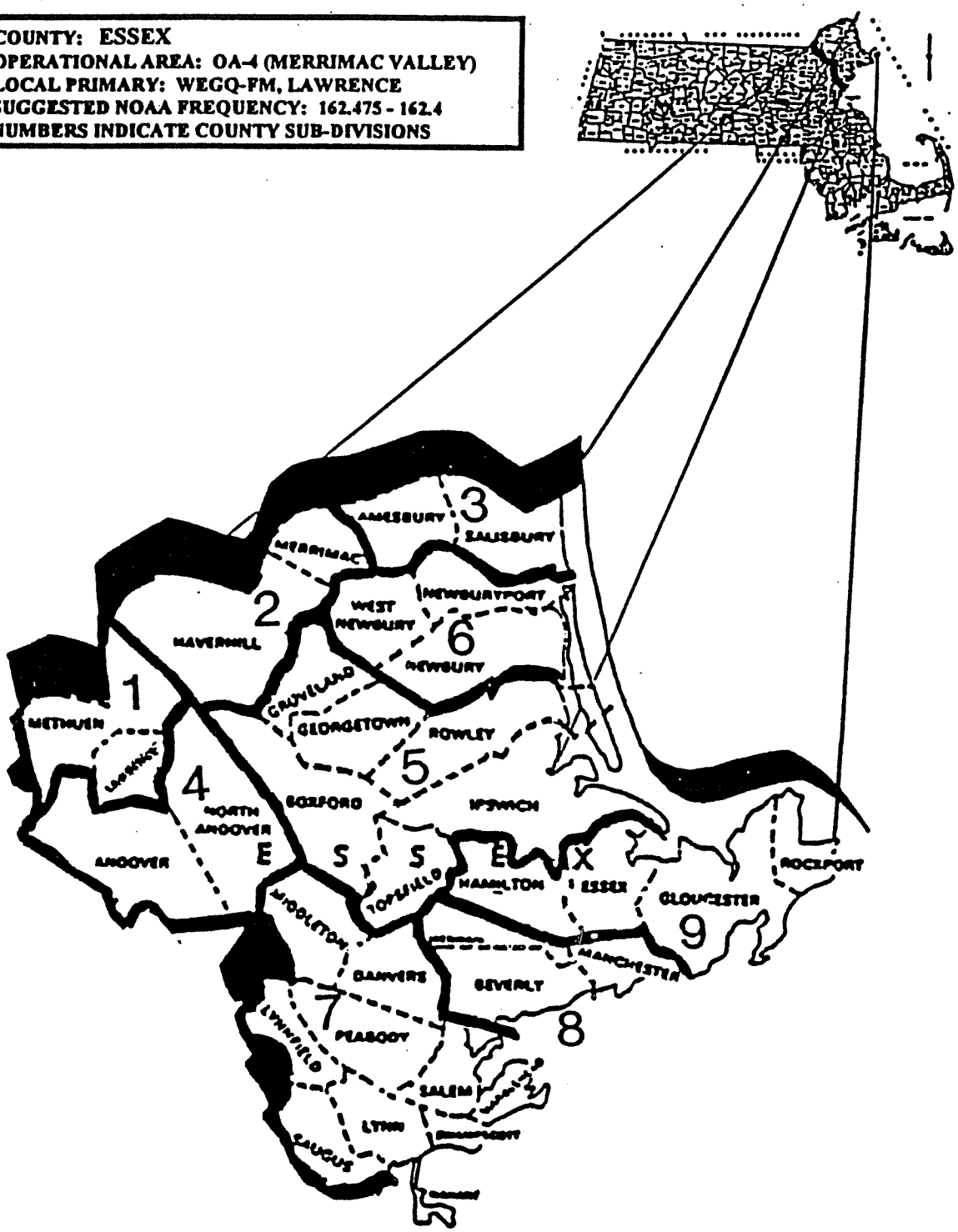
COUNTY: WORCESTER
OPERATIONAL AREA: OA-3 (CENTRAL MASS)
LOCAL PRIMARY: WSRS-FM, WORCESTER
SUGGESTED NOAA FREQUENCY: 162.55
NUMBERS INDICATE COUNTY SUB-DIVISIONS



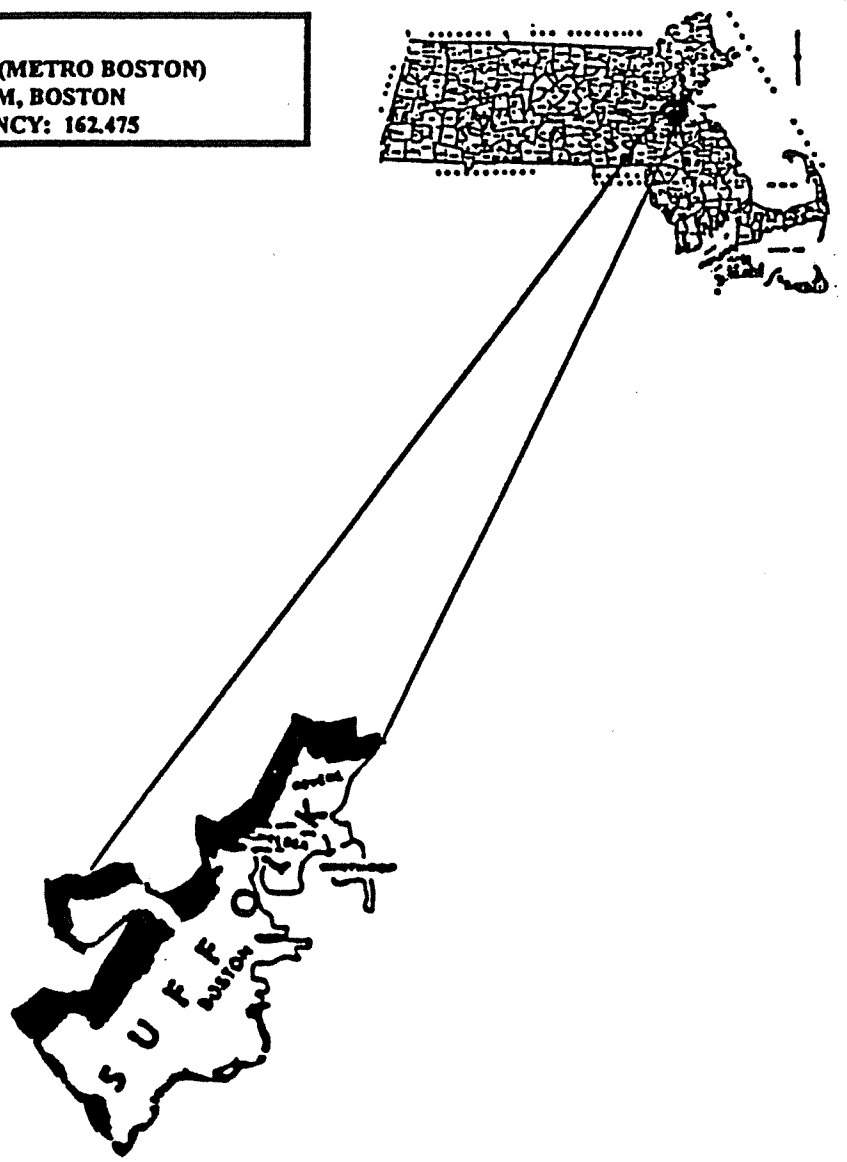
COUNTY: MIDDLESEX
OPERATIONAL AREA: OA-5 (METRO BOSTON)
LOCAL PRIMARY: WBMX-FM, BOSTON
SUGGESTED NOAA FREQUENCY: 162.55 - 162.475
NUMBERS INDICATE COUNTY SUB-DIVISIONS



