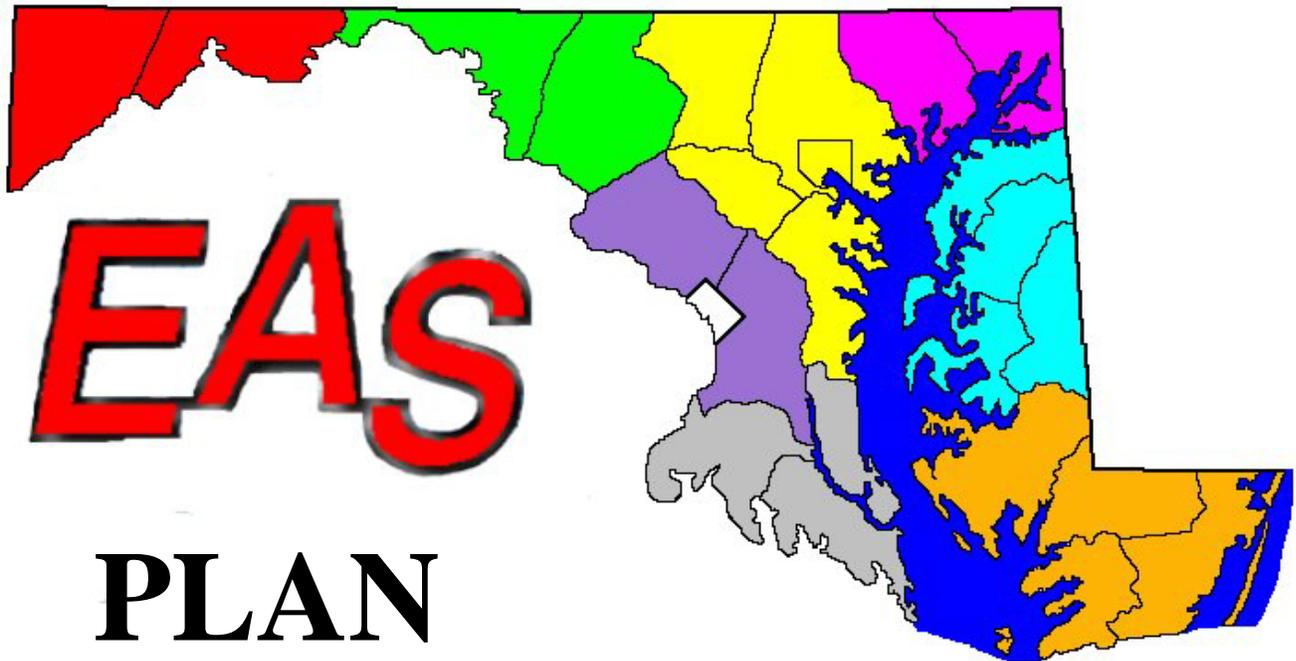


# THE MARYLAND STATE



## **Rules for Activating the Emergency Alert System in Maryland for Broadcasters, Cable Operators, Emergency Managers and Others Concerned with Public Warning.**

The Maryland State Emergency Communications Committee  
December 2008 DRAFT

# *Maryland State EAS Plan*

## **Annexes:**

**Annex 01 - LP Monitoring Assignments**

**Annex 02 - State Relay Network**

**Annex 03 - NOAA Weather Radio Monitoring Assignments**

**Annex 03, Appendix 1 – NOAA MOU for Non-Weather Related Events**

**Annex 04 - Required Monthly Test Schedule (RMT)**

**Annex 05 - RMT Test Scripts Approved for Use**

**Annex 06 - Child Abduction Event Procedures for Maryland Child AMBER Alerts**

**Annex 07 - Local EAS Plan – Local EAS Plan Model**

**Annex 08 - EAS Events and Maryland Automation Event Settings**

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## Intent and Purpose of this Plan

### Overview

This plan is the FCC-mandated document outlining the organization and implementation of the State of Maryland Emergency Alert System (EAS). It is a guideline for Maryland broadcasters and cable TV operators and determines how to relay emergency information/instructions for emergencies throughout the State. The document details specific procedures for testing, issuing, and disseminating this emergency information. In this plan, “cable system” shall mean any authorized service provider which delivers by wire or fiber optic, including (but not limited to) Comcast and FIOS.

This Plan is an adjunct to the FCC EAS Rules and is not meant to be a summary, in whole or in part, of those Rules. FCC Rules, Part 11, contain the general rules regarding the Emergency Alert System. Stations can download FCC Emergency Alert System (EAS) AM/FM and TV Handbooks and Part 11 rules via the World Wide Web from the FCC’s Web Site: <http://www.fcc.gov/eb/eas/>. The handbook(s) contains basic operational procedures for national, state, and local activations, testing procedures, and script samples that may be used by stations.

### Plan Summary

The following sections in this plan covers

- Monitoring assignments for each station/cable operator – Annex 1.
- EAS Header codes and sequences.
- Required Weekly and Monthly Tests.
  - Local Tests are to be made once weekly, on random days, at random *times*.
  - The once monthly statewide test will be conducted on the last Wednesday of the month. See Annex 4 for the Maryland Statewide once monthly test times. (Also see FCC EAS Handbook).

It is highly recommended that all broadcast stations, FiOS, and cable systems add the National Weather Service’s NOAA Weather Radio (NWR) as one of the inputs to their EAS decoder. Annex 3 contains a coverage map and list of NWR transmitters, their locations, frequencies, and power.

Note that Montgomery and Prince George’s County stations, which were formerly in the District of Columbia’s plan, now monitor two areas, Maryland and the District of Columbia. Those broadcast stations and cable systems will all monitor one DC station assigned by the DC plan with priority given to DC area activations. A second station will be assigned by the Maryland plan. Additionally, EMnet, or other compatible, decoders shall be programmed with FIPS codes for both jurisdictions.

## NATIONAL, STATE, AND LOCAL EAS

Per FCC EAS Rules, the EAS system’s notification hierarchy places importance on the message transmitted in this order of priority: National, Local, and State.

## **National EAS Participation**

All broadcasters and cable operators are required by FCC rules to participate in the National-level EAS. In the event of National EAS activation, Participating National (“PN”) stations and all cable operators would relay Presidential messages while Non-Participating National (“NN”) stations would sign-off after making an announcement to notify listeners/viewers to tune to a local “PN” station for their area.

Part of the National Plan involves weekly and monthly testing of the EAS System. All stations/cable operators must transmit a Required Weekly EAS Test (RWT), and retransmit a Required Monthly Test (RMT) within 1 hour of reception via an EAS decoder.

## **State/Local EAS Participation**

Broadcast, FiOS and Cable participation in the Maryland State or Local EAS is voluntary. Stations that elect to participate shall follow the procedures in this plan. The Governor or his designee shall have the authority to issue mandatory EAS messages 180 days after FEMA adopts the Common Alerting Protocol (CAP), under FCC Rule §11.55. At that time, all EAS Participants within Maryland (excepting SDARs and DBS providers) must receive and transmit state-level and geographically targeted EAS messages, as aggregated and delivered by the Governor or his designee. FEMA will be adopting CAP in the first quarter of 2009.<sup>1</sup>

Mandatory Gubernatorial EAS activations are authorized only for the following event codes:

- “CEM” – Civil Emergency Message
- “SPW” – Shelter in Place Warning
- “EVI” – Evacuation Immediate

## **Conditions of EAS Participation**

By participating in this plan, individual broadcast operations do not relinquish their ability to exercise independent action during any situation. These rights and responsibilities are granted to individual licensees per FCC Rules and Regulations. Those who do relay announcements/material from other stations do have all necessary rebroadcast authority per FCC rules and this plan.

## **National EAS Designations**

**National Primary (NP)** Primary source of all National EAS Alerts.

These stations along with the NWS and State EOC will receive and relay all National level EAS Alerts.

**Local Primary (LP-1, LP-2)** Primary source of all local area EAS messages.

They will be relaying National, State, and Weather Alerts. These may also be the input point for Local EAS Alerts. In some areas, due to the size, there may be an LP-3 station to help cover the entire area.

**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.

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<sup>1</sup> FEMA News Release, “FEMA Announces Intention To Adopt Common Alerting Protocol 1.1” July 30, 2008, No.: HQ-08-147.

**State Relay (SR)** Primary source of all State EAS messages. These stations will receive State level messages from the State EOC and NWS and will also relay all National level messages.<sup>2</sup>

**Participating National (PN)**: Most broadcasters and cable operators are designated as "PN".

**Non-Participating National (NN)**: Broadcasters who hold an "NN" authorization from the FCC must sign off the air during a National Emergency.

## Maryland State Designations -

The following are other terms used in the organization of the Maryland EAS Plan.

**Local Relay (LR)**: A message outlet needed to complete the message chain. Here this refers to a broadcaster who is not an LP station designation, but who is needed to relay messages to a remote location so others further down the daisy chain can receive the messages.

**NWS**: The National Weather Service (NWS) encodes their alerts using the S.A.M.E. coding method as used by other originators of EAS. NWS will activate EAS through broadcasts over NOAA Weather Radio (NWR). As noted earlier, it is recommended that you monitor the NWR for your local area. See Annex 3 for a list of transmitters and their service areas. NWS will be able to also request EAS activation via EMnet and other wire services and telecommunication methods. (See below and Annex 3 for more information.)

**STATE EOC**: Maryland Emergency Management Agency. This will be the origination point for messages from the Governor.

## Maryland EAS-Specific Information

### FCC Mandated Event Codes

The FCC requires that broadcasters and cable operators program their EAS Decoders for the following events:

- "EAN" (National EAS Activation) - Must be re-transmitted immediately.
- "EAT" (National EAS Termination) - Must be re-transmitted immediately.
- "RMT" (Required Monthly Test) - containing your station's County FIPS code or State FIPS Code. Must be re-transmitted within 1 hour of receipt.
- "RWT" (Required Weekly Test) - containing the county FIPS code for your station's location of received test for that FIPS code area need only be logged. No re-broadcast is necessary.

Maryland State EAS Plan participants will automatically forward the following event codes in the interest of public safety:

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<sup>2</sup> Note: This is the official FCC designation and definition. This however has never been the practice in any of the previous MD State EAS plans. The legacy daisy chain uses the LP stations for this function, and the stations with SR designation have performed basically a Local Relay (LR) function for stations too far away to reliably receive one of the LP station's signals for their area. This configuration continues to be necessary in order to comply with FCC Rules Part 11. In practice, the Relay functions are now more reliably performed via EMnet. See Annex 2.

- “CEM” – Civil Emergency Message – An emergency message regarding an in-progress or imminent significant threat(s) to public safety and/or property. The CEM is a higher priority message than the Local Area Emergency, but the hazard is less specific than the Civil Danger Warning.
- “SPW” – Shelter in Place Warning - A warning of an event where the public is recommended to shelter in place (go inside, close doors and windows, turn off air conditioning or heating systems, and turn on the radio or TV for more information).
- “EVI” – Evacuation Immediate - A warning where immediate evacuation is recommended or ordered according to state law or local ordinance.

In the interests of public safety it is highly recommended that the following event codes are automatically aired subject to Local Emergency Communications Committee Memoranda of Understanding between Emergency Managers and local broadcasters:

- “TOE” – 911 Telephone Outage Emergency
- “CAE” – Child Abduction Emergency (AMBER Alert)
- “TOR” – Tornado Warning
- “FFW” – Flash Flood Warning

See Annex 8 for detailed Event Codes Information

## **EAS TESTS**

### **Required Weekly Tests**

Required Weekly Tests are those transmitted by participating stations per FCC Rules and are beyond the scope of this document.

Note: The NWS transmits a weekly test (RWT) via all NWR transmitters every Wednesday between 11 am and noon. The only exception to this would be if real-time weather alerts are occurring, then no test is conducted.

### **Required Monthly Tests**

The once monthly Statewide test will be conducted on the last Wednesday of the month. For a list of Maryland Statewide once monthly test times, see Annex 4. All Statewide EAS tests must be re-broadcast by all stations and logged as a received state EAS test.

### **DAYTIME Only Stations**

Daytime only stations receiving an overnight RMT must log the test received in the appropriate manner, and rebroadcast within its valid duration after sign-on. If the time stamp of the RMT has expired, you should log its receipt and send an RWT in place of the RMT in your first 15 minutes. Daytimers receiving an actual activation overnight must immediately rebroadcast the alert if the time stamp for that emergency is still valid, otherwise, you need only log the event in the appropriate manner that the activation has been received. Do not re-record and transmit separate RMT messages under any circumstances.

## **AUTHORIZED SOURCES FOR ACTIVATING THE EAS STATE EAS ACTIVATION**

Governor, State of Maryland

Governor's Designee, State of Maryland

Director, Maryland Emergency Management Agency

Director's Designee, Maryland Emergency Management Agency

### **Maryland EAS System Design and Implementation**

State of Maryland activations are delivered via the legacy system (daisy chain and ENDECs) and EMnet satellite receivers and decoders. The Maryland Emergency Management Agency is interested in providing redundant delivery systems where possible. EMnet EAS is a system currently in place to enhance the State Relay (See Annex 2 for details). Other systems are also being evaluated for future enhancement as well.

- State activations will originate from the State Emergency Operations Center.
- Each station for automatic activation will preset selected codes in the event a station is automated. (See Annex 8 for details.)
- FCC licensees are advised that they must maintain and monitor ENDECs so long as they are required under FCC Rules, Part 11.

### **Local Jurisdiction Activation**

- All local emergencies (other than weather alerts) shall be declared only by the local jurisdiction's Emergency Management Agency.
- Local Jurisdictions will go directly to their local LP Stations and other broadcasters. The State will monitor, but will not interfere or direct a local activation request unless requested by the Local Jurisdiction.
- Local Jurisdictions are also encouraged to use EMnet EAS State Relay Network for local activations and emergency messages when necessary. (For additional Local Activation information see the Local Plans in Annex 7.)

## **NATIONAL WEATHER SERVICE**

The National Weather Service (NWS) has the mission of warning the public of impending weather and water hazards. One of the primary methods used by NWS is NOAA Weather Radio (NWR). There are four NWS Offices that service the State of Maryland that will issue watches, warnings, advisories and statements via NWR transmitters across Maryland (See Annex 3 for transmitters and area covered).

While broadcasters may receive all the weather codes listed in Annex 3 (also see Annex 8) only a subset of these codes from the NWS will request EAS activation. The text versions of these warning messages read, "BULLETIN – EAS ACTIVATION REQUESTED". The NWS requests EAS Activation on all

Tornado Warnings (TOR) and Flash Flood Warning (FFW) messages. NWS asks that broadcasters set their equipment to automatically air these messages when stations are in automated mode.

All other coded messages will read, “IMMEDIATE BROADCAST REQUESTED” in the text version. This is not an EAS activation. Under rare situations where other conditions pose an immediate, life-threatening danger to the public, the NWS may request EAS activation. In these cases, the text message will state “EAS ACTIVATION REQUESTED” and the local LP-1 station may receive a direct call from NWS to alert them of the message or a message/alert through EMnet.

NWS also has a Memorandum of Understanding (MOU) with the State of Maryland to use NWR as an “All Hazards Warning Radio” using the Civil Emergency Message (CEM) event code. Other events will soon be available as the NWR system and State of Maryland MOU is updated. This allows the state and local jurisdictions to contact the NWS to help issue an EAS activation via NWR.

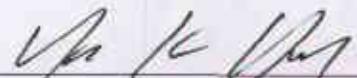
### **WEATHER EAS ALERTS**

National Weather Services will issue weather activations over the NWR and NWWS system. When it becomes possible to arrange, this information will be available via EMnet EAS as well.

### SIGNATURES OF ACCEPTANCE

The Maryland State Emergency Alert System (EAS) Plan was developed by the Maryland State Emergency Communications Committee (MD SECC). It was done with assistance of many people, and through the cooperation of the Maryland Emergency Management Agency (MEMA), the Maryland Emergency Management Association, the National Weather Service (NWS), the Maryland AMBER Committee, the Maryland State Police, and the Maryland, District of Columbia, Delaware Broadcasters Association (MDCD). It is accepted and authorized by the following representatives:

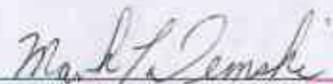
**For the Maryland State Emergency Communications Committee**

  
\_\_\_\_\_  
Jeff Halapin, Co-Chair  
MD SECC

  
\_\_\_\_\_  
Chip Weinman, Co-Chair  
MD SECC

**For the Maryland Emergency Management Agency and State Association**

  
\_\_\_\_\_  
Richard Muth, Director  
Maryland Emergency Management Agency

  
\_\_\_\_\_  
Mark Demski, Representative  
MD Emergency Management Association

**For the National Weather Service**

  
\_\_\_\_\_  
Christopher Strong,  
Warning Coordination Meteorologist  
National Weather Service

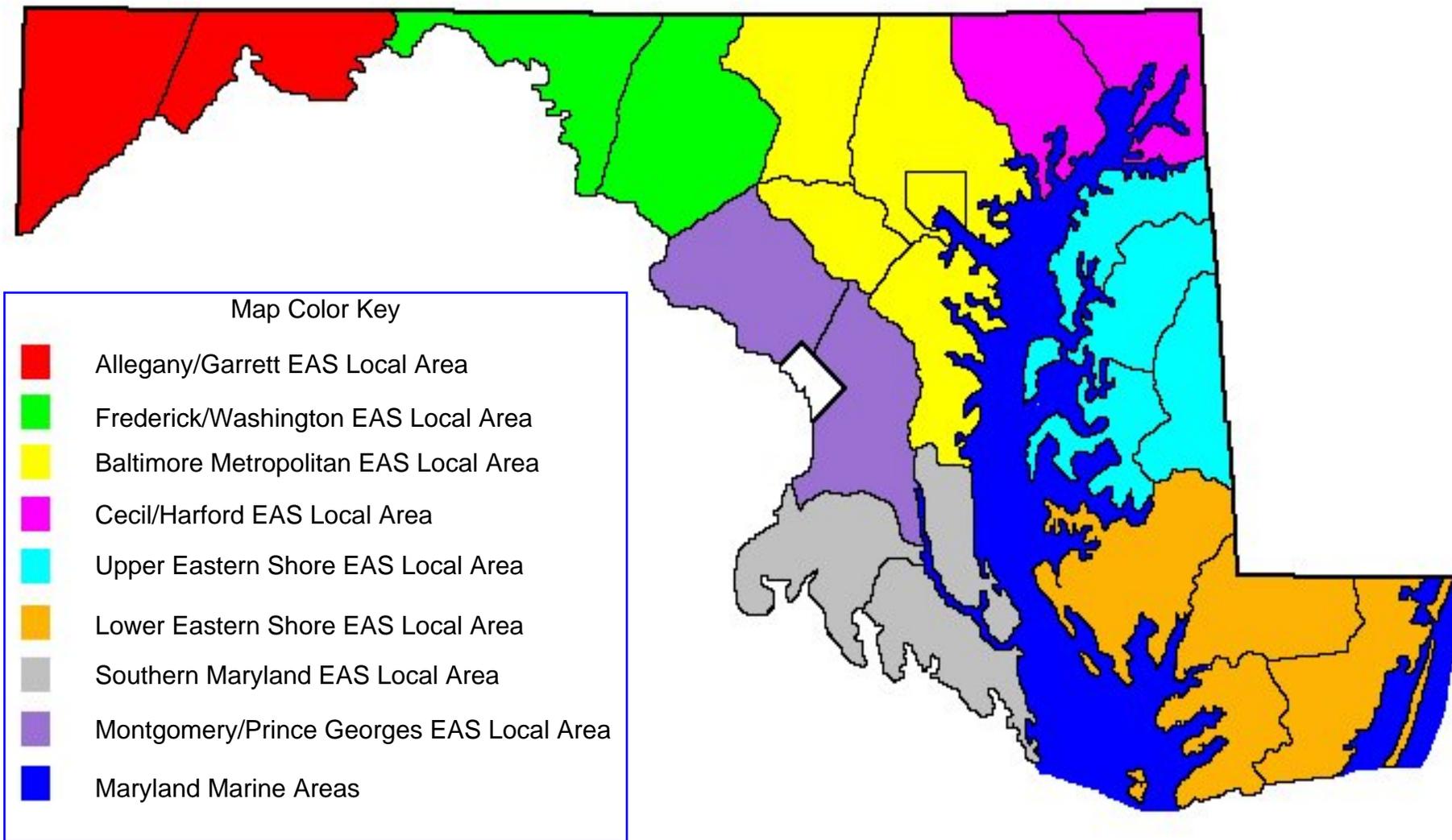
**For the Maryland Amber Committee**

  
\_\_\_\_\_  
Ron Riggan, Sergeant  
Technical Investigation Section  
Maryland State Police

**For the Federal Communications Commission:**

\_\_\_\_\_  
James A. Dailey, Director  
Office of Homeland Security  
Enforcement Bureau  
Federal Communications Commission

# MARYLAND EAS OPERATIONAL AREAS



## EAS MONITORING ASSIGNMENT GRID

The following grid shows the EAS monitoring assignments for the Local Areas in the State of Maryland. To comply with the FCC requirements found in Part 11, you must monitor two sources that provide EAN coverage, which are designated as LP1 and LP2. If it is not possible to reliably get one of your two LP assignments, you are authorized to monitor the assignment under local relay, another broadcast station upstream that is able to monitor and will send out local EAS events.

Additional sources are available for Local/State EAS Activations and Weather activations. To get these you will need the ability to monitor more than two sources. It might be good to upgrade to at least four or more audio input ports. The third assignment should be the State Relay Network. In fact this is the single most important for local/state activations, but it does not supersede the FCC requirements. The State Relay Network will be available through MD EMnet equipment only and is a satellite connection that will reach all broadcast and cable systems so equipped simultaneously. Everyone receives all the messages for Maryland, and settings local to your operation determine which ones you will decode and send. The National Weather Service's NOAA Weather Radio is the fourth assignment. It, too, may provide State and Local alerts as well as Weather information.

<b>MARYLAND EAS MONITORING ASSIGNMENTS</b>						
<b>EAS Operational Area Name:</b>	<b>LP1</b> (Best Two from different columns Required)	<b>LP2</b> (Best Two from different columns Required)	<b>LP3</b> (Best Two from different columns Required)	<b>State Relay Network* (SRN)</b>	<b>National Weather Service</b>	<b>Other Assignment or Local Relay (SR)</b>
Allegany/Garrett	WFRB 560 WFRB-FM 105.3	WTBO 1450 WKGO 106.1		EMnet EAS	NWR	
Baltimore Metro	WBAL 1090 WIYY 97.9	WPOC 93.1		EMnet EAS	NWR	
Cecil/Harford Counties	WXCX 103.7	WHFC 91.1		EMnet EAS	NWR	
Frederick/Washington Counties	WFMD 930 WFRE 99.9 WAYZ-FM 104.7	WAFY 103.1		EMnet EAS	NWR	WCRH 90.5
Lower Eastern Shore	WQHQ 104.7	WSCL 89.5 WSDL 90.7	WCEM 1240 WCEM106.3	EMnet EAS	NWR	WOLC 102.5
Southern Maryland	WPRS-FM 104.1	WYRX 97.7		EMnet EAS	NWR	
Upper Eastern Shore	WEMD 1460 WCEI-FM 96.7	WKHS 90.5		EMnet EAS	NWR	WXCX 103.7
Montgomery/Prince Georges Counties	WPGC 1580 WPGC-FM 95.5	Washington DC Assignment		EMnet EAS	NWR	

\*EMnet EAS is the official State EAS Network made available to broadcasters in a multi-part roll out that includes all Maryland LP stations, television stations, county emergency management centers. Until EMnet EAS sources qualify to get LP designations, they will have to be used as a third audio port. At this time, not all broadcasters will get this option. It will include NWWWS text coverage as an option, in the future EMnet EAS will carry local weather warnings generated from the NWWWS text.

Use the chart above to determine the appropriate monitoring assignments for Cable Outlets and Broadcasters who are not LP stations. If you can not receive one of the three main assignments 24/7 you can use the fifth choice, Local Relay as a replacement. However it is necessary that you be able to receive a minimum of two broadcast signals from the above list for all operating

hours of your station to fulfill EAN monitoring requirements. Two of the black lettered choices are required. They may not be from the same column. The blue lettering is optional if you have the extra ports. Those with EMnet EAS equipment should do their best to get it connected to their EAS ENDECs, or be certain to use the EMnet Remote Note Interface.

The chart below is for LP stations to understand their monitoring assignments. Note this is based on the daisy chain relay already established.

<b>LP STATION MONITORING ASSIGNMENTS</b>					
<b>Designation for EAS Operational Area</b>	<b>LP Station Call Sign</b>	<b>EAS Source #1</b>	<b>EAS Source #2</b>	<b>State/Regional Relay Network Source #3</b>	<b>EAS Source #4</b>
Allegany / Garrett LP1	WFRB WFRB-FM	WFMD 930 WFRE 99.9 WAYZ 104.7	WTBO 1450 WKGO 106.1	EMnet EAS	NWR
Allegany / Garrett LP2	WTBO WKGO	WAFY 103.1	WFRB 560 WFRB 105.3	EMnet EAS	NWR
Baltimore Metro LP1 Alt. State Primary 1	WBAL	WTOP 103.5	WPOC 93.1	EMnet EAS	NWR
Baltimore Metro LP2 Alt. State Primary 2	WPOC	WBAL 1090 WIYY 97.9	WMAL 630	EMnet EAS	NWR
Cecil/ Harford County LP1	WXCY	WBAL 1090 WIYY 97.9	WHFC 91.1	EMnet EAS	NWR
Cecil/ Harford County LP2	WHFC	WPOC 93.1	WXCY 103.7	EMnet EAS	NWR
Frederick / Washington LP1	WFMD WFRE-FM WAYZ-FM	WBAL 1090 WIYY 97.9	WAFY 103.1	EMnet EAS	NWR
Frederick / Washington LP2	WAFY	WPOC 93.1	WFMD 930 WFRE 99.9 WAYZ-FM 104.7	EMnet EAS	NWR

<b>LP Station Monitoring Assignments (continued)</b>					
<b>Designation for EAS Operational Area</b>	<b>LP Station Call Sign</b>	<b>EAS Source #1</b>	<b>EAS Source #2</b>	<b>State/Regional Relay Network Source #3</b>	<b>EAS Source #4</b>
Southern Maryland LP1	WPRS-FM	WCEI 96.7	WYRX 97.7	EMnet EAS	NWR
Southern Maryland LP2	WYRX-FM	WHFS 99.1	WPRS-FM 104.1	EMnet EAS	NWR
Lower Eastern Shore LP1	WQHQ	WCEI 96.7	WCEM 106.3	EMnet EAS	NWR
Lower Eastern Shore LP2	WSCL	WPOC 93.1	WQHQ 104.7	EMnet EAS	NWR
Lower Eastern Shore LP3	WCEM	WBAL 1090 WIYY 97.9 or WCEI 96.7	WSCL 89.5 WSDL 90.7	EMnet EAS	NWR
Upper Eastern Shore LP1	WEMD WCEI-FM	WBAL 1090 WIYY 97.9	WPOC 93.1	EMnet EAS	NWR
Upper Eastern Shore LP2	WKHS	WPOC 93.1	WCEI 96.7 WEMD 1460	EMnet EAS	NWR
Montgomery/ Prince Georges LP1	WPGC WPGC-FM	WBAL 1090 WIYY 97.9	Washington DC Area LP Assignment	EMnet EAS	NWR

Explanation of the above - All LP stations should have a minimum of four audio input ports monitoring a minimum of four EAS sources. Those listed in the table above are the ones to be monitored. Remember the first two sources are required by the FCC, same as in the past plan.

It is also important here to note that the only legal responsibility that an LP station has is to provide EAN coverage so all local broadcasters will get the EAN message should EAS ever experience a national activation. Carrying EAN is “required” of all broadcasters who are not designated as non participants, the MD SECC is not asking you to do more than what stations have to do anyway.

The State of Maryland is providing EMnet EAS to virtually all full-time commercial broadcast stations. EMnet EAS will provide an additional, redundant alternative to the legacy daisy chain and ENDEC system still mandated by the FCC. There is no greater public service that a broadcast station can perform than to warn the public in times of emergency.

If a station has a problem receiving one of the assigned LP stations, station management should contact one of the MD SECC Chairpersons for a revision to this annex to accommodate a new assignment. As LP stations serve as relays to inject an EAN message to non-LP stations in the Maryland EAS network, using an original source for EAN where it is available is best. For this reason NPR stations are often recruited to be an LP as they have access to a connection within their radio network to cover EAN messages. They actually compliment the Primary Entry Point (PEP) network, and provide a separate source of EAN coverage. This is important, should the PEP system ever fail. NPR could essentially carry the EAN message into our EAS network.

It is suggested stations and cable operators monitor as many EAS sources as possible. This is done in an effort to help broadcasters improve EAS in a regional context. (1) Emergency messages by EAS carry across state lines so that all people listening to a station are warned whether or not they are in danger, and (2) listening to another area provides other ways to get the EAN message if the local system fails. This does not require stations or cable operators to listen to another state's LP signal, a closer station with a stronger signal would probably provide enough coverage so long as they are not designated as "Non Participating."

One other note, a dedicated Land Line connection for Emergency Management to connect directly to a station's ENDEC, or a Local EAS Radio Network would be a far better monitoring choice for the fourth, (fifth or sixth) input where available. EMnet EAS is capable of providing Weather alerts. Contact one of the MD SECC Chairpersons for assistance in planning and engineering, if need be.

## PARTICIPATING STATE/LOCAL PLAN -

**Please Note:** Under this Maryland State EAS Plan, all broadcasters and cable outlets are considered to be participating members of the State Plan. If for some reason a station or cable operator does not wish to participate, please contact the MD SECC. Communication is important to the success of the Maryland EAS system. Please let the MD SECC know about any problems or concerns with this EAS Plan, Relay Network, and participation to provide fast public warning.

## MAP BOOK –

**Please Note:** The following is based on data taken from Station Search Details on the FCC web site as of September 18, 2008. The cable companies are not from an FCC List but have been provided by local jurisdiction emergency management representatives. Please notify the MD SECC whose contact information is found in Annex 12 of the MD EAS Plan of any changes or additions.

**Maryland EAS MAP BOOK - by EAS Operational Area****ALLEGANY/GARRETT EAS LOCAL AREA****Broadcast Stations -**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WCBC	24001	Cumberland	1270	1./5. KW DA-2 U	PN
WKGO	24001	Cumberland	106.1	5.4 KW 430 Meters	LP-2
WCMD	24001	Cumberland	1230	1. KW ND-1U	PN
WROG	24001	Cumberland	102.9	3.5 KW 438 Meters	PN
WTBO	24001	Cumberland	1450	1. KW ND-1U	LP-2
WFRB	24023	Frostburg	560	5. KW ND-D D	LP-1
WFRB-FM	24023	Frostburg	105.3	13.5 KW 292 Meters	LP-1
WFWM	24023	Frostburg	91.9	1.3 KW 434 Meters	NN
WLIC	24023	Frostburg	97.1	.150 KW 413 Meters	PN
WAIJ	24023	Grantsville	90.3	10.0 KW 171 Meters	PN
WKHJ	24023	Mountain Lake Park	104.5	1.5 KW 202 Meters	PN
WGPT	24023	Oakland	CH 36	245 KW 216 Meters	PN
WMSG	24023	Oakland	1050	0.075/1. KW ND-1U	PN
WWHC	24023	Oakland	92.3	1.4 KW 210 Meters	PN
WWPN	24001	Westernport	101.1	0.32 KW 417 Meters	PN

**Cable Companies – (need to be confirmed with local emergency managers)**

Comcast  
 Cablevision Communications - Oakland  
 Charter Communications - Cumberland  
 Old Town Community Systems – Allegany County  
 Tele-Media - Barton

**Maryland EAS MAP BOOK - by EAS Operational Area****BALTIMORE METROPOLITAN EAS LOCAL AREA****Broadcast Stations -**

Call sign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WBIS	24003	Annapolis	1190	10. KW DA-D D	PN
WFSI	24003	Annapolis	107.9	50.0 KW 152 Meters	PN
WLZL	24003	Annapolis	99.1	50 KW 140 Meters	SR
WMPT	24003	Annapolis	CH 22	5000 KW 265 Meters	PN
WNAV	24003	Annapolis	1430	1./5. KW DA-NU	PN, BSPP
WYRE	24003	Annapolis	810	0.25 KW ND-D D	PN
W28BY	24510	Baltimore	CH 63	6.92 KW Meters	PN
WBAL	24510	Baltimore	1090	50./50. KW DA-NU	NP, LP-1, SP, BSPP
WBAL-TV	24510	Baltimore	CH 11	316 KW 305 Meters	PN
WBFF	24510	Baltimore	CH 45	1290 KW 386 Meters	PN
WBGR	24510	Baltimore	860	0.066/2.5 KW DA-2 U	PN
WBJC	24510	Baltimore	91.5	50. KW 152 meters	PN
WBMD	24510	Baltimore	750	0.73 KW ND-D D	PN
WCAO	24510	Baltimore	600	5. KW DA-1 U	PN, LP-2
WCBM	24510	Baltimore	680	5./10. KW DA-2 U	PN
WEAA	24510	Baltimore	88.9	12.5 KW 67 Meters	PN
WERQ-FM	24510	Baltimore	92.3	37. KW 174 Meters	PN
WUTB	24510	Baltimore	CH 24	1170 KW 326 Meters	PN
WRBS	24510	Baltimore	1230	1. KW ND-1 U	PN
WIYY	24510	Baltimore	97.9	13.5 KW 288 Meters	SP, LP-1
WJFK	24510	Baltimore	1300	5./5. KW DA-2 U	PN
WYPR	24510	Baltimore	88.1	10.0 KW 130 Meters	NN
WJZ-TV	25410	Baltimore	CH 13	316 KW 292 Meters	PN
WLIF	25410	Baltimore	101.9	13.5 KW 293 Meters	PN
WMAR-TV	25410	Baltimore	CH 02	100 KW 297 Meters	PN
WMPB	25410	Baltimore	CH 67	1000 KW 250 Meters	PN
WNUV-TV	25410	Baltimore	CH 54	5000 KW 349 Meters	PN
WCHH	25410	Baltimore	104.3	32. KW 148 Meters	PN
WOLB	25410	Baltimore	1010	0.026/1. KW ND-1 U	PN
WPOC	25410	Baltimore	93.1	16.0 KW 264 Meters	LP-2, SR, SP-2
WRBS-FM	24510	Baltimore	95.1	50 KW 152 Meters	PN
WWIN	24510	Baltimore	1400	1. KW ND-1 U	PN
WVIE	24510	Baltimore	1370	1.5/5. KW DA-2 U	PN
WWMX	24510	Baltimore	106.5	7.4 KW 371 Meters	PN
WQSR	24510	Baltimore	102.7	50. KW 133 Meters	BSPP
WFBR	24003	Glen Burnie	1590	1./1/ KW DA-2 U	PN
WWIN-FM	24003	Glen Burnie	95.9	3.00 KW 91 Meters	PN
WNST	24005	Towson	1570	0.237/5. KW ND-1 U	PN
WMJF-LP	24005	Towson	CH 16	1.22 KW Meters	PN
WTMD	25005	Towson	89.7	10.0 KW 72 Meters	PN
WZBA	24013	Westminster	100.7	16.0 KW 262 Meters	PN
WTTR	24013	Westminster	1470	1./1. KW DA-N U	PN