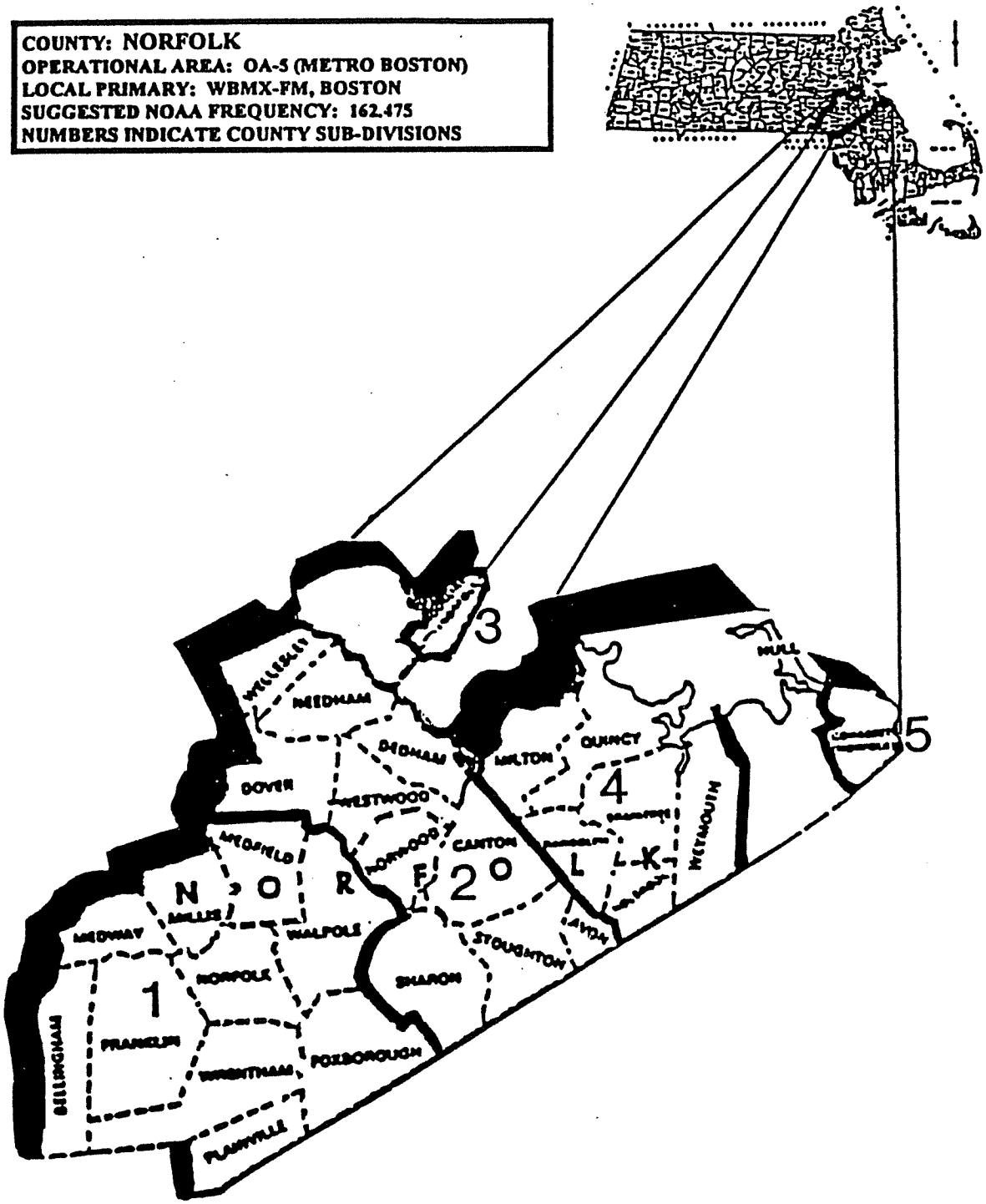
COUNTY: ESSEX
OPERATIONAL AREA: OA-4 (MERRIMAC VALLEY)
LOCAL PRIMARY: WEGQ-FM, LAWRENCE
SUGGESTED NOAA FREQUENCY: 162.475 - 162.4
NUMBERS INDICATE COUNTY SUB-DIVISIONS



COUNTY: SUFFOLK
OPERATIONAL AREA: OA-5 (METRO BOSTON)
LOCAL PRIMARY: WBMX-FM, BOSTON
SUGGESTED NOAA FREQUENCY: 162.475

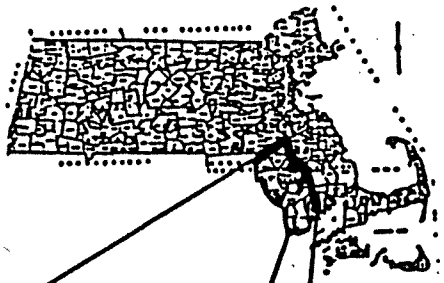


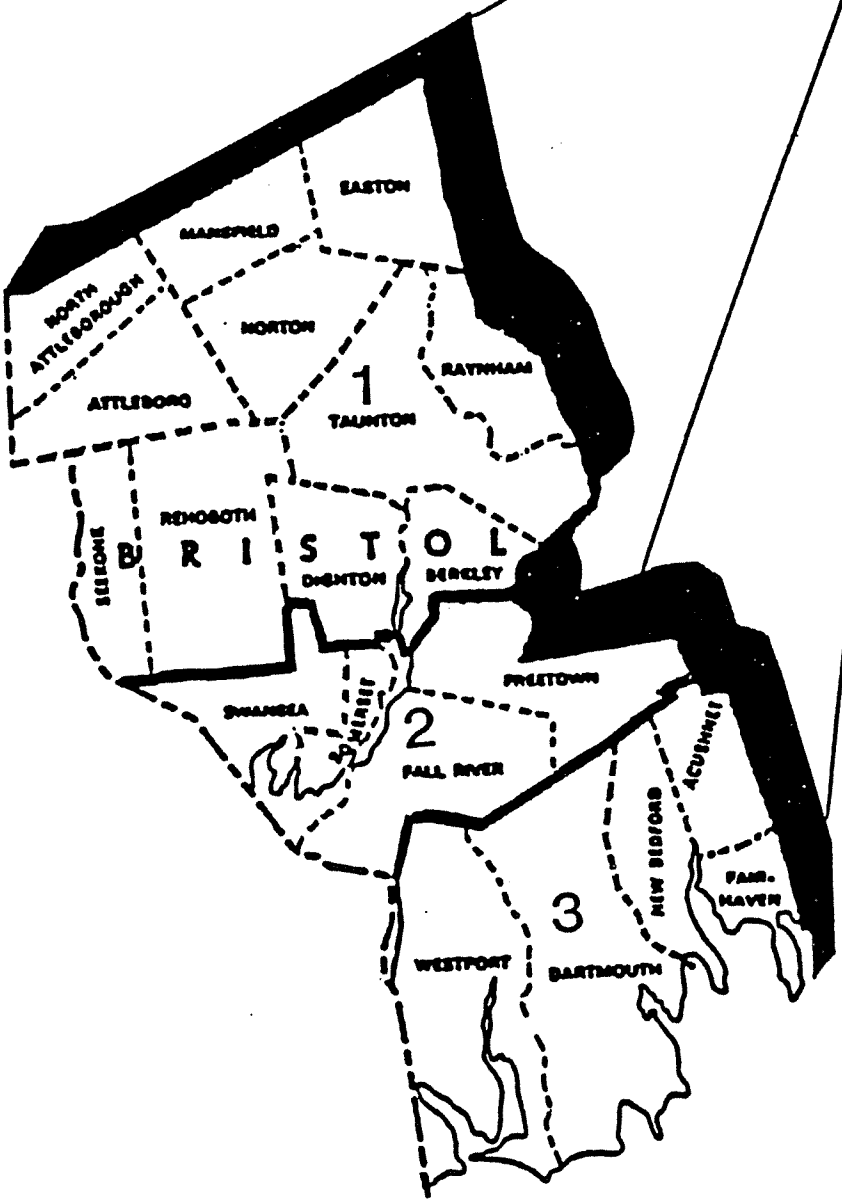
COUNTY: NORFOLK
OPERATIONAL AREA: OA-5 (METRO BOSTON)
LOCAL PRIMARY: WBMX-FM, BOSTON
SUGGESTED NOAA FREQUENCY: 162.475
NUMBERS INDICATE COUNTY SUB-DIVISIONS