**Cable Companies – (NEEDS INPUT FROM LOCAL EMA DIRECTORS)**

Comcast – Anne Arundel County, Baltimore City, Baltimore County, Carroll County, Howard County  
 ??? –  
 ???-

**Maryland EAS MAP BOOK - by EAS Operational Area****FREDERICK-WASHINGTON EAS LOCAL AREA****Broadcast Stations -**

Call sign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WTLP	24021	Braddock Heights	103.9	0.38 KW 278 Meters	PN
WTRI	24021	Brunswick	1520	0.5 KW ND-D D	PN
WMTB-FM	24021	Emmitsburg	89.9	0.1 KW 44 Meters	PN
WFMD	24021	Frederick	930	2.5/5. KW DA-2 U	LP-1, BSPP
WFPT	24021	Frederick	CH 62	3160 KW 138 Meters	PN
WFRE	24021	Frederick	99.9	7.9 KW 355 Meters	LP-1
WWFD	24021	Frederick	820	0.43/4.3 KW DA-N U	PN
WARK	24043	Hagerstown	1490	1. KW ND-1 U	PN
WWEG	24043	Hagerstown	106.9	9 KW 237 Meters	PN
WGMS	24043	Hagerstown	89.1	0.9 KW 408 Meters	PN
WHAG-TV	24043	Hagerstown	CH 25	1350 KW 375 Meters	PN
WHAG	24043	Hagerstown	1410		
WJAL	24043	Hagerstown	CH 68	3890 KW 394 Meters	PN
WJEJ	24043	Hagerstown	1240	1. KW ND-1 U	PN, BSPP
WAYZ	24043	Hagerstown	104.7	8.3 KW 420 Meters	LP-1
WWPB	24043	Hagerstown	CH 31	4070 KW 373 Meters	PN
WHAG	24043	Halfway	1410	0.099/1. KW DA-2 U	PN
WDLD	24043	Halfway	96.7	4.8 KW 50 Meters	PN
WAFY	24021	Middletown	103.1	1.0 KW 174 Meters	LP-2
WDMU	24021	Walkersville	700	5. KW DA-D D	PN
WCRH	24043	Williamsport	90.5	10.0 KW 268 Meters	SR
WICL	24043	Williamsport	95.9	3.3 KW 91 Meters	PN

**Cable Companies – (needs input from EMA directors)**

Comcast – Frederick County, Washington County

Antietam CATV Hagerstown – Washington County, Hagerstown

**Maryland EAS MAP BOOK - by EAS Operational Area**

**HARFORD / CECIL COUNTY EAS LOCAL AREA**

**Broadcast Stations –**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WAMD	24025	Aberdeen	970	0.5/0.5 KW DA-2 U	PN
WHFC	24025	Bel Air	91.1	1.10 KW 69 Meters	LP-2
WOEL-FM	24025	Elkton	89.9	3 KW 79 Meters	PN
WSRY	24025	Elkton	1550	Not available	Not available
WJSS	24025	Havre de Grace	1330	0.5/5. KW DA-N U	PN
WXYC	24025	Havre de Grace	103.7	37 KW 168 Meters	SR, LP-1

**Cable Companies – (need input from local EMA directors)**

Clearview CATV – Northern Harford County  
 Comcast – Harford County

**Maryland EAS MAP BOOK - by EAS Operational Area**  
**SOUTHERN MARYLAND EAS LOCAL AREA**  
**SOUTHERN MARYLAND EAS LOCAL AREA**

**Broadcast Stations -**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WWGB	24017	Indian Head	1030	50. KW DA-D D	PN
WKIK	24017	LaPlata	1560	1. KW ND-D D	PN
WYRX-FM	24037	Lexington Park	97.7	6 KW 100 Meters	LP-2
WPTX	24037	Lexington Park	1690	1./5. KW DA-2 U	PN
WSMD-FM	24037	Mechanicsville	98.3	3.0 KW 100 Meters	PN
WWXT	24009	Prince Frederick	92.7	2.85 KW 145 Meters	PN
WPRS-FM	24017	Waldorf	104.1	50 KW 147 Meters	LP-1

**Cable Companies – (needs input from EMA directors)**

Comcast – Calvert County, Charles County  
 Gans Multimedia Partnership – North Beach (Calvert County), St. Mary’s County

**Maryland EAS MAP BOOK - by EAS Operational Area**

**UPPER EASTERN SHORE EAS LOCAL AREA**

**Broadcast Stations -**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WCTR	24029	Chestertown	1530	0.25 KW ND-D D	PN
WKDI	24011	Denton	840	1. KW DA-D D	PN
WEMD	24041	Easton	1460	0.5/1. KW DA-2 U	LP-1, BSPP
WCEI-FM	24041	Easton	96.7	25.0 KW 78 Meters	LP-1, SR
WTDK	24011	Federalsburg	107.1	3.9 KW 124 Meters	PN
WRNR-FM	24035	Grasonville	103.1	6.0 KW 100 Meters	PN
WKHS	24029	Worton	90.5	17.5 KW 66 Meters	LP-2

**Cable Companies – (needs input from local EMA directors)**

- Armstrong Utilities – Rising Sun (Cecil County)
- Charter – Kent County, Queen Anne’s County, Talbot County
- Comcast – Cecil County, Caroline County
- Easton Utilities – Talbot County

**Maryland EAS MAP BOOK - by EAS Operational Area****LOWER EASTERN SHORE EAS LOCAL AREA****Broadcast Stations -**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WOCQ	24047	Berlin	103.9	6.00 KW 100 Meters	PN
WBEY-FM	24039	Crisfield	97.9	4.3 KW 116 Meters	PN
WBLP-LP	24047	Ocean City	CH 22	.061 KW 19 Meters	PN
WKHZ	24047	Ocean City	1590	0.5/1. KW Da-2 U	PN
WRAV-LP	24047	Ocean City	CH 08	.297 KW 79 Meters	PN
WYPO	24047	Ocean City	106.9	4.5 KW 117 Meters	PN
WWFG	24047	Ocean City	99.9	38 KW 143 Meters	PN
WQHQ	24045	Ocean City -Salisbury	104.7	33. KW 186 Meters	LP-1
WQJZ	24047	Ocean Pines	97.1	4.6 KW 114 Meters	PN
WGOP	24047	Pocomoke City	540	0.243/0.5 KW ND-1 U	PN
WKHW	24047	Pocomoke City	106.5	1.80 KW 104 Meters	PN
WESM	24039	Princess Anne	91.3	45. KW 91 Meters	PN
WOLC	24039	Princess Anne	102.5	50. KW 152 Meters	SR
WBOC-TV	24045	Salisbury	CH 16	4070 KW 302 Meters	PN
WCPB	24045	Salisbury	CH 28	2190 KW 157 Meters	PN
WDIH	24045	Salisbury	90.3	0.38 KW 55 Meters	PN
WICO	24045	Salisbury	1320	0.028/1. KW ND-1 U	PN
WICO-FM	24045	Salisbury	97.5	4.5 KW 91 Meters	PN
WJDY	24045	Salisbury	1470	5. KW DA-D D	PN
WDKZ	24045	Salisbury	105.5	2.10 KW 117 Meters	PN
WMDT	24045	Salisbury	CH 47	2190 KW 304 Meters	PN
WSBY-FM	24045	Salisbury	98.9	6.00 KW 99 Meters	PN
WSCL	24045	Salisbury	89.5	33.0 KW 178 Meters	LP-2
WSDL	24047	Ocean City	90.7	18.5. KW 101 Meters	LP-2
WTGM	24045	Salisbury	960	5./5. KW DA-2U	BSPP
WKHI	24045	Fruitland	107.5	18.5 KW 103 Meters	PN
WQMR	24047	Snow Hill	101.1	1.2 KW 149 Meters	PN
WXMD	24047	Pokomoke	92.5	2.95 KW 144 Meters	PN
WCEM	24019	Cambridge	1240	1. KW ND-1 U	LP-3
WCEM-FM	24019	Cambridge	106.3	6.0 KW 99 Meters	LP-3
WAAI	24019	Hurlock	100.9	1.30 KW 153 Meters	PN
WINX-FM	24019	Cambridge	94.3	4.6 KW 110 Meters	PN

**Cable Companies – (need input from local EMA directors)**

Charter Communications – Crisfield (Somerset County)

Comcast – Dorchester County, Somerset County, Wicomico County, Worcester County

Mediacom – Worcester County

**Maryland EAS MAP BOOK - by EAS Operational Area****Montgomery / Prince Georges EAS Local Area  
Broadcast Stations -**

Callsign	FIPS Code	City of License	Frequency	Facilities	EAS Designation
WTGB-FM	24031	Bethesda	94.7	20.5 KW 235 Meters	PN
WMMJ	24031	Bethesda	102.3	2.90 KW 146 Meters	PN
WTNT	24031	Bethesda	570	1./5. KW DA-2U	PN
WMUC-FM	24033	College Park	88.1	.010 KW 1 Meters	PN
WMET	24031	Gaithersburg	1160	0.5/1. KW DA-2 U	PN
WILC	24033	Laurel	900	0.5/1.9 KW DA-2 U	PN
WPGC	24033	Morningside	1580	0.27/50. KW DA-2 U	LP-2
WPGC-FM	24033	Morningside	95.5	40 KW 167 Meters	LP-2
WCTN	24031	Potomac-Cabin John	950	0.047/2.5 KW DA-1 U	PN
WLXE	24031	Rockville	1600	0.5/1. KW DA-N U	PN
WTOP	24031	Silver Spring	1050	0.044/1. KW ND-1 U	NN
WGTS	24031	Takoma Park	91.9	27 KW 50 Meters	PN
WACA	24031	Wheaton	1540	5. KW ND-D D	PN

**Cable Companies –**

Comcast – Montgomery County, Prince Georges County.

# The Maryland State EAS Relay Network

The purpose of the Emergency Alert System is to convey any needed Emergency Warning or message to the public in a fast and efficient method.

## Overview

In 1997 the Federal Communications Commission (FCC) replaced the Emergency Broadcast System (EBS) with a more technological advanced Emergency Alert System (EAS), intended to provide a way to directly connect emergency managers and broadcasters. It was designed to free broadcasters of maintaining a staff presence 24x7 (even when off air).

The FCC requires states to have the capability to transmit EAS messages and has an established system that is standard across the US. It involves developing Statewide Relay Networks among radio stations. In Maryland the network consists of broadcasters throughout the state that communicate EAS messages through the use of specific message encoding hardware (Encoder/Decoder or ENDEC) installed at their facilities. The 'state relay' is basically a description of the method of message transfer from LP1 and LP2 radio stations to other participating stations in the state based on their monitoring assignments described in Annex 1. If an EAS message is generated from a specific radio station in Maryland, those radio stations assigned to monitor it will receive the message on their ENDEC and can then broadcast the message to their respective audiences.

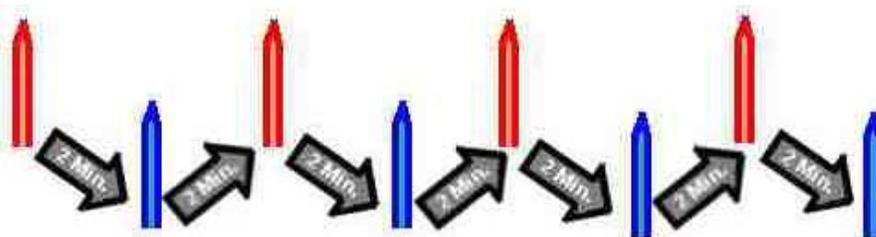
In Maryland, the system has been enhanced by the use of satellite links, computer software, and the internet that allows EAS messages to be sent to any number of desired recipients simultaneously across the state. This software is EMnet and is part of the standard process for sending EAS messages in Maryland. When EMnet is used to activate EAS messages, it will, by default, send the message over the internet to all designated recipients simultaneously. If the internet connection happens to be inoperable at the time, the message is transmitted via satellite with no discernable difference to the users sending or receiving the message. The capability to send and receive messages through the ENDEC units is a federal requirement. EMnet adds to that framework and functions seamlessly with it. Since EMnet can send the message simultaneously throughout the state if necessary, the message reaches farther and quicker than the method of relaying the message through the 'daisy chain' of radio stations.

The State of Maryland recognized the problems inherent in the legacy daisy-chain EAS delivery method and took initial steps in 2003 to improve matters by equipping over 40 broadcast locations with EMnet EAS satellite receivers and decoders.

**FCC Rules have not yet been updated to allow for replacement of the EAS system equipment (ENDECs). Broadcasters must keep their ENDECs in place and must continue to monitor local LP assignments to fulfill FCC EAS requirements for EAN coverage.**

## State Relay Network

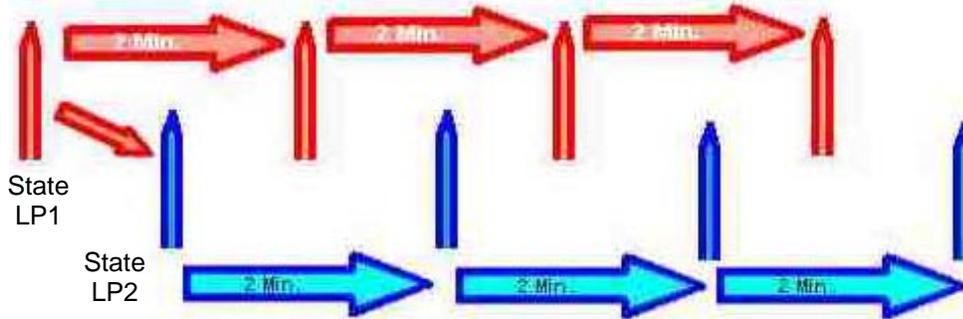
The EBS system operated on a simple daisy chain model that looks much like the diagram below.



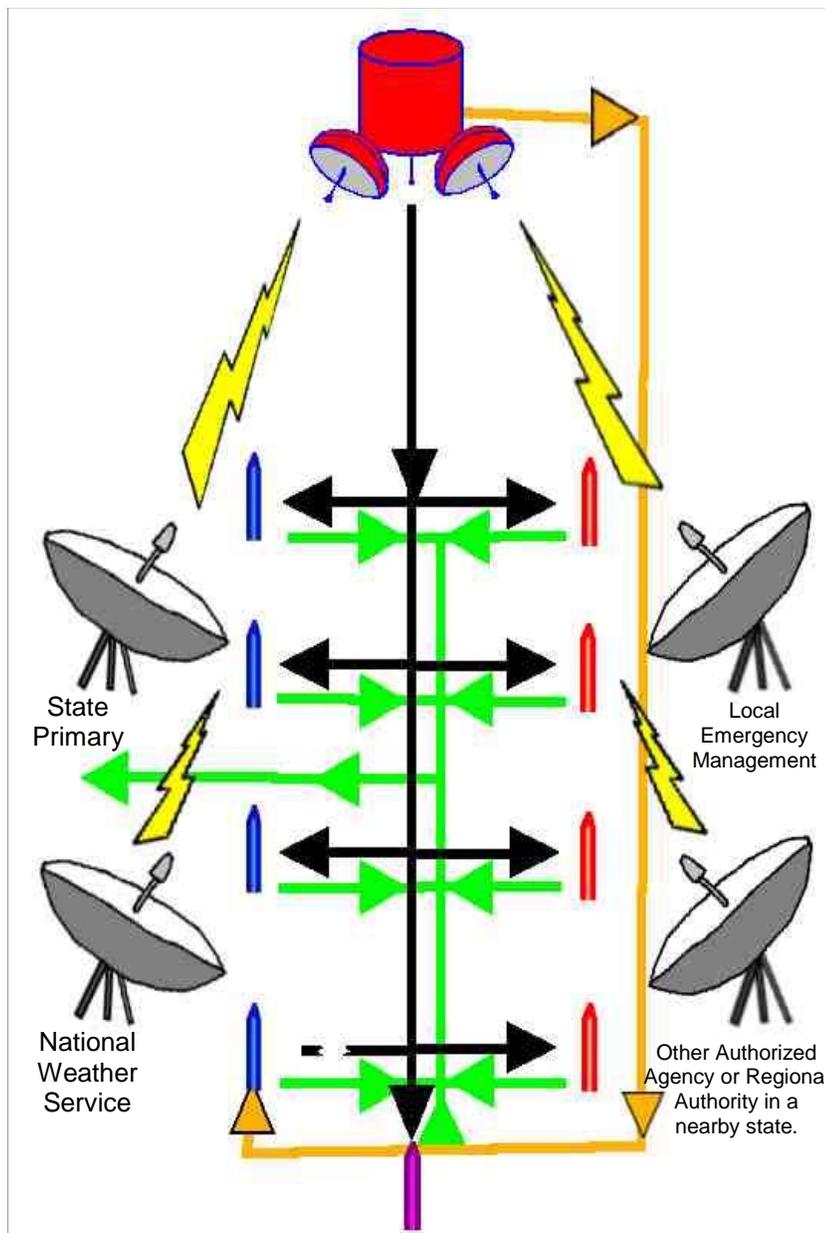
This way works when one station relays messages to another. Timeline for the above: 18 Minutes. The Daisy Chain is a one-direction messaging system. If started locally, those above the start point in the

chain do not hear the alert, as they are not monitoring lower stations in the chain. In the diagram above, if a message was started at one of the middle stations, those to the right would receive it and those to the left would not.