MASSACHUSETTS
EMERGENCY ALERT SYSTEM PLAN

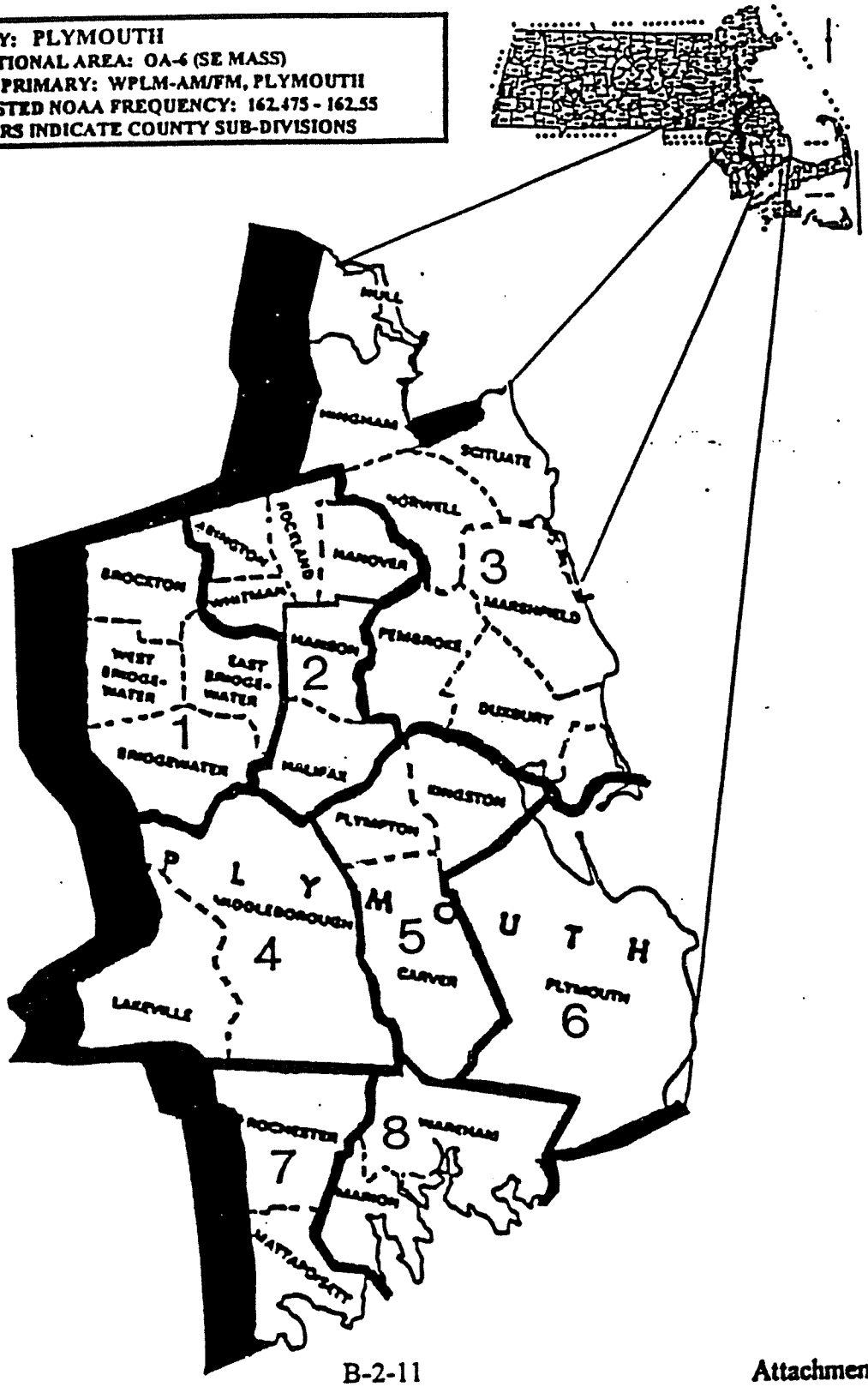
COUNTY: BRISTOL
OPERATIONAL AREA: OA-6 (SE MASS)
LOCAL PRIMARY: WPLM-AM/FM, PLYMOUTH
SUGGESTED NOAA FREQUENCY: 162.4 - 162.475 - 162.55
NUMBERS INDICATE COUNTY SUB-DIVISIONS



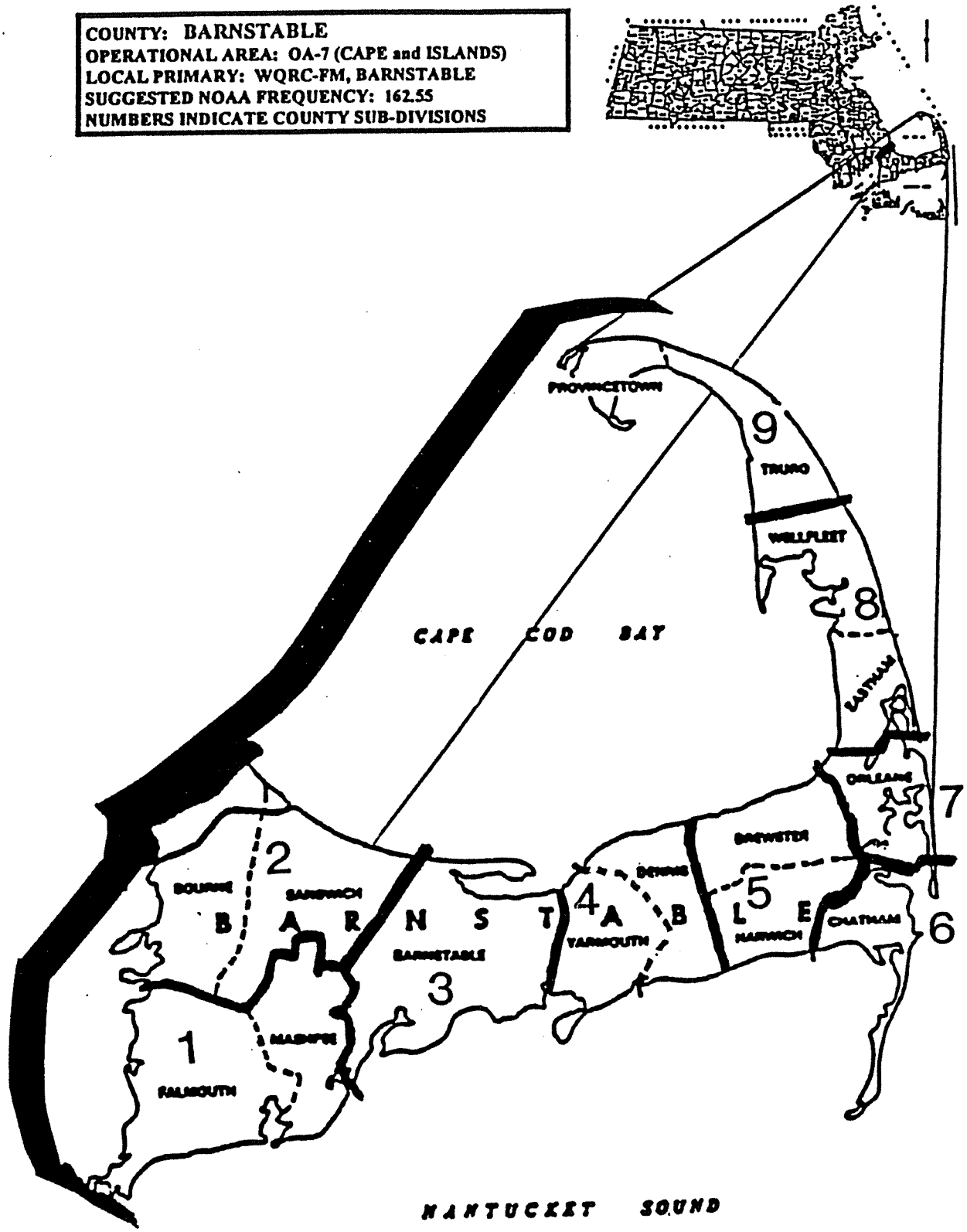


MASSACHUSETTS
EMERGENCY ALERT SYSTEM PLAN

COUNTY: PLYMOUTH
OPERATIONAL AREA: OA-6 (SE MASS)
LOCAL PRIMARY: WPLM-AM/FM, PLYMOUTH
SUGGESTED NOAA FREQUENCY: 162.475 - 162.55
NUMBERS INDICATE COUNTY SUB-DIVISIONS