Currently Maryland uses a 'Ladder and Rung' system that is based on the daisy chain, but doubles up on message originators by having 2 Local Primary stations air the message.



This method shortens the relay a bit, it also provides two paths for the message and this improves chances it is heard by more stations as we get a layer of redundancy. The timeline for this method is still 10 minutes.



### Satellite Delivery System

With a satellite delivery system, coverage area and delivery speed are increased. What would take two minutes in conventional radio style gear, can be sent with wider bandwidth and greater speed. This means the recorded message could get there in virtually 30 seconds. Not every satellite network is the same. The adjacent diagram shows a basic network arrangement with many listening stations and a smaller number of authorized, equipped message senders.

This two dimensional graphic does not show the direct line of sight that a Satellite system uses. Basically, this is a diagram to show everyone is connected to the same network and receives data all at once.

The adjacent illustration uses the following conventions: The **yellow** lightning bolts are the uplink to the satellite. The **black** line is the downlink feed that shows the relay network. The **orange** line is the alternate link established to keep communications if one of the nodes has lost connection via the satellite feed. The **green** line is the feedback network that lets State Emergency Management see if the message arrived and was read.

## **Enhanced State Relay Network**

EMnet is a communications system designed to allow emergency managers to communicate with each other with a secure messaging system. The interface that EMnet uses is multifunctional and can send messages in a variety of priority levels. It can also be used to activate EAS alerts with all the encoding, vocal, including the vocal's text. In this way, EMnet functions in concert with the State Relay System for Emergency Communications allowing added flexibility with activating and managing EAS alerts while still meeting FCC rules for carrying them. It is also capable of receiving weather information via NWS EAS requests on EMnet and by using an EMWIN interface, which can receive the local weather text from the NOAA Weather Wire Service. Broadcast stations can also get EAS alerts from surrounding states that are using EMnet. Currently, other states using EMnet EAS in our region are Delaware, Pennsylvania, Virginia and Washington D.C. FIPS codes for the state(s) and/or counties of that surrounding state that are within a broadcaster's pattern can be added to the broadcaster's EMnet. It is important when using out-of-state alerts that the other state's EAS Plan is followed when covering such EAS Events.

EMnet EAS is a step beyond the basic Satellite System. It provides security by encrypting all messages sent over the network. It provides feedback to the sender and state emergency management operations, showing if a station received the message, and opened it. If monitoring equipment is installed, it could acknowledge that the message was aired. The system reports if and when a node (EMnet user terminal) goes down and notifies those necessary that the system has lost contact. When it detects a lost node, it switches that location (node) to an alternate delivery method if available. EMnet EAS has the ability to forward the audio and text used to all broadcasters, so it can be printed out. It will also generate the full crawl text including the text used for the alert vocal for video programmers.

EAS equipment installed at broadcaster locations can receive EMnet EAS alerts as well as send and receive non-EAS messages back to emergency managers. This allows verification that the unit is functioning. For the most part, the broadcaster acknowledges that the message was viewed.

To send an alert, the originator must have an authorized user name and password. All messages are encrypted before being sent and will only be decrypted by the party for whom it was intended. EMnet has the ability to activate pagers and send email of the messages received. News department personnel can elect to get an instant email or page when EMnet has received a message that requires attention. EMnet administrators can set the system up for daily testing and be paged if the test fails. It is possible to use the email feature to create an instant web page for a station's web site.

## **EMnet Deployment in Maryland**

EMnet is the solution for EAS alerting connectivity and security provided by the Maryland Emergency Management Agency. The State of Maryland EMnet EAS equipment has been provided to select broadcast stations at no cost. The State will cover the cost of the monthly satellite service where it has provided the equipment. While it would be best to provide the EMnet EAS Satellite Receiver equipment to all broadcasters in the State, it is not possible to do so due to budget constraints. However, the State has chosen to provide the equipment to as many broadcasters as possible with the understanding that the others who serve a significant audience within the State of Maryland may be included in the future or provide for their own. Equipment has been distributed to all local jurisdiction Emergency Management operations within the State. The equipment has also been distributed to all of the LP Broadcast Stations and to select television stations as this provides the best connectivity to all the other broadcasters and cable outlets. Other units are distributed to radio sites which have multiple stations in a single location. One EMnet EAS receiver can be used to feed multiple broadcast signals that might reach the greatest number of people.

## **EMnet EAS Equipment Property Rights -**

The equipment provided to broadcasters so they can receive EMnet EAS is property of the State of Maryland, and contains software programs considered essential to our State's public safety. Maryland maintains ownership of the units. This equipment is provide for the expressed purpose of being used for the Emergency Alert System and the handling of State and Local EAS activations. Broadcast radio and television stations that have been provided EMnet EAS equipment by the State are asked to maintain these computers in running condition by: (1) supplying uninterruptable power, (2) providing a connection to an EAS ENDEC or use of a Remote Node Interface (RNI) into the final audio feed to a transmitter, (3) maintaining virus protection, (4) providing an internet connection, and (5) updating the computer's operating system on a weekly basis. The EMnet EAS computer and the EMnet Satellite Receiver should never be turned off except for maintenance. Broadcasters and Emergency Managers may not alter the programs on the computer necessary to run the EMnet EAS network. These programs are maintained remotely by MEMA through its contractor to meet the EAS community's needs. Other uses of this EMnet EAS equipment must be approved by the Maryland Emergency Management Agency, and must not interfere with the operation of EMnet EAS.

## EAS and NOAA WEATHER RADIO (NWR)

The NOAA Weather Radio System can also be used as an EAS source. NOAA maintains the EAS capability to include all approved event codes instead of codes related to weather events. By special arrangement, the National Weather Service can initiate EAS alerts, or repeat them on the Weather Radio system (Reference Annex 3, Appendix 1). EAS encoding is an outgrowth of SAME technology developed by the National Weather Service to warn people of approaching storms and the dangers they contain. By expanding its ability to handle all EAS messages, emergency officials are able to reach out to more people with emergency messages and life saving instructions.

The following are weather related event codes that EAS equipment can be set up to receive from the NWS in Maryland.

### Weather Related Events

<b>BZW</b>	Blizzard Warning	<b>SPS</b>	Special Weather Statement
<b>CFW</b>	Coastal Flood Warning	<b>SVA</b>	Severe Thunderstorm Watch
<b>FFA</b>	Flash Flood Watch	<b>SVR</b>	Severe Thunderstorm Warning
<b>FFW*</b>	Flash Flood Warning*	<b>SVS</b>	Severe Weather Statement
<b>FFS</b>	Flash Flood Statement	<b>TOA</b>	Tornado Watch.
<b>FLW</b>	Flood Warning	<b>TOR*</b>	Tornado Warning*
<b>HLS</b>	Hurricane Statement	<b>TRA</b>	Tropical Storm Watch
<b>HUA</b>	Hurricane Watch	<b>TRW</b>	Tropical Storm Warning
<b>HUW</b>	Hurricane Warning	<b>TSW</b>	Tsunami Warning
<b>SMW</b>	Special Marine Warning	<b>WSW</b>	Winter Storm Warning

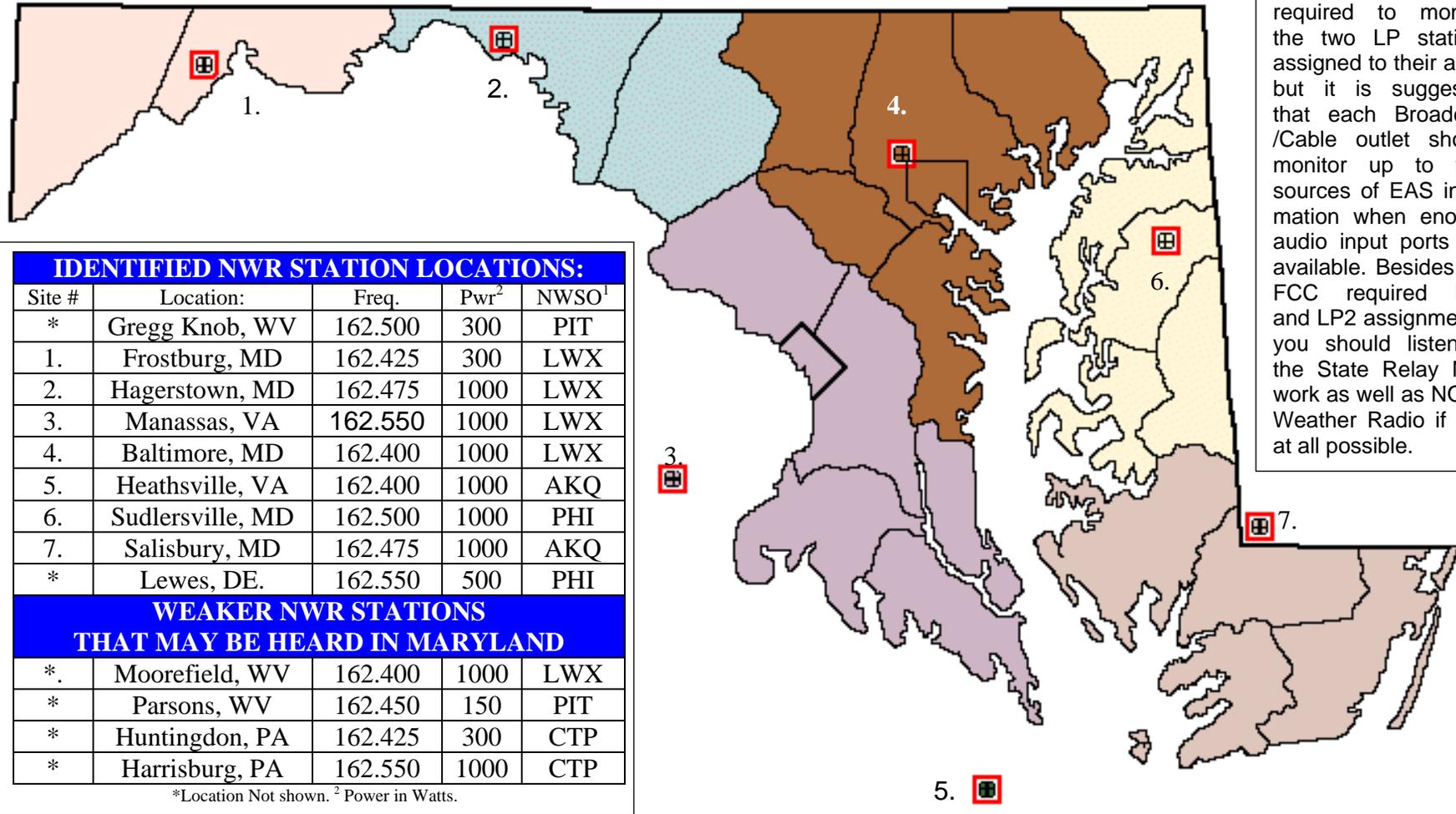
\*These are life-threatening events that the NWS requests always be auto-forwarded.

### Monitoring NOAA Weather Radio

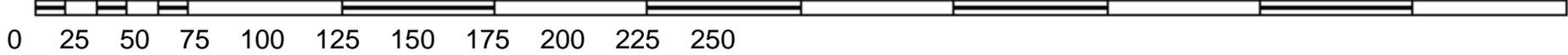
Monitoring NOAA Weather Radio is not a requirement, but it is highly recommended. This can be considered your third or fourth EAS monitoring assignment. Several weather warnings are imminent threats and need to be broadcast to the public as quickly as possible to save lives. The best way for broadcasters to do this is to monitor NWR for weather activations. NWR cannot do EAN as yet, so it can not replace your LP1 or LP2 monitoring assignment. But with the ALL HAZARD Weather Radio program, NWR can be used to carry local emergency messages when needed. By monitoring the nearest NWR station, stations can get fast weather alerts, and also provide another source for State and Local alerts. [Note: ALL HAZARD portions require an agreement between State and Local Emergency Management Agencies and the National Weather Service as to what will be covered.]

## MARYLAND NOAA WEATHER RADIO ZONE MAP

Please monitor the NWR transmission with the strongest signal strength for your area.



Each broadcaster or cable operation is only required to monitor the two LP stations assigned to their area, but it is suggested that each Broadcast /Cable outlet should monitor up to four sources of EAS information when enough audio input ports are available. Besides the FCC required LP1 and LP2 assignments, you should listen to the State Relay Network as well as NOAA Weather Radio if it is at all possible.



Map Scale in Miles. <sup>1</sup>NWSO abbreviations used: AKQ= Wakefield, VA , LWX = Sterling, VA, PHI= Mount Holly, NJ, CTP= State College, PA., PIT= Pittsburgh, PA.

<b>Maryland NOAA Weather Transmitter Coverage, FIPS Codes, and Frequencies</b>							
<b>State</b>	<b>County/City</b>	<b>FIPS Code</b>	<b>NWR Transmitter Location</b>	<b>Frequency MHz</b>	<b>CALL SIGN</b>	<b>Power in WATTS</b>	<b>Remarks</b>
<b>MD</b>	<b>Allegany</b>	<b>24001</b>	<b>Frostburg</b>	<b>162.425</b>	<b>WXM-43</b>	<b>300</b>	<b>Primary</b>
			Hagerstown	162.475	WXM-42	1000	Secondary
			Moorefield WV	162.400	WXM-73	500	Tertiary
<b>MD</b>	<b>Anne Arundel</b>	<b>24003</b>	<b>Pikesville</b>	<b>162.400</b>	<b>KEC-83</b>	<b>1000</b>	<b>Primary</b>
			Sudlersville	162.500	WXK-97	1000	Secondary
<b>MD</b>	<b>Baltimore City</b>	<b>24510</b>	<b>Pikesville</b>	<b>162.400</b>	<b>KEC-83</b>	<b>1000</b>	<b>Primary</b>
			Sudlersville	162.500	WXK-97	1000	Secondary
<b>MD</b>	<b>Baltimore County</b>	<b>24005</b>	<b>Pikesville</b>	<b>162.400</b>	<b>KEC-83</b>	<b>1000</b>	<b>Primary</b>
			Sudlersville	162.500	WXK-97	1000	Secondary
<b>MD</b>	<b>Calvert</b>	<b>24009</b>	<b>Manassas VA</b>	<b>162.550</b>	<b>KHB-36</b>	<b>1000</b>	<b>Primary</b>
			Salisbury	162.475	KEC-92	1000	Secondary
			Pikesville	162.400	KEC-83	1000	Tertiary
<b>MD</b>	<b>Caroline</b>	<b>24011</b>	<b>Sudlersville</b>	<b>162.500</b>	<b>WXK-97</b>	<b>1000</b>	<b>Primary</b>
			Lewes DE	162.550	WXJ-94	500	Secondary
			Salisbury	162.475	KEC-92	1000	Tertiary
<b>MD</b>	<b>Carroll</b>	<b>24013</b>	<b>Pikesville</b>	<b>162.400</b>	<b>KEC-83</b>	<b>1000</b>	<b>Primary</b>
			Hagerstown	162.475	WXM-42	1000	Secondary
<b>MD</b>	<b>Cecil</b>	<b>24015</b>	<b>Sudlersville</b>	<b>162.500</b>	<b>WXK-97</b>	<b>1000</b>	<b>Primary</b>
			Philadelphia PA	162.475	KIH-28	1000	Secondary
<b>MD</b>	<b>Charles</b>	<b>24017</b>	<b>Manassas VA</b>	<b>162.550</b>	<b>KHB-36</b>	<b>1000</b>	<b>Primary</b>
<b>MD</b>	<b>Dorchester</b>	<b>24019</b>	<b>Salisbury</b>	<b>162.475</b>	<b>KEC-92</b>	<b>1000</b>	<b>Primary</b>
			Sudlersville	162.500	WXK-97	1000	Secondary
<b>MD</b>	<b>Frederick</b>	<b>24021</b>	<b>Hagerstown</b>	<b>162.475</b>	<b>WXM-42</b>	<b>1000</b>	<b>Primary</b>
			Manassas	162.550	KHB-36	1000	Secondary
			Pikesville	162.400	KEC-83	1000	Tertiary
<b>MD</b>	<b>Garrett</b>	<b>24023</b>	<b>Frostburg</b>	<b>162.425</b>	<b>WXM-43</b>	<b>300</b>	<b>Primary</b>
			Gregg Knob WV	162.500	KWN-36	300	Secondary

### Maryland NOAA Weather Transmitter Coverage, FIPS Codes, and Frequencies

State	County/City	FIPS Code	NWR Transmitter Location	Frequency MHz	CALL SIGN	Power in WATTS	Remarks
MD	Harford	24025	Pikesville	162.400	KEC-83	1000	Primary
			Sudlersville	162.500	WXK-97	1000	Secondary
MD	Howard	24027	Pikesville	162.400	KEC-83	1000	Primary
MD	Kent	24029	Sudlersville	162.500	WXK-97	1000	Primary
			Pikesville	162.400	KEC-83	1000	Secondary
MD	Montgomery	24031	Manassas VA	162.550	KHB-36	1000	Primary
			Pikesville	162.400	KEC-83	1000	Secondary
MD	Prince Georges	24033	Manassas VA	162.550	KHB-36	1000	Primary
			Pikesville	162.400	KEC-83	1000	Secondary
MD	Queen Annes	24035	Sudlersville	162.500	WXK-97	1000	Primary
			Pikesville	162.400	KEC-83	1000	Secondary
			Salisbury	162.475	KEC-92	1000	Tertiary
MD	St Mary's	24037	Manassas VA	162.550	KHB-36	1000	Primary
			Heathsville VA	162.400	WXM-57	1000	Secondary
			Salisbury	162.475	KEC-92	1000	Tertiary
MD	Somerset	24039	Salisbury	162.475	KEC-92	1000	Primary
			Heathsville VA	162.400	WXM-57	1000	Secondary
MD	Talbot	24041	Sudlersville	162.500	WXK-97	1000	Primary
			Salisbury	162.475	KEC-92	1000	Secondary
MD	Washington	24043	Hagerstown	162.475	WXM-42	1000	Primary
			Frostburg	162.425	WXM-43	300	Secondary
MD	Wicomico	24045	Salisbury	162.475	KEC-92	1000	Primary
			Lewes DE	162.550	WXJ-94	500	Secondary
MD	Worcester	24047	Salisbury	162.475	KEC-92	1000	Primary
			Lewes DE	162.550	WXJ-94	500	Secondary

**U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL WEATHER SERVICE**

***AGREEMENT FOR TRANSMISSION OF WARNING MESSAGES ON NOAA  
WEATHER RADIO AND NOAA WEATHER WIRE SERVICE SYSTEMS***

This Agreement is entered into between the United States of America, Department of Commerce, National Oceanic and Atmospheric Administration/National Weather Service, hereinafter referred to as NWS, and the State of Maryland, Military Department, Maryland Emergency Management Agency, hereinafter referred to as the Maryland EMA.