COUNTY: BARNSTABLE
OPERATIONAL AREA: OA-7 (CAPE and ISLANDS)
LOCAL PRIMARY: WQRC-FM, BARNSTABLE
SUGGESTED NOAA FREQUENCY: 162.55
NUMBERS INDICATE COUNTY SUB-DIVISIONS



Attachment D: MASSACHUSETTS STATE RELAY NETWORK AND FCC MAPBOOK

MASSACHUSETTS STATE RELAY NETWORK

STATE PRIMARY SOURCE (S)

WBMX-FM	BOSTON	98.5

STATE PRIMARY SOURCES (S) -2

WBZ	BOSTON	1030

STATE RELAY SOURCE (S)

WPLM-FM	PLYMOUTH	99.1
WHYN-FM	SPRINGFIELD	93.1
WSRS-FM	WORCESTER	96.1

LOCAL PRIMARY SOURCE (S) -1

WQRC-FM	BARNSTABLE	99.9
WBMX-FM	BOSTON	98.5
WEGQ-FM	LAWRENCE	93.7
WBEC	PITTSFIELD	1420
WBEC-FM	PITTSFIELD	105.5
WPLM	PLYMOUTH	1390
WPLM-FM	PLYMOUTH	99.1
WHYN	SPRINGFIELD	560
WHYN-FM	SPRINGFIELD	93.1
WSRS-FM	WORCESTER	96.1

LOCAL PRIMARY SOURCE (S) -2

WXRV-FM	HAVERHILL	92.5
WTAG	WORCESTER	580

LOCAL PRIMARY SOURCE (S) -3

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - BERKSHIRE EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

WCDC-TV
25003
ADAMS
CH 19
447 KW 637 Meters
PN

WJJW
25003
NORTH ADAMS
91.1
0.42 KW -253 Meters
PN

* WBEC
25003
PITTSFIELD
1420
1./1. KW DA-N U
LP-1/BSPP

WBRK-FM
25003
PITTSFIELD
101.7
3.00 KW 44 Meters
PN

WUPE
25003
PITTSFIELD
95.9
1.00 KW 170 Meters
PN

WCFM
25003
WILLIAMSTOWN
91.9
0.44 KW -229 Meters
PN

WAMQ
25003
GREAT BARRINGTON
105.1
1.1 KW 159 Meters
PN

WMNB
25003
NORTH ADAMS
100.1
1.20 KW 153 Meters
PN

* WBEC-FM
25003
PITTSFIELD
105.5
0.95 KW 180 Meters
LP-1/BSPP

WTBR-FM
25003
PITTSFIELD
89.7
0.38 KW -35 Meters
PN

WBSL-FM
25003
SHEFFIELD
91.7
.230 KW -23 Meters
PN

WSBS
25003
GREAT BARRINGTON
860
0.004/2.7 KW ND-1 U
PN

WNAW
25003
NORTH ADAMS
1230
1. KW ND-1 U
PN

WBRK
25003
PITTSFIELD
1340
1.KW ND-1 U
PN/BSPP

WUHN
25003
PITTSFIELD
1110
5. KW DA-D D
PN

WCWL
25003
STOCKBRIDGE
91.3
0.45 KW 12 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - CAPE COD AND ISLANDS EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

---

* WQRC
25001
BARNSTABLE
99.9
50. KW 116 Meters
LP-1

WFPB
25001
FALMOUTH
91.9
0.65 KW 54 Meters
PN

WCOD-FM
25001
HYANNIS
106.1
45. KW 131 Meters
PN

WRZE
25019
NANTUCKET
96.3
50. KW 120 Meters
NN

WKPE-FM
25001
ORLEANS
104.7
50. KW 140 Meters
PN

WOCN-FM
25001
SOUTH YARMOUTH
103.9
3.0 KW 96 Meters
PN

WKKL
25001
WEST BARNSTABLE
90.7
.205 KW 38 Meters
NN

WFCC-FM
25001
CHATHAM
107.5
50. KW 104 Meters
PN

WCCT-FM
25001
HARWICH
90.3
0.64 KW 38 Meters
PN

WPXC
25001
HYANNIS
102.9
3.1 KW 141 Meters
PN

WNMH
25001
NORTHFIELD
91.5
.235 KW -94 Meters
NN

WOMR
25001
PROVINCETOWN
91.9
0.81 KW 47 Meters
PN

WMVY
25007
TISBURY
92.7
3.00 KW 87 Meters
PN

WUOK
25001
WEST YARMOUTH
1240
1. KW ND-1 U
PN

WCIB
25001
FALMOUTH
101.9
50. KW 146 Meters
PN

WJCO
25001
HARWICH PORT
93.5
3.0 KW 100 Meters
PN

WWKJ
25001
MASHPEE
101.1
3,7 KW 77 Meters
PN

WKPE
25001
ORLEANS
1170
1. KW DA-D D
PN

WSDH
25001
SANDWICH
91.5
0.31 KW 46 Meters
PN

WZBU
25007
VINEYARD HAVEN
CH 58
1150 KW 134 Meters
PN

WXTK
25001
WEST YARMOUTH
94.9
50. KW 75 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - CENTRAL MASSACHUSETTS EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

WCAT-FM
25027
ATHOL
99.9
1.85 KW 124 Meters
PN

WEIM
25027
FITCHBURG
1280
1./5. KW DA-2 U
PN

WXPL
25027
FITCHBURG
91.3
.100 KW -41 Meters
PN

WCMX
25027
LEOMINSTER
1000
1. KW ND-D D
PN

WQVR
25027
SOUTHBRIDGE
100.1
2.1 KW 121 Meters
PN

WINQ-FM
25027
WINCHENDON
97.7
1.85 KW 127 Meters
PN

WCHC
25027
WORCESTER
88.1
.100 KW -2 Meters
PN

WBPV
25027
CHARLTON
90.1
.100 KW 119 Meters
NN

WFGL
25027
FITCHBURG
960
1./2.5 KW DA-2 U
PN

WGAW
25027
GARDNER
1340
1. KW ND-1 U
PN

WMRC
25027
MILFORD
1490
1. KW ND-1 U
PN

WGFP
25027
WEBSTER
940
1. KW ND-D D
PN

WAAF
25027
WORCESTER
107.3
18.5 KW 250 Meters
PN

WCRN
25027
WORCESTER
830
5./7. KW DA-2 U
PN

WNRC
25027
DUDLEY
95.1
.014 KW 38 Meters
NN

WXLO-FM
25027
FITCHBURG
104.5
37. KW 172 Meters
PN

WVNE
25027
LEICESTER
760
25. KW ND-D D
PN

WESO
25027
SOUTHBRIDGE
970
0.021/1. KW ND-1 U
PN

WXXW
25027
WEBSTER
98.9
1.85 KW 125 Meters
PN

WBPR
25027
WORCESTER
91.9
1.0 KW 81 Meters
PN

WCUW
25027
WORCESTER
91.3
0.63 KW 44 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - CENTRAL MASSACHUSETTS EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

WICN
25027
WORCESTER
90.5
8.1 KW 113 Meters
PN

WNEB
25027
WORCESTER
1230
1. KW ND-1 U
PN

WORC
25027
WORCESTER
1310
1./5. KW DA-2 U
PN

* WSRS
25027
WORCESTER
96.1
16.5 KW 263 Meters
LP-1/SR

* WTAG
25027
WORCESTER
580
5./5. KW DA-2 U
LP-2/BSPP

WUNI
25027
WORCESTER
CH 27
1150 KW 466 Meters
NN

WWTM
25027
WORCESTER
1440
5./5. KW DA-N U
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - CONNECTICUT VALLEY EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