This Agreement identifies certain responsibilities of both NWS and the Maryland EMA in the dissemination of information over NOAA Weather Radio (NWR) and NOAA Weather Wire Service (NWWS) in or serving the State. It defines the general scope of messages NWS will disseminate. It also outlines procedures to be used by the Maryland EMA in relaying its own non-weather related emergency messages and those from local jurisdiction emergency management agencies, hereinafter referred to as “others,” to NWS for dissemination. Non-Weather related emergencies will fall within the guidelines outlined in the Maryland State EAS plan and follow FCC EAS Rules Title 47 - §11.31.

**I. GENERAL:**

A. Both parties to this Agreement acknowledge that the primary mission of NWR and NWWS is to deliver meteorological and hydrological information to the public via messages transmitted on both systems. The transmission of other non-weather related emergency messages is only permitted where such messages will help to minimize the potential for loss of life and/or property. There may be cases where NWS, the Maryland EMA, and/or others have non-weather related emergency messages to issue at approximately the same time. In such situations, the local NWS office will make a decision on the relative priority of the messages based solely on the potential for the loss of life and/or property as determined by the NWS.

B. Maryland EMA and others will request transmission on NWR/NWWS only when other means of dissemination are not adequate to ensure the fastest delivery of urgent information of an imminent threat. Where NWR/NWWS have been used to disseminate a non-weather related emergency message, these systems may also be used for brief follow-up messages. Normally, such messages will simply direct listeners to commercial/public radio and television stations for further information.

C. In the case of NWR, the warning alarm should be activated only for the transmitter serving the area affected.

D. Not all emergencies or hazards for which transmissions may be requested by Maryland EMA or others can be foreseen and documented in this Agreement. The local NWS office should exercise its best judgment when considering such requests by determining the seriousness and immediacy of the threat to life and/or property.

E. The parties agree that the use of NWR/NWWS for non-weather related emergency messages will not be authorized unless procedures have been developed, approved, and accepted by NWS, Maryland EMA, and any local jurisdiction emergency management agency desiring use of the systems.

## II. AUTHORITY:

A. The NWS is authorized to enter into this Agreement pursuant to 15 U.S.C. Section 313. NWS participation in this Agreement is subject to the availability of appropriations.

B. The Maryland EMA is authorized to enter into this Agreement pursuant to Maryland Annotated Code, Public Safety Article Sec.14-104, Subsection D. Maryland EMA's participation in this Agreement is subject to the availability of appropriated funds for this purpose.

## III. NWS AGREES THAT:

A. Operation of NWR/NWWS will be in accordance with instructions contained in the National Weather Service Operations Manual and the controlling NWS office's Station Duty Manual.

B. Upon receipt of a request for transmission of a non-weather related emergency message from Maryland EMA or others and following proper authentication, those messages will be disseminated on both systems without further coordination. The NWR warning alarm and/or NWWS alert signal should be used with all warnings.

C. It will work with Maryland EMA and others to create appropriate procedures for the transmission of non-weather related emergency messages over NWR and NWWS. No non-weather related emergency messages will be transmitted until approved procedures are in place.

D. It will promptly notify Maryland EMA and others of changes in its use of NWR/ NWWS, including hours of operation and information carried.

E. To the extent permitted by applicable law, it will be responsible for claims of any nature, including costs and expenses, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person(s) or property by virtue of negligence on the part of the NWS, its officers, agents, and employees, in the performance of this Agreement. See, Federal Tort Claims Act, 28 U.S.C. Sections 2671, et.seq. NWS in no manner assumes any liability for the actions or omissions of the Maryland EMA, its officers, agents, and employees or for the actions or omissions of others related to the performance of this Agreement.

## IV. MARYLAND EMA AND OTHERS AGREE THAT:

A. Nothing in this Agreement limits NWS' current or future use of NWR/NWWS, including hours of operation and information carried.

B. Any request to broadcast non-weather related emergency messages over NWR/ NWWS shall be based solely on the imminent threat of danger to the health, safety, or property of the citizens of Maryland.

C. Messages will be transmitted to the appropriate NWS office by telephone, facsimile, computer/internet/electronic mail, and/or radio and will be broadcast, identically, on both NWR and NWWS.

D. It will coordinate its needs and those of others and will work with NWS to develop and approve procedures for transmission of non-weather related emergency messages. The procedures will outline appropriate use of NWR/ NWS, appropriate message content, appropriate identification of the sender, identification of the commercial/public radio and television stations for more information, and an authentication process. The procedure will include the NWS requirement that no message exceed 200 words.

E. To the extent permitted by applicable law, it will be responsible for claims of any nature, including costs and expenses, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person(s) or property by virtue of negligence on the part of the Maryland EMA, its officers, agents, and employees, in the performance of this Agreement. See, Maryland Annotated Code, State Government Article, Title 12, Subtitle 1. Maryland EMA in no manner assumes any liability for the actions or omissions of NWS, its officers, agents, and employees or for the actions or omissions of others related to the performance of this Agreement.

V. EFFECTIVE DATE:

This Agreement shall become effective on the last date shown below when executed by both parties hereto. This Agreement is valid and binding until terminated by either party upon 60-days prior written notice.

VI. AMENDMENTS:

This Agreement may be amended or modified at any time by mutual agreement of the parties hereto.

STATE OF MARYLAND  
Military Department  
Maryland Emergency Management Agency

UNITED STATES OF AMERICA  
Department of Commerce  
National Oceanic and Atmospheric  
Administration  
National Weather Service

By: Richard Muth  
Richard Muth

Title: Director

Date: January 6, 2009

By: Dean P. Gulezian  
Dean P. Gulezian

Title: Eastern Region Director

Date: 12/16/08

## Procedures for Issuing Non-Weather Related Emergency Messages via NWR

**I. PURPOSE.** This document details procedures for the broadcast of Non-Weather Related Messages via the NOAA Weather Radio Network.

**II. AUTHORITY.** Agreement between the United States of America, Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS) and the State of Maryland, Military Department, Maryland Emergency Management Agency (MEMA).

### III. GENERAL.

A. Use of the NWR and NOAA Weather Wire Service (NWWS) provides local jurisdictions with several notable advantages:

1) While not the primary portal into the Emergency Alert System (EAS), the NWR/NWWS activates the Emergency Alert System providing a near real-time secondary gateway to commercial/public broadcasters.

2) NWR provides immediate access to thousands of homes, businesses, and schools equipped with NOAA weather radios.

3) Upon receipt, the involved Weather Service Forecast Office (WSFO) will immediately release a submitted non-weather related emergency message to all wire and internet services using the NOAA Weather Wire Service (NWWS).

B. The primary mission of the NOAA Weather Radio (NWR) and National Weather Wire Service (NWWS) is the timely delivery of meteorological and hydrological information to the general public. The transmission of non-weather related emergency messages is authorized **to minimize the potential for loss of life and/or property**. Where the situation requires the simultaneous broadcast of weather and non-weather emergency messages, the local NWS office determines the priority of message broadcasts based on the potential for loss of life and/or property as assessed by the NWS.

C. Maryland emergency management personnel may request the broadcast of non-weather emergency information only when other means of dissemination are unavailable or untimely. Such a message shall *not* be submitted to advise the public of important but non life-threatening situations, e.g. school closures.

D. Where the NWR/NWWS has been used to disseminate non-weather emergency messages, brief follow-up messages may be appropriate. Broadcasts of follow-up messages will follow the same procedures and format as for the original message. Such messages normally will update or revise previous messages and direct listeners to commercial/public radio and television stations for further information.

### IV. STATE OR LOCAL ACTIVATION INSTRUCTIONS.

A. Maryland emergency management personnel upon determining that the NWR/NWWS is the most effective method to inform the public of an emergency will use the most expeditious means available to contact the supporting WSFO. The preferred method is via commercial FAX with a follow-up call to confirm receipt of the message. To facilitate this process, the following NWS telephone numbers are provided:

**Forecast Office**

Wakefield VA

**Supported Jurisdictions**

Dorchester/Ocean City  
Somerset/Wicomico &  
Worcester Counties

**Phone/FAX Numbers**

**FAX:** 757-899-5107  
**Phone:** 757-899-2415

<u>Forecast Office</u>	<u>Supported Jurisdictions</u>	<u>Phone/FAX Numbers</u>
Mount Holly NJ	Cecil/Caroline/Kent Queen Anne's/Talbot Counties	<b>FAX:</b> 609-261-6614 <b>Phone:</b> 609-261-6604
Sterling VA (Balt/Wash)	Allegany/Anne Arundel Baltimore City/Baltimore Calvert/Carroll/ Charles Frederick/Harford/Howard Montgomery/ Prince George's/Saint Mary's Washington Counties	<b>FAX:</b> 703-260-0809 <b>Phone:</b> 703-996-2201
Pittsburgh PA	Garrett	<b>FAX:</b> 412-262-9488 412-262-2034 (Backup) <b>Phone:</b> 412-262-1988 1-800-242-0510

**National Warning System (NAWAS)** State and local emergency management jurisdictions may use, in lieu of commercial lines, the Maryland and Regional NAWAS circuit to contact the NWS forecast office serving its area. This will require the call to be bridged through the State or Alternate State Warning Point. Use of NAWAS during times of emergency ensures calls receive priority and eliminates the need for the NWS to verify the call.

B. Messages provided to the WSFO shall be in the format found in Appendix A below. To ensure accuracy and expedite processing, messages should be FAXed with follow-up phone or NAWAS calls to verify receipt. If FAX is not available telephonic dictation of the message is acceptable. Message format remains the same. To ensure faster broadcast and fewer errors, messages should be short and to the point. A CEM transferred to the Emergency Alert System (EAS) must be less than two minutes in length to conform to the requirements of this system. This is in addition to the NWS requirement that a CEM not exceed 200 words.

C. Upon receipt of a CEM, the Forecast Office will call back using previously provided phone numbers or NAWAS warning point to verify the authenticity of the message. If the phone number is not continuously monitored, submitting officials must ensure someone is present to receive the follow-up verification call.

D. As a last resort, if telephonic communication is impossible, local jurisdictions may use supporting amateur radio service to contact the Sterling WSFO via SKYWARN amateur radio operators. (SKYWARN frequencies: 147.300+ MHz voice repeater / SKYWARN Packet Station: WX4LWX at 145.730 MHz.)

### **MOU / SOP - Appendix A Civil Emergency Message Format**

Message Information required by NWS:

- 1) Name of the Originating Agency  
The originating agency is the responsible emergency management office or its designated representative, e.g., police, fire or health department. It should be the agency directing the public to take action.
- 2) Jurisdiction Recipients  
Jurisdictions shall be identified by county except for Baltimore City. This is for assigning location codes (FIPS) which will set off individual tone-alert receivers so configured. Individual municipalities need not be identified.

- 3) Expiration Time  
Specify how long the message should be in effect. The maximum time is 6 hours, the minimum is 15 minutes.
- 4) Description of the emergency. Provide a short narrative (not to exceed either 200 words or two minutes in broadcast length) outlining the nature of the emergency, the desired specific action(s) to be taken by the public, e.g. remain in place, the actions initiated or pending by local jurisdictions, e.g. road closures, and the commercial/public broadcasters where additional information may be obtained.
- 5) Emergency location. This may include adjacent areas, yet unaffected, expected to be impacted by the emergency, e.g. the projected downwind area of a chemical spill.
- 6) Date/Time of emergency. Use local time.

Message Format: (Example Message issued by NWS Sterling)

WBCCEMLWX  
TTAA00 KLWX 242300  
MDC027-250500-

CIVIL EMERGENCY MESSAGE  
NATIONAL WEATHER SERVICE BALTIMORE-WASHINGTON  
700 PM EST FRI DEC 24 2002

THE FOLLOWING MESSAGE IS BEING TRANSMITTED AT THE REQUEST OF THE HOWARD COUNTY FIRE DEPARTMENT AND EMERGENCY MANAGEMENT...

AT 650 PM...A TRAIN DERAILED NORTH OF ELKRIDGE MARYLAND. THE RESULTANT CHLORINE GAS LEAK HAS CLOSED I-895 AND US ROUTE 1 NEAR ELKRIDGE. RESIDENTS OF THE COMMUNITY OF XXXX ARE ASKED TO EVACUATE IMMEDIATELY. FURTHER EAST...RESIDENTS OF XXXX ARE ASKED TO STAY AT HOME...KEEP ALL DOORS AND WINDOWS CLOSED AND TUNED TO XXXX ON YOUR AM/FM DIAL FOR FURTHER INSTRUCTIONS.  
END

# MARYLAND RMT SCHEDULE

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## Maryland Coordinated Monthly EAS RMT Test Schedule 2009

MONTH/ YEAR	DAY OF WEEK	DAY OF MONTH	VALID TIME WINDOW FOR TEST TO BEGIN	WHO WILL START	AREA OF COVERAGE	SUGGESTED TEXT
It is assumed in this schedule that the Required Monthly Test will take place on the Last Wednesday of every month.						
January 2009	Wednesday	28	10A-11A	MEMA	Full State	Standard
February 2009	Wednesday	25	2A-4A	MEMA	Full State	Standard
March 2009	Wednesday	25	10A-11A	MEMA	Full State	Standard
April 2009	Wednesday	29	2A-4A	MEMA	Full State	Standard
May 2009	Wednesday	27	10A-11A	MEMA	Full State	Standard
June 2009	Wednesday	24	2A-4A	MEMA	Full State	Standard
July 2009	Wednesday	29	10A-11A	MEMA	Full State	Standard
August 2009	Wednesday	26	2A-4A	MEMA	Full State	Standard
September 2009	Wednesday	30*	10A-11A	MEMA	Full State	Standard
October 2009	Wednesday	28	2A-4A	MEMA	Full State	Standard
November 2009	Wednesday	25	10A-11A	MEMA	Full State	Standard
December 2009	Wednesday	30	2A-4A	MEMA	Full State	Standard
<p>* Fall Back Plan Option – When the test is scheduled on the last day of the month, if WBAL does not receive the test before the test window expires, then they are to initiate the test to be sure it will be done. This will be known as the Fall Back Plan, as a Required Monthly Test must be done every month.</p>						
<p>Other RMT Potential Starting points – This RMT schedule is based on tests starting by MEMA using EMnet EAS to carry the emergency message. It might be beneficial to also use some of the other Warning partners to initiate the RMT for a given month to allow a better understanding of how well our EAS network is working. These partners might include the NWS via EMnet and NWR, MD State Police, and Local Area Communication Committees. A revised schedule will be issued if this option is used.</p>						
<p>Please note: The Suggested Test Text could be changed with SECC approval to include various EAS topic reminders, that might help your audience better understand the Role of EAS. All tests will contain the RMT event code and will be clearly labeled with the words, "This is a Test." Also note, initiators could be changed as well if needed.</p>						

### From the FCC Handbook Concerning Monthly Tests:

Required monthly tests (RMT) consists of transmitting: the EAS digital Header Codes, the two tone attention signal, a brief test script and end of message code. And for TV: a visual display of header code data. A monthly test can be substituted for one weekly test. In the odd months monthly tests must be conducted in daylight hours (8:30 AM to sunset). In even months monthly tests must be conducted at night (sunset to 8:30 AM). Monthly Tests must be retransmitted within 60 minutes of receipt. They can be scheduled by the State/Local Plan.

No monthly test is necessary during a month when there is an EAS activation that includes a two tone alert signal, and an audio message (including a video message for TV). However, unless this activation is one for the full state, the SECC has determined that a monthly test will be sent so all equipment in the state is tested monthly. Also, the RMT monthly test code is reserved for use only by those authorized by the SECC or LECC according to this schedule.

## Maryland Coordinated Monthly EAS RMT Test Schedule 2010

MONTH/ YEAR	DAY OF WEEK	DAY OF MONTH	VALID TIME WINDOW FOR TEST TO BEGIN	WHO WILL START	AREA OF COVERAGE	SUGGESTED TEXT
It is assumed in this schedule that the Required Monthly Test will take place on the Last Wednesday of every month.						
January 2010	Wednesday	27	10A-11A	MEMA	Full State	Standard
February 2010	Wednesday	24	2A-4A	MEMA	Full State	Standard
March 2010	Wednesday	31*	10A-11A	MEMA	Full State	Standard
April 2010	Wednesday	28	2A-4A	MEMA	Full State	Standard
May 2010	Wednesday	26	10A-11A	MEMA	Full State	Standard
June 2010	Wednesday	30*	2A-4A	MEMA	Full State	Standard
July 2010	Wednesday	28	10A-11A	MEMA	Full State	Standard
August 2010	Wednesday	25	2A-4A	MEMA	Full State	Standard
September 2010	Wednesday	29	10A-11A	MEMA	Full State	Standard
October 2010	Wednesday	27	2A-4A	MEMA	Full State	Standard
November 2010	Wednesday	24	10A-11A	MEMA	Full State	Standard
December 2010	Wednesday	39	2A-4A	MEMA	Full State	Standard
* Fall Back Plan Option – When the test is scheduled on the last day of the month, if WBAL does not receive the test before the test window expires, then they are to initiate the test to be sure it will be done. This will be known as the Fall Back Plan, as a Required Monthly Test must be done every month.						
Other RMT Potential Starting points – This RMT schedule is based on tests starting by MEMA using EMnet EAS to carry the emergency message. It might be beneficial to also use some of the other Warning partners to initiate the RMT for a given month to allow a better understanding of how well our EAS network is working. These partners might include the NWS via EMnet and NWR, MD State Police, and Local Area Communication Committees. A revised schedule will be issued if this option is used.						
Please note: The Suggested Test Text could be changed with SECC approval to include various EAS topic reminders, that might help your audience better understand the Role of EAS. All tests will contain the RMT event code and will be clearly labeled with the words, "This is a Test." Also note, initiators could be changed as well if needed.						

### From the FCC Handbook Concerning Monthly Tests:

Required monthly tests (RMT) consists of transmitting: the EAS digital Header Codes, the two tone attention signal, a brief test script and end of message code. And for TV: a visual display of header code data. A monthly test can be substituted for one weekly test. In the odd months monthly tests must be conducted in daylight hours (8:30 AM to sunset). In even months monthly tests must be conducted at night (sunset to 8:30 AM). Monthly Tests must be retransmitted within 60 minutes of receipt. They can be scheduled by the State/Local Plan.

No monthly test is necessary during a month when there is an EAS activation that includes a two tone alert signal, and an audio message (including a video message for TV). However, unless this activation is one for the full state, the SECC has determined that a monthly test will be sent so all equipment in the state is tested monthly. Also, the RMT monthly test code is reserved for use only by those authorized by the SECC or LECC according to this schedule.

# RMT Scripts

Listed below are the officially approved Required Monthly Test (RMT) Scripts for Maryland's Coordinated Monthly EAS Test.

## 1. Standard RMT Script:

### For MEMA-

This is the Maryland Emergency Management Agency with the coordinated test of the Emergency Alert System. Broadcasters are testing equipment used to warn you during an emergency. This concludes this test of the Emergency Alert System. (approx. 13 seconds)

**For the National Weather Service-** [Used with RMT for the State of Maryland or the local Weather Service Forecast Area concerned depending on how the NWS does their tests. It can be sent via EMnet/EAS or using NWR to start the test.]

This is the National Weather Service at \_\_\_\_\_, with the coordinated test of the Emergency Alert System. Broadcasters from Maryland are testing equipment used to warn you during an emergency. This concludes this test of the Emergency Alert System. (approx. 14 seconds)

### For WBAL-

This is a test of the Maryland Emergency Alert System. In the event of an emergency, this system could bring you important information. This concludes this test of the Emergency Alert System. (approx. 12 seconds) (The one currently used)

or

This is the coordinated test of the Emergency Alert System. Broadcasters from Maryland are testing equipment used to warn you during an emergency. This concludes this test of the Emergency Alert System. (approx. 11 seconds)

## 2. Approximate RMT Times:

4 seconds to send the header  
 8 seconds for the attention signal  
 1 second of blank  
 12 -14 seconds for the vocal audio  
 1 second of blank  
 4 seconds for the end of message signal.

---

30 - 32 seconds total

## Maryland Child Amber Alert

# MARYLAND CHILD AMBER ALERT –

1. AMBER is part of the voluntary side of EAS. It can be a valuable service for your audience if you understand how it works and how it can help save young lives.
2. The OFFICIAL EAS Event Code for all Maryland Child AMBER Alerts is “CAE” (Child Abduction Emergency). No other event code may be used for official EAS activations when issuing the initial Maryland Child Amber Alert. This event code may NOT be used except in an actual emergency, as per FCC Rules. If you have not upgraded your EAS equipment to receive this event code, you may want to consider doing so now.

The Maryland State Police is the only agency authorized to initiate a CAE for any location in Maryland. This is done upon requests made by local law enforcement. No other Police agency in Maryland may authorize a CAE. It must come from the Maryland State Police to be official.

Law enforcement agencies making such requests must first determine that the following criteria exist:

- A. Law Enforcement verifies that a child has been abducted.
- B. There is reasonable belief, which law enforcement can articulate, that an abduction has occurred.
- C. The abduction is of a child under age 18 (age 17 years old or younger).
- D. The law-enforcement agency has reason to believe that the child is in imminent danger of serious bodily injury or death.
- E. There is enough descriptive information about the abduction for law enforcement to issue an AMBER Alert to assist in the recovery of the child. (This will most often include description of the child, abductor as well as a suspect vehicle).
- F. The abductor and/or child are likely to still be in the broadcast area.
- G. The child's name and other critical data elements, including the Child Abduction flag, have been entered into the National Crime Information Center (NCIC).

Upon confirmation of the above criteria by the Maryland State Police, they will contact MEMA and request that EAS activation for the Maryland Child AMBER Alert.

Official Verification of an active Amber Alert in Maryland can be found at:  
[www.mdamberplan.com](http://www.mdamberplan.com) . If it is found on that web site, it is an official activation.

The protocol of the Maryland Child AMBER Alert Team will have MSP contact the Maryland Emergency Management Agency's Maryland Joint Operations Center (MJOC) to issue the EMnet EAS Child Abduction Emergency EAS bulletin. MSP will provide the text of the CAE to the MJOC. The text provided by MSP will be entered into the EMnet EAS Encoder by the MJOC Personnel. The MJOC will then create a recording of the text provided by the Maryland Child AMBER Alert Team and will add a digital photo(s) as attachments if available.

Maryland Joint Operations Center

## **Maryland Child Amber Alert**

State Emergency Operations Center  
Maryland Emergency Management Agency  
Camp Fretterd Military Reservation  
Telephone: 410-517-3676 or toll free 1-877-636-2872.  
Email: [MJOC@mema.state.md.us](mailto:MJOC@mema.state.md.us)

The MJOC will, upon the approval of a member of the Maryland Child AMBER Alert Team, issue the CAE via EMnet EAS to all of Maryland. EAS stations are encouraged to broadcast a CAE to all media outlets. The participating media outlets then broadcast the alert to the public.

## **Definitions**

**Abduction:** A child is reported to be involuntarily missing from the person(s) having care-taking responsibilities for the child. There is an eyewitness who states that the child was taken by a person or persons for whom there is a physical description, a vehicle description (if one is involved), and a direction of travel from the point last seen. Lacking an eyewitness, evidence exists that the child's disappearance was not voluntary.

**Child:** A person under the age of 18 (Federal guidelines state age 17 or younger).

**Child Abduction Emergency (CAE):** the event code utilized to distribute the Maryland Child AMBER Alert via the Emergency Alert System.

## **Broadcast to the public**

The initiator will record and transmit the alert to all area media outlets via the State EAS Relay Network and EMnet.

The broadcast can include the EAS encoding and attention signal, EAS vocal and End of Message (EOM) during the initial reception and forwarding of the EAS alert. A live station announcer may choose to read the information manually from the official text found within the CAE.

If the Alert is being manually forwarded from a manned broadcast station, before they forward the EAS CAE bulletin, the announcer may want to tell the recipient station "This is a Child Abduction Emergency Alert – please stand by for important information." Then the relaying station should forward the EAS CAE Alert as it was received.

Subsequent or follow up coverage will only happen at manned stations, or only when automation be can programmed to add the alert vocal to repeat it. No one can expect more from an unmanned operation.

Broadcasters and cable operators using automation are encouraged to configure their "On Air" EAS equipment to auto forward the CAE code when station staff are not present to manually forward the alert.

Broadcast stations and cable operators are encouraged to repeat the Child Amber Alert vocal message from a recording of the initial EAS message, or by reading it to their audience from the official text, when staff is present. In the case of television stations, you can graphically represent or crawl the alert's vocal information on screen as a way to fulfill FCC inclusiveness requirements. This should be done within a reasonable amount of time. It is hoped the message will be repeated three or four times an hour for the first two or three hours. News departments should actively cover the

**Maryland Child Amber Alert**

story as it unfolds for their audience and follow up with the story to show how the public assisted police.

Updated alerts may be broadcast if significant new information is developed which may result in the location of the abductor and/or the child; this may be done using EMnet text messaging. If the child has not been recovered within 24 hours, the AMBER Alert is self-canceling. Please note the EAS CAE event duration is 4 hours, not to be confused with the AMBER alert itself.

Only repeat the alert information on air while the alert is active. After the alert is cancelled, discontinue active use, and refer it to the news department for follow up. When the alert is cancelled, it is suggested your announcer thank your audience for their participation, as it is only with the public's help that a Child Amber Alert is effective.

**Activation Review**

As soon as practical after the activation of a Maryland Child AMBER Alert, the Maryland Coordinating Council members will meet with the law enforcement agency that activated the Maryland Child AMBER Alert to review the implementation of established procedures and address any deficiencies. The Maryland Coordinating Council law enforcement members may invite other individuals to participate in the review process. If Maryland EAS is utilized for the AMBER Alert, the Maryland Coordinating Council usually invites selected members of the Maryland State Emergency Coordinating Committee (MD SECC) to also participate in the review.

**USE OF OUT-OF-STATE CHILD AMBER ALERTS –**

Broadcasters are reminded that quite often their transmission signal crosses state boundaries and reaches a larger audience than just people from Maryland. It is possible for many people outside of Maryland to need information that may affect a state that borders Maryland. You can choose to broadcast that information as you feel is appropriate for your station. If you choose to do this, be certain that you are following the state rules for the other state in such activations, in forwarding the EAS Alert. So long as you act within the rules provided by the nearby state concerning EAS activations in their jurisdictions, we will not hinder your assistance to provide your audience information on their out-of-state emergency.

For broadcast and cable situations with demographics in more than one state, EMnet EAS can help you with this regional coverage. EMnet EAS can be programmed to receive more than just Maryland EAS Alerts.

If a nearby State feels that the suspect may flee to Maryland, they may request a Maryland CAE activation through the Maryland State Police. MSP will determine if the request fits the Maryland Child AMBER Alert criteria. If it does, the alert may be issued to all or part of Maryland.

**IN STATE and OTHER NEARBY OFFICIAL STATE AMBER ALERT Resources –**

Maryland Amber Plan = [www.mdamberplan.com](http://www.mdamberplan.com)

Delaware Amber Plan = <http://www.state.de.us/dsp/pio/newsroom.htm>

Pennsylvania Amber Plan = [www.amber.state.pa.us/amber/site/default.asp](http://www.amber.state.pa.us/amber/site/default.asp)

Virginia Amber Plan = [www.vaamberalert.com](http://www.vaamberalert.com)

Washington D.C. Amber Plan = [www.dcamberplan.com](http://www.dcamberplan.com)

West Virginia Amber Plan = [www.wvstatepolice.com/amber.htm](http://www.wvstatepolice.com/amber.htm)

## **Maryland Child Amber Alert**

### **HOW AMBER WORKS -**

Now that you know the protocol concerning EAS use of Child AMBER Alerts in Maryland, here is a quick review on how the system should work, and why everyone should participate.

The idea behind AMBER Alerts is that we have the greatest chance of saving the abducted child's life if they are recovered in the first 3 hours. Chances of finding them alive after that point of time diminish greatly. With this understood, it is important to get the word out quickly.

A common misconception: While the AMBER Alert efforts have made a big splash on television news, it should be noted that an AMBER Alert is not initially a television event. What is needed is to get people who are out and about to begin looking. You can not watch TV and drive a car safely, but you can listen to the radio. That is why it is so important for ALL radio stations to at least carry the initial EAS CAE Alert to their audiences. Because some one out there, on the road, may be listening to your radio station and get the word, "Be on the look out." They are the ones most likely to see the suspect vehicle and report it. This all can happen because you helped by issuing the initial CAE EAS Alert. If you can add the EAS data stream to your RDBS or traffic report system where available, even more people who may be listening to CDs or tapes in their cars could get the word.

Television's role is one of keeping people informed, and providing pictures of the child and suspect when available. Television and Radio News Departments are also helpful in following the developments of the Child AMBER Alert situation. After the event concludes, they can follow up on what happened. But take note, the AMBER Alert incidents you see on TV news are mostly over, thanks to those on the road listening to the Radio.

Broadcasters are reminded that this is a good public service. It is voluntary. It is of significant importance. Advocates of the AMBER Alert model are very well tuned to the need for broadcasters to do this public service. While we can not say that broadcasters and cable operators must do this, we suggest broadcasters and cable operators carefully consider active participation in this public effort.

## **LOCAL EAS PLANS**

### **Introduction -**

In compliance with FCC Part 11 Rules, this State Plan recognizes the need for the Local EAS areas to organize a Local Emergency Communications Committee (LECC) and local EAS Plans for the State's various operational areas. The LECCs should consider organizing their operational area local plan into regions. It would encourage all media outlets capable of being heard from a given location to carry the same emergency message about a single event within the same time frame.

The Local EAS Plan (or Local Area Plan) will offer guidance for local level emergencies. The Local Plan will provide guidance to both Emergency Management and the broadcast/cable sectors of the EAS community. The Local EAS Plan will be coordinated and reach the intended audience. Each EAS operational area needs to establish an LECC and create an EAS Plan for the specific location.

This does not mean that each EAS Operational Area has to be thought of as being separate. Local EAS Areas can use combined resources, and improve communications among all parties within their Local Area. It is desired that all broadcasters and Emergency Management organizations utilize a common set of rules so that plans from different EAS Operational Areas won't have different sets of procedures to follow. Standardization in this area will only benefit the overall process of EAS for the State.

Whenever possible, LECCs will be composed of equal part representation between government officials and private sector participants. They will meet as needed to create and maintain a Local EAS Plan, and oversee its implementation within that local area. Local Broadcaster representation on this committee shall include someone from each Local Primary (LP) station in the EAS Operational Area.

Local Emergency Communication Committees are hereby authorized under the State's EAS Plan to create a local EAS Plan for their respective Operational Area. Until that can be accomplished and plans are officially submitted and approved by the MD SECC and FCC, Local EAS Operational Areas can function under the following EAS Area Model Operational Plan. This model plan shall be superseded by the approved Local EAS Plan for a specific local Operational Area.

Once approved, the Local EAS Plans from a recognized Maryland LECC will be added as an appendix to this Annex of Maryland State EAS Plan.

## **MODEL LOCAL EAS PLAN**

Emergency Alert System Procedures for the Local Areas in Maryland until formal plans are composed and submitted.

**PURPOSE:** This Local Area Plan (Model) is to provide procedures for activating the Emergency Alert System by authorized local area government officials, by broadcasters and by cable operators so they might be able to relay the critical information during an emergency situation. It will provide both sides of the alerting system with guidance on what to do to send an EAS Alert out and what to do when an EAS Alert is received to get the information to the public in a timely manner. While this is not intended to be an exhaustive authority, it is important to note the changes in both FCC rules and the alerting process since the old EBS days.

**AUTHORITY:** Title 47 U.S.C. [add correct numbers here if changed] Part 11, [add correct subpart here], FCC Rules and Regulations, Radio Broadcast Services, Emergency Alert System (EAS) as pertains to day-to-day emergency operation.

### **INTRODUCTION:**

**BY WHOM** - These procedures were prepared by the State Emergency Communications Committee in conjunction with federal and State Emergency Management officials to provide guidance until an official Local EAS Plan can be created by each EAS operational area in the State.

**AUTHORIZATION-** This section provides authority for the local EAS operations to function until a local plan is approved.

**EXPLANATION OF CHANGES** - It must be understood by both sides that with the creation of the Emergency Alert System the FCC changed the rules for broadcasters, allowing for automation to replace manned operation, for some if not all of the broadcast day. This changes the way things must happen because it is no longer feasible for local emergency officials to call the broadcaster to get the alert message out.

**Activation of the Emergency Alert System must be done by the authority who is issuing the alert.**

Because of automation and other considerations, broadcasters should no longer be relied upon to help in this process. The Maryland Joint Operations Center can assist a local emergency manager with EAS activations when they cannot initiate it themselves. Broadcasters must ensure forwarding the emergency message either manually or automatically when an emergency exists which affects the life and safety of the public in their broadcast audience. It is important that both broadcasters and emergency managers become familiar with these procedures and follow them whenever EAS is needed.

Acceptance of/or participation in this plan shall not be deemed as a relinquishment of program control and shall not be deemed to prohibit a licensee from exercising his/her independent discretion

## Local EAS Model Plan

and responsibility in any given situation. As noted in Part 11 Rules any use of the EAS Attention Signal confers automatic rebroadcast authority.