WAMH
25015
AMHERST
89.3
.150 KW 219 Meters
PN

WRNX
25015
AMHERST
100.9
1.35 KW 211 Meters
PN

WGAJ
25011
DEERFIELD
91.7
.100 KW 95 Meters
PN

WHAI
25011
GREENFIELD
1240
1. KW ND-1 U
PN/BSPP

WCCH
25013
HOLYOKE
103.5
.009 KW 79 Meters
PN

WHMP-FM
25015
NORTHAMPTON
99.3
6.0 KW 99 Meters
PN

WMHC
25015
SOUTH HADLEY
91.5
.100 KW -5 Meters
PN

WFCR
25015
AMHERST
88.5
35. KW 219 Meters
PN

WTTT
25015
AMHERST
1430
5. KW DA-D D
PN

WAQY
25013
EAST LONGMEADOW
1600
2.5 KW ND-D D
PN

WHAI-FM
25011
GREENFIELD
98.3
2.0 KW 123 Meters
PN

WREB
25013
HOLYOKE
930
0.044/0.5 KW ND-1 U
PN

WOZQ
25015
NORTHAMPTON
91.9
.200 KW -35 Meters
PN

WAIC
25011
SPRINGFIELD
91.9
.230 KW 20 Meters
PN

WMUA
25015
AMHERST
91.1
1.00 KW 8 Meters
PN

WACE
25013
CHICOPEE
730
0.008/5. KW ND-1 U
NN

WGAM
25011
GREENFIELD
1520
10. KW DA-D D
PN

WRSI
25011
GREENFIELD
95.3
0.32 KW 238 Meters
PN

WHMP
25015
NORTHAMPTON
1400
1. KW ND-1 U
PN/BSPP

WCAT
25011
ORANGE-ATHOL
700
2.5 KW ND-D D
PN

WAQY-FM
25011
SPRINGFIELD
102.1
17.0 KW 238 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - CONNECTICUT VALLEY EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

WGBY-TV
25011
SPRINGFIELD
CH 57
1200 KW 305 Meters
PN

WGGB-TV
25011
SPRINGFIELD
CH 40
4270 KW 322 Meters
PN

* WHYN
25011
SPRINGFIELD
560
1./5. KW DA-2 U
LP-1/BSPP

* WHYN-FM
25011
SPRINGFIELD
93.1
8.9 KW 305 Meters
LP-1/SR

WMAS
25011
SPRINGFIELD
1450
1. KW ND-1 U
PN

WMAS-FM
25011
SPRINGFIELD
94.7
50. KW 59 Meters
PN

WNEK-FM
25011
SPRINGFIELD
105.1
.013 KW -7 Meters
PN

WSCB
25011
SPRINGFIELD
89.9
.100 KW 11 Meters
PN

WSPR
25011
SPRINGFIELD
1270
1./5. KW DA-2 U
PN

WTCC
25011
SPRINGFIELD
90.7
4.0 KW 28 Meters
PN

WWLP
25011
SPRINGFIELD
CH 22
3390 KW 268 Meters
PN

WPVQ
25011
TURNERS FALLS
93.9
2.5 KW 109 Meters
PN

WARE
25015
WARE
1250
2.5/5. KW DA-2 U
PN

WACM
25013
WEST SPRINGFIELD
1490
0.47 KW ND-1 U
PN

WNNZ
25013
WESTFIELD
640
1./50. KW DA-2 U
PN

WSKB
25013
WESTFIELD
89.5
.100 KW -66 Meters
NN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - MERRIMACK VALLEY EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

WPAA
25009
ANDOVER
91.7
.025 KW 64 Meters
PN

WBOQ
25009
GLOUCESTER
104.9
1.55 KW 136 Meters
PN

WCCM
25009
LAWRENCE
800
1. KW ND-D D
PN/BSPP

WMFP
25009
LAWRENCE
CH 62
5000 KW 186 Meters
PN

WLYN
25009
LYNN
1360
0.076/0.7 KW ND-1 U
PN

WMWM
25009
SALEM
91.7
.130 KW 24 Meters
PN

WNSH
25009
BEVERLY
1570
0.5/0.5 KW DA-2 U
NN

WHAV
25009
HAVERHILL
1490
1. KW ND-1 U
PN

* WEGQ
25009
LAWRENCE
93.7
34.0 KW 179 Meters
LP-1/BSPP

WLLH
25017
LOWELL
1400
1. KW ND-1 U
PN

WNBP
25009
NEWBURYPORT
1450
1. KW ND-1 U
PN

WBMT
25009
BOXFORD
88.3
0.71 KW 6 Meters
PN

* WXRV
25009
HAVERHILL
92.5
25.0 KW 217 Meters
LP-2

WLLH
25009
LAWRENCE
1400
1. KW ND-1 U
PN

WFNX
25009
LYNN
101.7
1.65 KW 137 Meters
PN

WESX
25009
SALEM
1230
1. KW ND-1 U
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - METRO BOSTON EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

\+ NATIONAL PRIMARY
** STATE PRIMARY

WHAB
25017
ACTON
89.1
.008 KW 8 Meters
PN

WABU
25025
BOSTON
CH 68
1350 KW 249 Meters
PN

WBCN
25025
BOSTON
104.1
21.0 KW 235 Meters
PN

** WBMX
25025
BOSTON
98.5
9.0 KW 349 Meters
SP/LP-1

WBNW
25025
BOSTON
590
5. KW DA-1 U
PN

WBUR
25025
BOSTON
90.9
7.2 KW 305 Meters
PN

\+ WBZ
25025
BOSTON
1030
50. KW DA-1 U
NP/BSPP/SP-2

WBZ-TV
25025
BOSTON
CH 04
60.3 KW 354 Meters
PN

WCVB-TV
25025
BOSTON
CH 05
100 KW 299 Meters
PN

WEEI
25025
BOSTON
850
50./50. KW DA-2 U
PN

WERS
25025
BOSTON
88.9
4.0 KW 186 Meters
PN

WEZE
25025
BOSTON
1260
5./5. KW DA-N U
PN

WFXT
25025
BOSTON
CH 25
1950 KW 357 Meters
PN

WGBH
25025
BOSTON
89.7
100. KW 198 Meters
PN

WGBH-TV
25025
BOSTON
CH 02
87.1 KW 317 Meters
PN

WGBX-TV
25025
BOSTON
CH 44
1510 KW 329 Meters
PN

WHDH-TV
25025
BOSTON
CH 07
316 KW 306 Meters
PN

WILD
25025
BOSTON
1090
5. KW ND-D D
PN

WJMN
25025
BOSTON
94.5
11.5 KW 321 Meters
PN

WKLB-FM
25025
BOSTON
96.9
8.8 KW 351 Meters
PN

WMJX
25025
BOSTON
106.7
21.5 KW 235 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - METRO BOSTON EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

WNFT
25025
BOSTON
1150
5./5. KW DA-2 U
PN

WNRB
25025
BOSTON
1510
50./50. KW DA-2 U
PN

WODS
25025
BOSTON
103.3
16.0 KW 270 Meters
PN

WRBB
25025
BOSTON
104.9
.019 KW 27 Meters
PN

WRKO
25025
BOSTON
680
50./50. KW DA-2 U
PN

WROL
25025
BOSTON
950
5. KW ND-D D
PN

WSBK-TV
25025
BOSTON
CH 38
2340 KW 354 Meters
PN

WUMB-FM
25025
BOSTON
91.9
0.66 KW 63 Meters
PN

WZLX
25025
BOSTON
100.7
21.5 KW 235 Meters
PN

WBOS
25025
BROOKLINE
92.9
8.8 KW 351 Meters
PN

WUNR
25025
BROOKLINE
1600
5. KW DA-1 U
PN

WHRB
25025
CAMBRIDGE
95.3
1.70 KW 186 Meters
PN

WJIB
25025
CAMBRIDGE
740
0.005/0.25 KW ND-1 U
PN

WLVI-TV
25025
CAMBRIDGE
CH 56
2240 KW 360 Meters
PN

WMBR
25025
CAMBRIDGE
88.1
0.72 KW 90 Meters
PN

WADN
25017
CONCORD
1120
1./5. KW DA-2 U
PN

WIQH
25017
CONCORD
88.3
.010 KW 7 Meters
PN

WBPS
25021
DEDHAM
890
3.4/25. KW DA-2 U
PN

WXKS
25025
EVERETT
1430
1./5. KW DA-N U
PN

WDJM-FM
25017
FRAMINGHAM
91.3
.100 KW 27 Meters
NN

WKOX
25017
FRAMINGHAM
1200
1./10. KW DA-N U
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - METRO BOSTON EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

WROR-FM
25017
FRAMINGHAM
105.7
8.5 KW 349 Meters
PN/NN

WCAP
25017
LOWELL
980
5./5. KW DA-2 U
PN

WHSH-TV
25017
MARLBOROUGH
CH 66
3630 KW 326 Meters
NN

WMFO
25017
MEDFORD
91.5
.125 KW 41 Meters
NN

WBIV
25017
NATICK
1060
1. KW ND-D D
PN

WDIS
25021
NORFOLK
1170
1. KW DA-D D
PN

WSRB
25021
WALPOLE
91.5
.013 KW 27 Meters
PN

WGAO
25021
FRANKLIN
88.3
.175 KW 58 Meters
PN

WJUL
25017
LOWELL
91.5
1.4 KW 63 Meters
PN

WSRO
25017
MARLBOROUGH
1470
5./5. KW DA-N U
PN

WXKS-FM
25017
MEDFORD
107.9
20.5 KW 235 Meters
PN

WNTN
25025
NEWTON
1550
10. KW ND-D D
PN

WJDA
25021
QUINCY
1300
0.072/1. KW ND-1 U
PN

WBRS
25017
WALTHAM
100.1
.025 KW 46 Meters
NN

WHHB
25021
HOLLISTON
99.9
.017 KW 62 Meters
PN

WOAZ
25017
LOWELL
99.5
32. KW 183 Meters
PN

WAVM
25017
MAYNARD
91.7
.016 KW -2 Meters
NN

WMLN-FM
25021
MILTON
91.5
.170 KW 29 Meters
NN

WZBC
25025
NEWTON
90.3
1.00 KW 67 Meters
PN

WYAJ
25017
SUDBURY
97.7
.004 KW 67 Meters
PN

WCRB
25017
WALTHAM
102.5
15.0 KW 282 Meters
PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - METRO BOSTON EAS LOCAL AREA

CALL SIGN	WRCA	WZLY	WHSR-FM
FIPS CODE	25017	25021	25017
CITY OF LICENSE	WALTHAM	WELLESLEY	WINCHESTER
FREQUENCY	1330	91.5	91.9
FACILITIES	5./5. KW DA-2 U	.007 KW 47 Meters	.005 KW 28 Meters
EAS DESIGNATION	PN	PN	PN

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - SOUTH EAST MASSACHUSETTS EAS LOCAL AREA

CALL SIGN
FIPS CODE
CITY OF LICENSE
FREQUENCY
FACILITIES
EAS DESIGNATION

* LOCAL PRIMARY

WARA
25005
ATTLEBORO
1320
5./5. KW DA-2 U
PN

WBIM-FM
25023
BRIDGEWATER
91.5
.180 KW 22 Meters
PN

WBET
25023
BROCKTON
1460
1./5. KW DA-N U
PN

WCAV
25023
BROCKTON
97.7
3.00 KW 84 Meters
PN

WMSX
25023
BROCKTON
1410
0.156/1. KW DA-2 U
PN

WSHL-FM
25005
EASTON
91.3
.100 KW 20 Meters
PN

WFHN
25005
FAIRHAVEN
107.1
2.40 KW 106 Meters
PN

WHTB
25005
FALL RIVER
1400
1. KW ND-1 U
PN

WSAR
25005
FALL RIVER
1480
5. KW DA-1 U
PN/BSPP

WWTA
25023
MARION
88.5
.100 KW 16 Meters
PN

WATD-FM
25005
MARSHFIELD
95.9
2.8 KW 105 Meters
PN

WCEG
25023
MIDDLEBOROUGH CENTER
1530
1. KW ND-D D
PN

WBSM
25005
NEW BEDFORD
1420
1./5. KW DA-2 U
PN

WCTK
25005
NEW BEDFORD
98.1
47. KW 155 Meters
PN

WJFD-FM
25005
NEW BEDFORD
97.3
50. KW 152 Meters
PN

WLNE-TV
25005
NEW BEDFORD
CH 06
100 KW 283 Meters
PN

WNBH
25005
NEW BEDFORD
1340
1. KW ND-1 U
PN

WSMU-FM
25005
NORTH DARTMOUTH
91.1
1.20 KW 91 Meters
PN

WHRC
25023
NORWELL
CH 46
5.89 KW 75 Meters
PN

* WPLM
25023
PLYMOUTH
1390
5./5. KW DA-2 U
LP-1

* WPLM-FM
25023
PLYMOUTH
99.1
50. KW 131 Meters
LP-1/SR

Attachment D: MASSACHUSETTS FCC MAPBOOK

BROADCAST STATIONS - SOUTH EAST MASSACHUSETTS EAS LOCAL AREA

CALL SIGN	WRPS	WPEP	WSNE
FIPS CODE	25023	25005	25005
CITY OF LICENSE	ROCKLAND	TAUNTON	TAUNTON
FREQUENCY	88.3	1570	93.3
FACILITIES	.105 KW 42 Meters	0.227/1. KW ND-1 U	30.0 KW 189 Meters
EAS DESIGNATION	PN	PN	PN

Attachment E: Glossary of Terms

ACTIVATION: The initiation of the Emergency Alert System by transmission of the Emergency Alert System codes.

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

ATTENTION SIGNAL: Eight seconds of two tones (853 and 960Hz) used as an audio alert.

AUDIO FREQUENCY SHIFT KEYING (AFSK): 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 Emergency Alert System national activation; used to substantiate the information being sent.

AUTHORIZATION LETTER: The official authorization letter, given by FCC, for a broadcast station to go off the air during a national level activation of the Emergency Alert System.

AUTHORIZED GOVERNMENT OFFICIALS: The person or persons designated by government signatory to this procedure that have the authority to request activation of the Emergency Alert System and to make emergency announcements/broadcasts.

AUTOMATIC INTERRUPTION: The automatic encoding and transmission of Emergency Alert System 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 FC 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 power is 10 Watts or less.

Attachment E: Glossary of Terms

DIRECT BROADCAST SATELLITE (DBS): A service intended to deliver satellite signals directly to consumers using small, relatively inexpensive receive stations.

DECODER (EAS): An electronic device used by Emergency Alert System participants to receive Emergency Alert System alerts and to translate the Emergency Alert System codes into a visual message.

EMERGENCY: A situation posing a threat to the safety of life and property. Examples are, but not limited to: hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread power failures, industrial explosions, civil disorders and nuclear incidents or attack.

EMERGENCY ACTION NOTIFICATION (EAN): The message for national Emergency Alert System activation.

EMERGENCY ACTION TERMINATION (EAT): The message for national Emergency Alert System termination.

ENCODER: An electronic device used by Emergency Alert System participants to originate Emergency Alert System alerts by creating the Emergency Alert System codes for transmission to other participants and the public.

ENCODER (TWO-TONE): An electronic device that produces the two-tone signal.

EOM CODE: In ASCII form 'NNNN', this burst of data, sent three times signifies the end of an Emergency Alert System message and Emergency Alert System activation.

EVENT CODES: A three character ASCII code in the Emergency Alert System headers that denotes the type or cause of emergency event.

FEDERAL COMMUNICATIONS COMMISSION (FCC): One of the three federal agencies that administer the Emergency Alert System.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA): One of the three federal agencies that administer the Emergency Alert System.

FIPS NUMBER: A five character ASCII code in the Emergency Alert System headers that represent those counties affected by an Emergency Alert System activation, as defined by the Federal

Attachment E: Glossary of Terms

information Processing System that assigns each state and territory with their respective counties a five digit code.

HEADER CODE: A single string of intelligent digital Emergency Alert System, 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 a National Primary, State Primary, State Relay or Local Primary broadcast station or cable system.

LOCAL PRIMARY (LP): a KEY SOURCE WITHIN AN Emergency Alert System Local Area that is the primary source of Emergency Alert System programming for that area.

LOCATION CODE: An ASCII code in an Emergency Alert System 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.

LOW POWER TELEVISION (LPTV): A television signal translator station which also originates programming.

MAPBOOK: A list of broadcast stations and cable systems and their Emergency Alert System designation delineated by state and local area for use by other stations to determine the best source of Emergency Alert System 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 Emergency Alert System activations and programming as given in the FCC Mapbook and the state plans.

NATIONAL CONTROL POINT PROCEDURES: Those national Emergency Alert System procedures used on by national networks and program suppliers.

NATIONAL INFORMATION CENTER (NIC): A source of official Federal government information.

Attachment E: Glossary of Terms

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA): One of the three Federal agencies that participate in the Emergency Alert System.

NATIONAL PERIODIC TEST (NPT): Tests of National Primary sources.