## Parts of an EAS Alert

The State of Maryland has provided Emergency Management officials at the county level with specialized equipment that is capable of providing a fully encoded EAS alert message and inserting it into the EAS monitored stream. To use this equipment, Emergency Managers must know that all of the required EAS Alert parts are provided according to FCC specifications. If this is done correctly, the EAS messages can be seen by broadcast stations En/Dec equipment and forwarded, either automatically as appropriate or manually by broadcast staff. To comply with this, the initiator of the EAS alert must provide the following information to have a full EAS alert:

- (1) EAS header encoding: This includes the following information: preamble\* and sync codes\*, an originator ID\*, the event code, the code(s) for location(s) affected, the expected duration of the event, a UTC time stamp\*, the Sending Station ID\*. (\*These parts are usually automatically generated according to machine set up.)
- (2) the EAS Attention Signal,
- (3) a Vocal Alert Message,
- (4) and End of Message codes.

Incomplete messages, messages with non-intelligible audio components, and messages that lack all the parts needed might be ignored by the EAS En/Dec automation. Additionally it could cause the system to continue operating beyond the EAS message. Such EAS activations may not be used, and may not reach the public intended. EM staff who provide emergency messages should be certain to do it right the first time. Because of automation, EAS is a "one time" system. There is only a single 2-minute window to give out the necessary information to save lives and property. Time must be used wisely since the message may not get repeated. For this reason, it would be prudent to make certain the entire message is accurately and completely delivered.

Multiple EAS messages are not easily accomplished. Due to limitations of current EAS equipment, broadcasters need a minimum of 6 minutes to get the initial message out. This allows for only two layers in a daisy chain, and assumes immediate retransmission. Alerts that come too fast after the first activation will overwrite the original message. Successive alerts not spaced properly will erase previous ones from the broadcaster's EAS equipment's memory. Multiple alerts must be spaced appropriately to be effectively delivered.

Since EAS is a "one time" system, every message initiated will interrupt the broadcasters regular programming, effectively costing the broadcasters money. If multiple alerts are initiated for the same event, emergency managers run the risk of losing the privilege of having alert requests honored and carried by many broadcasters. EAS is voluntary at the local level. Broadcasters are not legally required to air them. To maintain the integrity of the system EAS activation must be used strictly for extreme emergencies and carried out correctly the first time. As the broadcasters have put it, *Less is BEST*. The full message must be delivered the first time. If people are asked to evacuate and are not told the location and name of a specific shelter, they will most likely not hear any later messages containing specific information because they will have already evacuated.

## **LOCAL PLAN TARGET COVERAGE AREA**

This temporary local plan is for the (*provide location here*) EAS Area. It applies to all Designated Local Government Officials within this operational area and to all broadcast and cable operators with a potential audience within this area. It remains the active plan until superseded by a new or updated plan.

## **LOCAL EAS ACTIVATION**

Local EAS activation will be coordinated by the County Office of Emergency Management or the other appropriate authority for the counties within this local plan. Local officials wanting to issue EAS messages to the public must contact their appropriate EM officials following the proper procedures.

County Emergency Operations Centers who are too busy to do an alert correctly, or may be in the evacuation zone, may request mutual aid from another nearby county EOC or the Maryland Joint Operations Center to issue the appropriate alert(s). Initiators are reminded to use only the appropriate FIPS codes for the affected area, not necessarily for their own county area.

## **Activation Procedure for initiating an EAS Alert**

Local Authorities in Maryland who are authorized to activate the EAS system will use the EMnet State Relay Network to initiate alerts into the monitored EAS network stream. These alerts are to be local EM operational area(s) specific. If broader activation is necessary, it should be referred to MEMA and the Maryland Joint Operations Center.

It is the responsibility of each EM operational area to assure the equipment is kept operational and ready for use. They must also assure that those who will actually issue the Emergency Vocal Message are fully trained on the equipment, and know how to correctly issue the alert (both mechanically and vocally). Most broadcast stations do EAS in automatic mode when staff is not present. Very few broadcasters still have staff present 24/7. Most are not staffed at night and on weekends. Automation of EAS at the broadcaster site is another reason that EAS messages must be succinct and accurate. A mistake could be costly to the broadcaster financially and cause them to not participate in the future. Training and exercising of these procedures can help prevent costly mistakes.

### **Here are the steps to complete a successful EAS Activation:**

- (1) Open EMnet messaging screen.
- (2) Click on EAS box on the right panel of EMnet window.
- (3) Click on the Template tab of EMnet EAS window.
- (4) Create a Template Name (file name) in the box in the center of the screen.
- (5) Click on the Audio Check Box for Local.
- (6) Click on the record Button.
- (7) Type in an alert vocal, load a pre-made message, or copy and paste another vocal message script or complete and use the one below. Remember all EAS Alerts must run under two minutes in length as that is the limit for most EAS equipment, so nothing

## Local EAS Model Plan

beyond the two minute length will be broadcast. Keeping pre-timed templates on hand for a variety of situations can greatly speed alert preparations.

Sample Vocal Template:

This is an Emergency Alert System activation for  (Name of County )  County. At the request of  (Name of Office of authorized requesting authority) , for the area of  (Name of Location of Incident) . Because of  (Type of Incident) . People in an area should  (Information as to what people nearby should do) . Repeat the location affected, the type of incident, and briefly what people should do.

- (8) Once the message is typed into the EMnet EAS text area, record the message using that text and the EMnet vocal message recorder. Then listen to it to be sure it is correct, clear, and easy to understand. If it is not right, re-do the recording. Speak slowly, so that all words are easily understood.
- (9) Set up Encoding on the EMnet EAS computer by clicking the close button on the recorder window. Double check that all parts are set up correctly.
- (10) Save the template.
- (11) Send the message into the EAS monitored stream. All LP Stations in Maryland and select TV Stations are equipped to receive EAS via this method.

**NOTE:** It is the responsibility of Emergency Management (EM) to initiate EAS. Under current FCC rules it is still possible to ask for broadcast assistance from one of the local primary radio stations. EM officials are reminded that many LP stations are not manned much of the time. Broadcast personnel are not trained to write or produce warnings. Because of this fact, (and the liabilities that could result if something is not done correctly) *it is NOT advisable for broadcasters to initiate EAS bulletins*. During EBS, it was the norm to use broadcasters to start emergency messages that were written or voiced by EM officials. EBS ended on December 31, 1996. With EAS it is now the responsibility of the Emergency Managers to be the initiator of local EAS broadcast requests.

## Receiving Local EAS Alerts for Your Broadcast Area -

When you receive an EAS alert for your broadcast area, it is important that you consider how important your relaying of that message is to those immediately involved with the situation. When you get an EAS message dealing with a life or death issue, like a tornado warning or an evacuation order due to a hazardous materials incident, the faster messages are forwarded, the more lives will be saved.

## **Immediate Transmission Requested**

It is strongly suggested that the following messages be broadcasted immediately:

**EVI = Immediate Evacuation**

**SPW = Shelter in Place Warning**

**TOR = Tornado Warning**

**CAE = Child Abduction Emergency**

**HMW = Hazardous Materials Warning**

**CEM = Civil Emergency Message**

**FFW = Flash Flood Warning**

## **Short Delays Tolerated**

For the following EAS messages, a short delay to allow smoother insertion into the program stream can be tolerated, but these messages are still vital to provide notice to the public:

**CDW = Civil Danger Warning**

**LEW = Law Enforcement Warning**

**RHW = Radiological Hazard Warning**

**TOE = 911 Telephone Emergency**

**HUW = Hurricane Warning<sup>1</sup>**

**TRW = Tropical Storm Warning<sup>1</sup>**

**TSW = Tsunami Warning<sup>1</sup>**

**WSW = Winter Storm Warning<sup>1</sup>**

**LAE = Local Area Emergency**

**FRW = Fire Warning**

**FLW = Flood Warning<sup>1</sup>**

**SVR = Severe Thunderstorm Warning<sup>1</sup>**

**TOA = Tornado Watch<sup>1</sup>**

## **Broadcaster Discretion Allowed**

The following Local EAS Events may be used as either an EAS alert or a news event at the discretion of station management:

**Weather Watches not listed above<sup>1</sup>**

**DMO<sup>2</sup> = Practice/Demo Warnings**

**NMN<sup>2</sup> = Network Message Notification**

**ADR<sup>2</sup> = Administrative Message**

## **EAS EVENTS Not Used by Maryland**

The following EAS Events will not be used by this local Area as they do not apply to Maryland:

**VOL = Volcano Warning**

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<sup>1</sup> How weather warnings and watches are handled is up to the broadcast station's own policy when professional meteorological staff personnel are locally employed or live "on air" personnel might be able to read the weather information. Issue of an official weather warning is the sole responsibility of the NWS. Not using EAS encoding could potentially cause people needing the warning to not receive it. Many radios, and even some TVs are equipped with SAME decoders that can automatically be turned on by the EAS encoding. This is why we strongly urge the use of EAS alerts for Tornado and Flash Flood Warnings.

<sup>2</sup> Not used except by special arrangement. DMO could be used in conjunction with a prearranged disaster drill to test EAS connectivity. ADR may later be assigned a special purpose. NMN has no known defined purpose at this time.

## **TESTS by Local Emergency Management**

EMnet EAS does not require much testing to verify it's ability to function as several elements are embedded in the system's architecture and software. RWTs could be sent to local broadcasters using EMnet occasionally. Broadcasters and Cable companies do not have to re-broadcast RWTs. The RMT event code is a function of the State Emergency Communications Committee. The "All Maryland" FIPS code is reserved for State level activations and tests only.

Broadcasters and Cable operators will follow the normal testing procedures as prescribed by the FCC EAS Rules. RWT testing should be done using your normal EAS box.

## **FIPS Subdivisions (Not Currently Set for Maryland)**

FCC Part 11 EAS Rules allowed codification of specific state and county identifiers with a prefix digit for subdivisions to be easily identified within those geo-political identifiers. While a standard was already in place for the state and county identities, no subdivision breakdowns have been officially designated for Maryland by the National Weather Service. They are not currently used. This means all EAS activations will be designated for a full county/city even if the area affected is only a small part. Until the SECC, LECCs, local EMAs, MEMA, and the NWS can meet and work out the specific subdivision layout and structure for given areas in Maryland and register same with the appropriate NIST office, subdivisions can not be officially used.

**Important Note:** This is a potential weakness in the EAS alerting system that could cause confusion. Because Video Programmers (TV Stations, and Cable Systems) must generate a video crawl from the EAS Header codes which include the FIPS location, the crawl may literally say that EAS was activated for EVACUATION of an entire county. While the vocal message may be much more specific, it will still say on TV what the FIPS Code says, e.g. a hurricane is approaching the coastal regions of Maryland from the South. TV stations have to crawl "Evacuation for Worcester County" even though evacuation was only for Ocean City and coastal low lying areas. This is why we have pushed hard to find a way for the spoken vocal text to be sent along with the EAS bulletin. Fortunately EMnet EAS overcomes this problem by providing broadcasters with the vocal message text at the same time the alert is received. This will help prevent much of the visual confusion.

## **PERSONS AUTHORIZED TO ACTIVATE EAS**

Part 11 Requires All EAS Plans to provide a full list of those empowered to activate EAS as a public warning tool. When specific names are known for office holders that do not change frequently, then the name should be included, otherwise the functional title of the office empowered may be enough. It is the responsibility of EOC and 911 staff to protect the EAS equipment from misuse. They should follow correct procedures in verifying a person's identity before issuing any EAS alerts under said authority.

**PERSONS AUTHORIZED TO ACTIVATE EAS for this Local EAS Operational Area are:**

## Local EAS Model Plan

- (1) Any local jurisdiction Emergency Management Director or Deputy Director of Emergency Management for the EAS Operational Area<sup>3</sup>
- (2) Any Authorized official in the State EAS Plan who is present at an EOC in your local EAS Operational area.<sup>4</sup>
- (3) Any authorized federal Official who in the Federal Regulations is permitted to do so, who can provide proof of authorization, and who is present at an EOC in your EAS Operational Area.<sup>4</sup>

## PRIORITY OF MESSAGES

Following FCC EAS Rules as found in Part 11 and the various EAS Operational Handbooks, Local EAS activations fall between Presidential Messages (EAN) and State Messages. In giving Local Messages a priority over State EAS messages, the FCC is recognizing that those in the trenches are better qualified to see to local needs. During a disaster, common sense would indicate that priority be given to Life Threatening Warnings first, and other related information messages after that as needed. Remember in larger disasters where multiple communities are affected, some coordination of messages may be needed.

## FOLLOW PLANS and More INFORMATION

When an EAS activation is necessary, an Emergency exists. Remember, at this time people need information in a fast, efficient, and timely manner. This includes the initial alert information, plus any additional support that is possible to do. Things like maps, lists of what to do, and what not to do, shelter locations, how to get medical help, evacuation routes, even supplies that are needed, and notification to volunteers to report, can all be done in the background without additional alerts whenever possible. Radio and TV stations should announce additional information as it becomes available. TV and Cable can do informational crawls or the EAS video page for the duration of the event (or at least the first few hours). Advanced planning on the part of Emergency Management on what support should be provided is suggested.

## REVIEW OF EAS USAGE

It would be advisable that the LECC hold a review session within a week or so after an activation. All persons involved should be invited to participate to include one representative each from the SECC and the LECC(s) involved. Review what worked as planned, what did not work, and how to deal with the problems to improve performance when EAS is needed in another Emergency.

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<sup>3</sup> NB: The Maryland State EAS Plan specifies that, "All local Emergencies (other than weather alerts) shall be declared only by the local or County Emergency Management Agency. All others wanting EAS activation for an emergency situation must go through their local Emergency Management office.

<sup>4</sup> Unless the person is in the rules of your local County EM to issue an order to start EAS, and does so by following the prescribed procedures of your county, you should not honor the request and issue an EAS. It is important that you know from whom the order came and that said person is a duly authorized. To be certain of their ID you can have any visiting authorities provide proof of authority, and they should be present at the EOC before locally initiating an EAS activation.

**Local EAS Model Plan****List of the Designated EAS Operational Areas in Maryland**

Allegany/Garrett EAS Local Area  
Baltimore Metropolitan EAS Local Area<sup>5</sup>  
Cecil/Harford EAS Local Area  
Frederick/Washington EAS Local Area  
Lower Eastern Shore EAS Local Area<sup>6</sup>  
Southern Maryland EAS Local Area<sup>7</sup>  
Upper Eastern Shore EAS Local Area<sup>8</sup>  
Maryland Counties<sup>9</sup> of the Washington DC Metropolitan EAS Plan

**PERMISSION FOR RE-USE GRANTED -**

Local Emergency Communication Committees or Local Area Emergency Communications Committees with official jurisdiction for EAS activities within the State of Maryland are granted permission to use this Local EAS Model Plan in whole or in part as desired. It is hopeful that each group would customize this plan or create another Local EAS Plan that includes all parts needed for that plan to be successful for its local area. Full document files for reworking this plan can be obtained from the MD SECC.

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<sup>5</sup> Baltimore City, Anne Arundel, Baltimore, Carroll and Howard Counties

<sup>6</sup> Dorchester, Somerset, Wicomico, Worcester Counties and Ocean City

<sup>7</sup> Calvert, Charles and St. Mary's Counties

<sup>8</sup> Caroline, Kent, Queen Anne's and Talbot Counties

<sup>9</sup> Montgomery and Prince George's Counties

## **EAS Event Codes and Maryland Automation Event Set Up Information**

### **MANDATED FCC ORIGINATOR AND EVENT CODES**

The following are mandated FCC Originator codes that determine who authorized the generation of an event.

#### **FCC Mandated Originator Codes**

The following Originator codes are mandated by FCC Rules:

<u><b>Originator</b></u>	<u><b>ORG Code</b></u>
Broadcast station or cable system	EAS
Civil authorities	CIV
National Weather Service	WXR
Primary Entry Point System	PEP

#### **FCC Mandated Event Codes**

The FCC requires that broadcasters and cable operators program their EAS Decoders for following events:

- "EAN" (National EAS Activation) - Must be re-transmitted immediately.
- "EAT" (National EAS Termination) - Must be re-transmitted immediately.
- "RMT" (Required Monthly Test) - containing your County of License code or State Code. Must be re-transmitted within 1 hour of receipt.
- "RWT" (Required Weekly Test) - containing your County of License code of received test need only be logged. No re-broadcast is necessary.

The following is a complete list of all Mandated FCC Event Codes that must be programmed into EAS decoders:

<u><b>Nature of Activation</b></u>	<u><b>Event Codes</b></u>
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

## Maryland Event Codes (EEE)

### State, Local, and Weather Codes (Optional):

Administrative Message	ADR
Blizzard Warning	BZW
Child Abduction Emergency	CAE <sup>1</sup>
Civil Emergency Message	CEM
Coastal Flood Warning	CFW <sup>1</sup>
Earthquake Warning	EQW <sup>1</sup>
Evacuation Immediate	EVI
Fire Warning	FRW <sup>1</sup>
Flash Flood Warning	FFW
Flash Flood Watch	FFA
Flash Flood Statement	FFS
Flood Warning	FLW
Hazardous Materials Warning	HMW <sup>1</sup>
High Wind Warning	HWW
Hurricane Warning	HUW
Hurricane Statement	HLS
Law Enforcement Warning	LEW <sup>1</sup>
911 Telephone Outage Emergency	TOE <sup>1</sup>
Practice/Demo Warning	DMO
Radiological Hazard Warning	RHW <sup>1</sup>
Severe Thunderstorm Warning	SVR
Severe Thunderstorm Watch	SVA
Severe Weather Statement	SVS
Shelter in Place Warning	SPW <sup>1</sup>
Special Marine Warning	SMW <sup>1</sup>
Tornado Warning	TOR
Tornado Watch	TOA
Tropical Storm Warning	TRW <sup>1</sup>
Tsunami Warning	TSW
Winter Storm Warning	WSW

<sup>1</sup>Upgrading to these new codes is voluntary but highly recommended. All models of EAS equipment manufactured after August 1, 2003 must be capable of receiving and transmitting these event codes. Broadcast stations, cable systems and wireless cable systems which replace their EAS equipment after February 1, 2004 must install equipment that is capable of receiving and transmitting these event codes.