NATIONAL PRIMARY (NP): a PRIMARY SOURCE OF Presidential or other national Emergency Alert System activations and programming, including broadcast stations involved with the Primary Entry Point system and Emergency Alert Notification networks.

NATIONAL WEATHER SERVICE (NWS): 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.

NOAA WEATHER RADIO (NWR): 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.

NON-PARTICIPATING NATIONAL (NN): An Emergency Alert System source (usually a broadcast station) that has elected not to participate in the National-level Emergency Alert System and removes its carrier from the air if a national-level activation occurs.

OPERATING HANDBOOK: A document issued by the FCC that instructs broadcast stations and cable personnel of the actions they must take during an activation of the Emergency Alert System.

OPERATOR INTERRUPTION: The transmission of an Emergency Alert System activation which has been manually initiated by broadcast station or cable system personnel.

ORIGINATOR CODE: A three character ASCII code in an Emergency Alert System header which denotes the source of an activation.

PARTICIPATING NATIONAL (NP): Broadcast stations, cable systems or MDS stations which monitor primary sources of Emergency Alert System programming and directly feed emergency alerts to the public.

PRESELECTED CODE: An Emergency Alert System event which the operator of Emergency Alert System equipment has chosen to be automatically encoded and retransmitted upon reception.

Attachment E: Glossary of Terms

PRIMARY ENTRY POINT (PEP): Key broadcast stations throughout the U.S. which together can provide national emergency information in the event hat the primary national alerting methods are inoperable.

PROTOCOL: A standard set of guidelines by which digital information is encoded and decoded, including the common code structure, the character set used, the sequence and timing of codes, and modulation technique used for radio transmission.

PROGRAM PRIORITIES: The precedence of the information that must be transmitted during the Emergency Alert System activation, namely national, local and state activations in that order.

RADIO BROADCAST DATA SYSTEM (RBDS): A defined protocol for data that is transmitted on the 57Khz subcarrier of FM radio broadcast stations utilized mainly by consumer devices equipped to receive it.

REQUIRED MONTHLY TEST (RMT): A coordinated monthly test of Emergency Alert System operations involving the full receiving and transmission of Emergency Alert System codes, Attention Signal, Emergency Alert System test programming, and Emergency Alert System EOM codes.

REQUIRED WEEKLY TEST (RWT): An independent weekly test of Emergency Alert System equipment only involving the decoding and encoding of Emergency Alert System 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.

SEVERE WEATHER: A potential exists for wind gusts that are greater the 58 miles per hour, hail that could exceed three-quarters (3/4) of an inch in diameter, and the possibility of a tornado occurring.

SEVERE WEATHER WATCH: A NWS indication the probabilities of a particular severe weather storm are high, and is an alert to the public of such severe weather conditions.

SEVERE WEATHER WARNING: A NWS indication that a particular severe weather storm has actually been sighted in the area or indicated by radar, and serves notice to the public that severe weather conditions are almost certain to occur.

Attachment E: Glossary of Terms

SPACE FREQUENCY: The audio frequency of AFSK modulation that corresponds to a digital bit of zero (0) ; the space frequency of Emergency Alert System codes is 6250/4 Hz or 1562.5 Hz.

STATE/LOCAL PLAN: A document that details monitoring assignments, actions to be taken in emergency activations, and other guidance for broadcasters and cable personnel in use of the Emergency Alert System.

STATE PRIMARY (SP): A primary source of Emergency Alert System state programming which can originate with a Governor or designated representative, such as a state's emergency operations officer.

STATE RELAY (SR): An entity which receives and retransmits Emergency Alert System activations in a State relay Network to assist in bringing a state activation to all Emergency Alert System Local Areas of a state.

STATE RELAY NETWORK: A system of facilities used to distribute State Emergency Alert System activations and programming across a state.

SUBCARRIER: An inaudible portion of the broadcast signal that is added to the program signal of the FM or TV sound and these can include the FM 57 kHz, 67 kHz, 69 kHz, and 92 kHz and the TV Subsidiary Communications Services.

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

VALID CODE: An Emergency Alert System header which has been match bit-for-bit with one of two other received headers thereby checked for validity.

WRSAME: Weather Radio Specific Area Message Encoder, 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.

Attachment F: Acronyms

AFSK	Audio frequency Shift Keying
AM	Amplitude Modulation
AP	Associated Press
ASCII	American Standard Code for Information Interchange
BPS	Bits per Second
BZW	Blizzard Warning
CATV	Cable Television
CA	Cooperative Agreement (formerly CCA Comprehensive Cooperative Agreement)
CEM	Civil Emergency Message
CFR	Code of Federal Regulations
CIV	Civil Authority
CONELRAD	Control of Electromagnetic Radiation
CPG	Civil Preparedness Guide
DBS	Direct Broadcast Satellite
DMO	Practice/Demo Warning
EAN	Emergency Alert Notification
EAS	Emergency Alert System
EAT	Emergency Alert Termination
EBS	Emergency Broadcast System
EO	Executive Order
EOC	Emergency Operations Center
EOM	End of Message
EVI	Evacuate Immediately

Attachment F: Acronyms

FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FFA	Flash Flood Watch
FFS	Flash Flood Statement
FFW	Flash Flood Warning
FIPS	Federal Information Processing Standard
FLA	Flood Watch
FLS	Flood Statement
FLW	Flood Warning
FM	Frequency Modulation
FNPRM	Further notice of Proposed Rule Making
HLS	Hurricane Statement
HUA	Hurricane Watch
HUW	Hurricane Warning
HWA	High Wind Watch
HWW	High Wind Warning
Hz	Hertz
LP	Local Primary
LPTV	Low Power Television
MCATC	Massachusetts Community Antenna Television Commission
MEMA	Massachusetts Emergency Management Agency
MO&O	Memorandum Opinion and Order
MDS	Multipoint Distribution System
NAB	National Association of Broadcasters

Attachment F: Acronyms

NAC	National Advisory Committee
NAWAS	National Warning System
NIC	National Information Center
NN	Non-participating National
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Inquiry
NP	National Primary
NPRM	Notice of Proposed Rule Making
NPT	National Periodic Test
NWR	NOAA Weather Radio
NWS	National Weather Service
OAECC	Operational Area Emergency Communications Committee
PEP	Primary Entry Point
PN	Participating National
PNPS	Pilgrim Nuclear Power Station
PPA	Performance Partnership Agreement
PSTN	Public Switch telephone Network
R&O	Report and Order
RBDS	Radio Broadcast Data System
RMT	Required Monthly test
RPU	Remote Pickup Unit
RWT	Required Weekly Test
SAME	Specific Area Message Encoding
SATCOM	Satellite Communications

Attachment F: Acronyms

SBE	Society of Broadcast Engineers
SCTE	Society of Cable television Engineers
SECC	State Emergency Communications Committee
SLA	State and Local Assistance
SMATV	Satellite Master Antenna Television
SNPS	Seabrook nuclear Power Station
SP	State Primary
SPS	Special Weather Report
SR	State Relay
SVA	Severe Thunderstorm Watch
SVR	Severe Thunderstorm Warning
SVS	Severe Thunderstorm Statement
TOA	Tornado Watch
TOR	Tornado Warning
TSA	Tsunami Watch
TSW	Tsunami Warning
TV	Television
UPI	United Press International
UTC	Coordinated Universal Time
VHF	Very High Frequency
VYNPS	Vermont Yankee Nuclear Power Station
WHCA	White House Communications Agency
WRSAME	Weather Radio Specific Area Message Encoding
WSA	Winter Storm Watch

Attachment F: Acronyms

WSW	Winter Storm Warning
WXR	National Weather Service

Attachment: G EAS CODES TRANSMITTED BY KEY EAS SOURCES

EAS CODES TRANSMITTED BY KEY EAS SOURCES

ORG-ORIGINATOR CODES	EEE-EVENT NATURE OF ACTIVATION	EVENT CODES
EAN=Emergency Action (National) Notification Network	Emergency Action Notification (National)	EAN
	Emergency Action Termination (National)	EAT
	National Information Center	NIC
PEP=Primary Entry Point	National Periodic Test	NPT
	Required Monthly Test	RMT
	Required Weekly Tests	RWT
WXR=National Weather Service	Blizzard Warning	BZW*
	Tornado Watch	TOA
	Tornado Warning	TOR*
CIV = Civil Authorities	Severe Thunderstorm Watch	SVA
	Severe Thunderstorm Warning	SVR*
	Severe Weather Statement	SVS
EAS = Broadcast Station or a Cable Station	Special Weather Statement	SPS
	Flash Flood Watch	FFA
	Flash Flood Warning	FFW*
	Flash Flood Statement	FFS
	Flood Watch	FLA
	Flood Warning	FLW
	Flood Statement	FLS
	Special Marine Warning	SMW
	Coastal Flood Watch	CFA
	Coastal Flood Warning	CFW
	Winter Storm Watch	WSA
	Winter Storm Warning	WSW
	Blizzard Warning	BZW
	High Wind Watch	HWA
	High Wind Warning	HWW
	Hurricane Watch	HUA
	Hurricane Warning	HUW*
	Hurricane Statement	HLS
	Evacuation Immediate	EVI
	Civil Emergency Message	CEM
	Practice/Demo Warning	DMO
	Administrative Message	ADR

Attachment: G EAS CODES TRANSMITTED BY KEY EAS SOURCES

EAS CODES TRANSMITTED BY KEY EAS SOURCES

ORG-ORIGINATOR CODES	**EEE**-EVENT NATURE OF ACTIVATION	EVENT CODES
EAS = Broadcast Station or a Cable Station (Cont'd)	Earthquake Alert	EQA
	Hazardous Mat Incident	HMI
	Radiological Accident	RAD
	Emergency Public Information	EPI
	Ozone Alert (unhealthy)	OAA

* While it is understoond that participation is voluntary, it is recommended that these weather events be considered serious enough for stations to proceed with immediate EAS activation.

Attachment: G EAS CODES TRANSMITTED BY KEY EAS SOURCES

* While it is understoond that participation is voluntary, it is recommended that these weather events be considered serious enough for stations to proceed with immediate EAS activation.

Attachment H: EAS Header Contents and Description

This attachment provides a non-technical explanation of the EAS Header.

1. The EAS Header Signal Configuration:

[Preamble]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-
(one second pause)
[Preamble]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-
(one second pause)
[Preamble]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-
(at least a one second pause)

2. EAS Header Breakdown:

Preamble: A digital code that clears the system.

ZCZC: An ASCII code that signals the start of a

ORG: Originator code indicating the source of the message (Reference Attachment G)

EEE: An event code that describes the nature of

PSSCCC: A FIPS location code identifying affected areas. An EAS header may contain up to 31 of these codes. The "**P**" represents a section of a county as described in Attachment M; the "**SS**" code identifies the state; and, "**CCC**" identifies the county. Attachment M contains the FIPS codes for each community in the Commonwealth of Massachusetts. The FIPS designations for the New England States, New Jersey and New York are as follows: "09" for CT, "23" for ME, "25" for MA, "33" for NH, "34" for NJ, "36" for NY, "44" for RI and "50" for VT.

TTTT: Time period (duration) the message remains in effect. The time is logged in 15 minute and one hour segments.

JJJHHMM: A date-time group code identifying the in-effect (start) time of the message. "**JJJ**" represents the day of the calendar year; "**HHMM**" represents the hour and minute using UTC, Universal Coordinated Time(GMT).

Attachment H: EAS Header Contents and Description

LLLLLLLL: An identification code identifying the broadcast station or CATV system transmitting or retransmitting the EAS message. It is important to note two important items regarding this header field. First, all eight characters must be used. Spaces may be used for blank characters. Second, common programming source for multi-stations e.g. an AM/FM station with different call signs need not change the field for each station's broadcast.

The header is transmitted three times, with a one second pause between transmissions. This pause is to allow dissipation of atmospheric interferences. For the receiving equipment to consider the signal valid, two of the three header transmission must match exactly.

More technical and detailed information regarding the EAS header may be found in Part 11 of the FCC Rules and Regulations (Attachment A of this plan). Attachment J contains a list of POCs should additional EAS header information be needed.

Attachment I: Points-of-Contact for Obtaining Assistance or Materials:

Federal Communications Commission (District and National Office):	1-888-FCC-TALK
Federal Emergency Management Agency, Region I, Boston, MA	617-223-4544
National Weather Service, Taunton, MA	508-823-2228
National Weather Service, Albany, NY	518-452-9864
Mass. Emergency Management Agency, Framingham, MA	508-820-2000
Mass. Emergency Management Agency, Area I, Tewksbury, MA	508-640-9500
Mass. Emergency Management Agency, Area II, Bridgewater, MA	508-697-3111
Mass. Emergency Management Agency, Area III, Belchertown, MA	413-323-6306
Doug Rowe, Co-Chairman, Mass. SECC	508-632-1340
James Bayley, Co-Chairman, Mass. SECC	508-659-2106
Massachusetts State Police HQ, Framingham, MA	508-820-2121
Massachusetts State Police, Alt HQ Northampton, MA	413-586-1508

Attachment K: EAS TEST SCRIPT

a. The SECC is offering the following EAS test script as a suggestion for the Required Monthly test (RMT). This script is approximately 30 seconds shorter than its EBS predecessor and is based upon an FCC example. Accordingly, broadcasters and CATV providers are encouraged to use it:

b. Procedures for the SP station, EAS Broadcast stations and Cable systems during attended operations.

1. **Discontinue normal programming.**

2. **Air the following announcement:**

   "THE FOLLOWING IS A TEST OF THE STATE EMERGENCY ALERT SYSTEM."

3. **Transmit the Emergency Alert System header codes and the two-tone Attention Signal.** (FCC Regulations, Section 11.51)

4. **Transmit the following announcement:**

   "THIS STATION IS TESTING ITS EMERGENCY ALERT SYSTEM EQUIPMENT. THE EMERGENCY ALERT SYSTEM HAS REPLACED THE EMERGENCY BROADCAST SYSTEM. THIS SYSTEM WILL PROVIDE EMERGENCY WARNINGS. THIS STATION SERVES THE _____ OPERATIONAL AREA. THIS CONCLUDES THE EMERGENCY ALERT SYSTEM TEST."

5. **Resume regular programming.**

Attachment L: COUNTY AND MUNICIPAL FIPS CODES

Part 11 recommended format, to determine the geographical areas of the state or county that might be more specific than zero.

FCC Recommended Format for County Subdivisions:

0 = All or an unspecified portion of the state or county.
1 = Northwest
2 = North Central
3 = Northeast
4 = West Central
5 = Central
6 = East Central
7 = Southwest
8 = South Central
9 = Southeast

This plan represents an effort to designate a location code for each community in Massachusetts. Examples: Bourne: 225001, Taunton: 125005, Lynn 725009.

Please note: The authors of this EAS Plan attempted assign county subdivisions based upon the FCC recommended format cited above. However, because of geographical considerations some deviations were made.

Attachment L: COUNTY AND MUNICIPAL FIPS CODES

The Federal Information Processing System (FIPS) is the source of the numbers used in the FIPS coding listed for the Massachusetts EAS network. The FCC is the source of the CATV Community Identification numbers.

All EAS messages transmitted under EAS will require a six digit code FIPS taken from the following list of Massachusetts. If the first digit is zero, then ALL or an UNSPECIFIED PORTION of the **County** is involved.

AREA TO BE NOTIFIED:	LOCATION CODE
STATEWIDE ALERT, ALL COMMUNITIES	025000
BARNSTABLE COUNTY, ALL	025001
BERKSHIRE COUNTY, ALL	025003
BRISTOL COUNTY, ALL	025005
DUKES COUNTY, ALL	025007
ESSEX COUNTY, ALL	025009
FRANKLIN COUNTY, ALL	025011
HAMPDEN COUNTY, ALL	025013
HAMPSHIRE COUNTY, ALL	025015
MIDDLESEX COUNTY, ALL	025017
NANTUCKET COUNTY, ALL	025019
NORFOLK COUNTY, ALL	025021
PLYMOUTH COUNTY, ALL	025023
SUFFOLK COUNTY, ALL	025025
WORCESTER COUNTY, ALL	025027

In addition, there may be instances whereas specific sections of a county might need to be identified by means of a single digit. Use the attached community listing, which is based upon the FCC