## **AUTOMATION EVENT CODES**

With the advent of the Emergency Alert System, broadcasters have been able to depend on automation to carry programming on nights and weekends, leaving the broadcast studios empty at times. As the messages carried by the Emergency Alert System are vital to the safety of the general public of your broadcast area, we respectfully request you program your EAS Equipment to handle the following Event Codes automatically. So when you switch from having your broadcast station manned to being unmanned and operating under automation mode your EAS equipment will forward the following events.

You may choose to automatically forward all of the other EAS event codes too. Remember with no one at your station to tell people the weather, this is a way to provide your audience with good weather coverage should a weather event be issued. The other emergencies in the Event code list should also be considered for auto forwarding. The following list however are the ones considered most critical for public safety.

### **List of Event Codes to Automatically Transmit:**

**NATIONAL ACTIVATIONS: EAN, EAT, NIC, and RMT.** This is an FCC requirement.

**State/Local and Weather Events<sup>1</sup> that need immediate broadcast to save lives:**

CEM	Civil Emergency Message	RHW	Radiological Hazard Warning
EVI	Immediate Evacuation	SPW	Shelter In Place
FFW	Flash Flood Warning	TOE	911 Telephone Outage
FRW	Fire Warning	TOR	Tornado Warning
HMW	Hazardous Materials Warning	CAE	Child Abduction Emergency
TSW	Tsunami Warning		

Note: Tsunami Warning (TSW) is included in this list which locally seems to be very unlikely but if it ever needed there will probably be very little advance warning time. Only broadcasters with signal patterns near the Chesapeake Bay and Coast and cable operations in bay and coastal communities would need to consider this event. A recent NWS release indicates they will begin to issue Tsunami Watch/Warnings if ever needed.

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<sup>1</sup> All State, Local, and Weather EAS events are optional. It is up to each broadcaster to decide which events will be covered. The MD SECC recommends that life threatening events be considered for those that will affect a given listening/viewing audience. The group are events with immediate consequences for people needing the warning information. The Child Abduction Emergency (CAE) for a Child AMBER Alert is one the MD SECC hopes is considered by all stations, but it is not one that warns the public of extreme danger, but rather asks the public to assist in saving a child's life. It is up to station management to decide on its station's participation in the voluntary part of EAS. This list requires a station's EAS Endec is upgraded to the latest EAS event codes. Those stations not having upgraded should at least set their Endecs to use the first three events, CEM, EVI, and FFW in the automatic mode. Stations without Event Code upgrades will not be able to receive and decode CAE events. The Child AMBER Alert information is ONLY sent using the CAE. FCC Rules prohibit using any other Event Code to activate EAS for an AMBER Alert.

## MARYLAND & LOCAL EAS EVENTS DEFINED

To keep things consistent as to what each EAS event code covers, as well as to keep us on track with all states in our surrounding area and nationally, so that we can maintain a consistent message that is understood by everyone, this section is included. It is complete as provided by the National Weather Service in preparations for their All Hazards National Weather Radio. Here are the definitions we will follow for the events listed that are for local and State use. Please note the exclusions from Maryland use listed in brackets following the definition.

**Administrative Message (ADR)**. A non-emergency message that provides updated information about an event in progress, an event that has expired or concluded early, pre-event preparation or mitigation activities, post-event recovery operations, or other administrative matters pertaining to the Emergency Alert System.

**Avalanche Watch (AVA)**. A message issued by authorized officials when conditions are forecast to become favorable for natural or human-triggered avalanches that could affect roadways, structures, or backcountry activities.

**Avalanche Warning (AVW)**. A warning of current or imminent avalanche activity when avalanche danger is considered high or extreme. Authorized officials may recommend or order protective actions according to state law or local ordinance when natural or human-triggered avalanches are likely to affect roadways, structures, or backcountry activities.

**Child Abduction Emergency (CAE)**. An emergency message, based on established criteria, about a missing child believed to be abducted. A local or state law enforcement agency investigating the abduction will describe the missing child, provide a description of the suspect or vehicle, and ask the public to notify the requesting agency if they have any information on the whereabouts of the child or suspect.

**Civil Danger Warning (CDW)**. A warning of an event that presents a danger to a significant civilian population. The CDW, which usually warns of a specific hazard and gives specific protective action, has a higher priority than the Local Area Emergency (LAE). Examples include contaminated water supply and imminent or in-progress military or terrorist attack. Public protective actions could include evacuation, shelter in place, or other actions (such as boiling contaminated water or seeking medical treatment).

**Civil Emergency Message (CEM)**. An emergency message regarding an in-progress or imminent significant threat(s) to public safety and/or property. The CEM is a higher priority message than the Local Area Emergency (LAE), but the hazard is less specific than the Civil Danger Warning (CDW). For example, the CEM could be used to describe a change in the Homeland Security Alert System level in response to a terrorist threat.

**Earthquake Warning (EQW)**. A warning of current or imminent earthquake activity. Authorized officials may recommend or order protective actions according to state law or local ordinance.

**Evacuation Immediate (EVI)**. A warning where immediate evacuation is recommended or ordered according to state law or local ordinance. As an example, authorized officials may recommend the evacuation of affected areas due to an approaching tropical cyclone. In the event a flammable or explosive gas is released, authorized officials may recommend evacuation of designated areas where casualties or property damage from a vapor cloud explosion or fire may occur.

**Fire Warning (FRW)**. A warning of a spreading wildfire or structural fire that threatens a populated area. Evacuation of areas in the fire's path may be recommended by authorized officials according to state law or local ordinance.

**Hazardous Materials Warning (HMW)**. A warning of the release of a non-radioactive hazardous material (such as a flammable gas, toxic chemical, or biological agent) that may recommend evacuation (for an explosion, fire or oil spill hazard) or shelter in place (for a toxic fume hazard).

**Law Enforcement Warning (LEW)**. A warning of a bomb explosion, riot, or other criminal event (e.g. a jailbreak). An authorized law enforcement agency may blockade roads, waterways, or facilities, evacuate or deny access to affected areas, and arrest violators or suspicious persons.

**Local Area Emergency (LAE)**. An emergency message that defines an event that by itself does not pose a significant threat to public safety and/or property. However, the event could escalate, contribute to other more serious events, or disrupt critical public safety services. Instructions, other than public protective actions, may be provided by authorized officials. Examples include: a disruption in water, electric or natural gas service, road closures due to excessive snowfall, or a potential terrorist threat where the public is asked to remain alert.

**Network Message Notification (NMN)**. Not yet defined and not in the suite of products for relay by NWS. **[Not for Maryland Use at this time.]**

**911 Telephone Outage Emergency (TOE)**. An emergency message that defines a local or state 911 telephone network outage by geographic area or telephone exchange. Authorized officials may provide alternative phone numbers in which to reach 911 or dispatch personnel.

**Nuclear Power Plant Warning (NUW)**. A warning of an event at a nuclear power plant classified such as a Site Area Emergency or General Emergency as classified by the Nuclear Regulatory Commission (NRC). A Site Area Emergency is confined to the plant site; no off-site impact is expected. Typically, a General Emergency is confined to an area less

than a 10-mile radius around the plant. Authorized officials may recommend evacuation or medical treatment of exposed persons in nearby areas.

**Radiological Hazard Warning (RHW)**. A warning of the loss, discovery, or release of a radiological hazard. Examples include: the theft of a radioactive isotope used for medical, seismic, or other purposes; the discovery of radioactive materials; a transportation (aircraft, truck or rail, etc.) accident which may involve nuclear weapons, nuclear fuel, or radioactive wastes. Authorized officials may recommend protective actions to be taken if a radioactive hazard is discovered.

**Shelter in Place Warning (SPW)**. A warning of an event where the public is recommended to shelter in place (go inside, close doors and windows, turn off air conditioning or heating systems, and turn on the radio or TV for more information). An example is the release of hazardous materials where toxic fumes or radioactivity may affect designated areas.

**Volcano Warning (VOW)**. A warning of current or imminent volcanic activity. Authorized officials may recommend or order protective actions according to state law or local ordinance. **[Not for Maryland Use.]**

Adopted from NWSI 10-518. Not all of these events are considered applicable for use in Maryland.

<b>MARYLAND FIPS CODES</b>				
<b>ALL MARYLAND BROADCASTERS/CABLE OPERATORS MUST INCLUDE THE STATE FIPS CODE</b>				
<b>024000</b>				
This is to receive full State MARYLAND EAS Messages and RMT Event Codes. Plus one needs to include any of these county codes that are appropriate for the coverage area.				
<b>MARYLAND COUNTY FIPS CODE CHART</b>				
Subdivision Number (Not Used) Use All County	State Number	County Number	County Name	Combined to make FIPS Code:
<b>0</b>	<b>24</b>	001	Allegany	024001
		003	Anne Arundel	024003
		005	Baltimore	024005
		009	Calvert	024009
		011	Caroline	024011
		013	Carroll	024013
		015	Cecil	024015
		017	Charles	024017
		019	Dorchester	024019
		021	Frederick	024021
		023	Garrett	024023
		025	Harford	024025
		027	Howard	024027
		029	Kent	024029
		031	Montgomery	024031
		033	Prince George's	024033
		035	Queen Anne's	024035
		037	St. Mary's	024037
		039	Somerset	024039
041	Talbot	024041		
043	Washington	024043		
045	Wicomico	024045		
047	Worcester	024047		
<b>INDEPENDENT CITY and Special FIPS Area Codes in Maryland –</b>				
Subdivision Number (not used) Use All County	State Number	Special Location Number	Location Name	Combined to make FIPS Code
<b>0</b>	<b>24</b>	510	Baltimore City	024510
<b>SPECIAL MARINE AREA FIPS CODES WITHIN MARYLAND</b>				
Subdivision Number (not used)	Marine Area Number	Marine Location Number	Location Identified as: CB=Chesapeake Bay PR= Potomac River	Combined to Make the FIPS Code
<b>0</b>	<b>73</b>	530	CB - North of Pooles Island	073530
		531	CB - Pooles Island to Sandy Pt	073531
		532	CB - Sandy Pt to North Beach	073532
		533	CB - North Beach to Drum Point	073533
		534	CB - Drum Pt MD to Smith Pt VA	073534
		535	PR- Key Bridge to Indian Pt	073535
		536	PR- Indian Head to Cobb Island	073536
		537	PR- Cobb Island to Smith Pt	073537
		650	Coastal Waters – Fenwick Is DE to Chincoteague VA	073650

There may be other Location codes broadcasters may want to cover for adjoining out-of-state locations and Marine interests nearby that are not listed here. It is up to each broadcaster to determine.

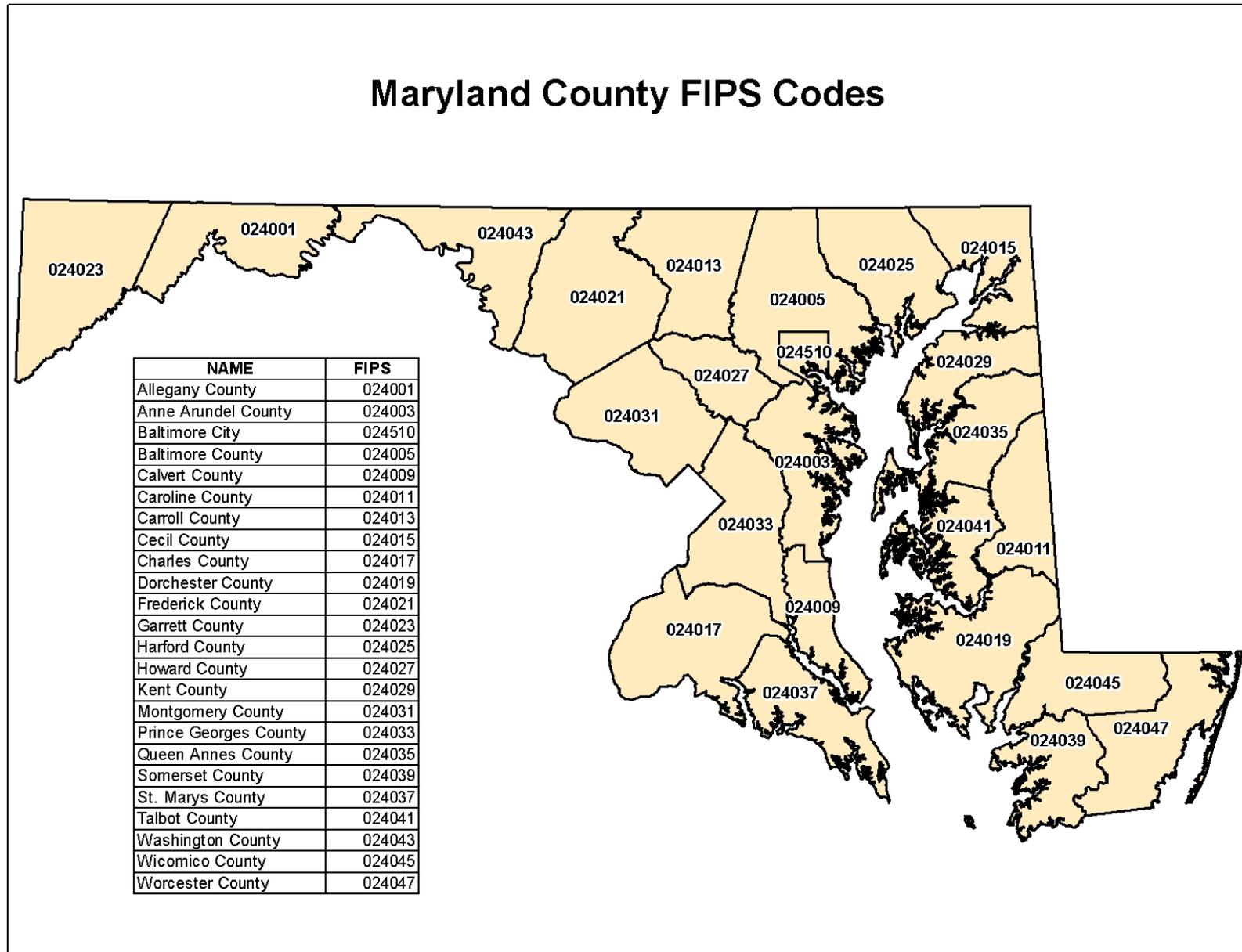
County and Local Emergency Management Agency Areas of Responsibility-			
EM/EOC Name:	Contact Information:	FIPS for Local Responsibility	Other FIPS for your Operational Area
<b>Allegany/ Garrett EAS Local Area</b>			
Allegany County 911/EOC	Allegany County Dept of Public Safety and Homeland Security 11400 PPG Road Cumberland, MD 21502 Office: 301-777-7113 Fax: 301-777-8196	024001	024001 024023
Garrett County Office of Emergency Management	Garrett County Office of Emergency Management 311 East Alder Street Oakland, MD 21550 Office: 301-334-7619 Fax: 301-334-8946	024023	024001 024023
<b>Baltimore Metropolitan EAS Local Area</b>			
Annapolis EOC	Annapolis City Emergency Management 929 West Street Suite 307 Annapolis, MD 21401 Office: 410-216-9167	024003	024003 024005 024013 024027 024510
Anne Arundel County EOC	Anne Arundel County Office of Emergency Management 7480 Baltimore and Annapolis Blvd Glen Burnie, MD 21061 Office: 410-222-0600 Fax: 410-222-8039	024003	024003 024005 024013 024027 024510
Baltimore City 911/EOC	Baltimore City Office of Emergency Management 1201 East Cold Spring Lane Baltimore, MD 21239 Office: 410-396-6175 Fax: 410-532-6125	024510	024003 024005 024013 024027 024510
Baltimore County 911/EOC	Baltimore County Office of Emergency Preparedness Baltimore County Fire Department 700 East Joppa Road, Third Floor Towson, MD 21286-5500 Office: 410-887-5996 Fax: 410-337-7445	024005	024003 024005 024013 024027 024510
Carroll County 911/EOC	Carroll County Emergency Management Agency Office of Public Safety 225 North Center Street, Room #020 Westminster, MD 21157 Office: 410-386-2296 Fax: 410-857-3522	024013	024003 024005 024013 024027 024510

County and Local Emergency Management Agency Areas of Responsibility-			
EM/EOC Name:	Contact Information:	FIPS for Local Responsibility	Other FIPS for your Operational Area
Howard County 911	Howard County Fire and Rescue Office of Emergency Management 6751 Columbia Gateway Drive Fourth Floor Columbia, MD 21046 Office: 410-313-6331 Fax: 410-313-3423	024027	024003 024005 024013 024027 024510
<b>Frederick/Washington EAS Local Area</b>			
Frederick County 911/EOC	Frederick County Civil Defense & Disaster Preparedness 340 Montevue Lane Frederick, MD 21702 Office: 301-694-1418 Fax: 301-695-7960	024021	024021 024043
Washington County 911/EOC	Washington County Emergency Management Washington County Dept. of Emergency Services 33 West Washington Street Hagerstown, MD 21740 Office: 240-313-2904 Fax: 240-313-2930	024043	024021 024043
<b>Cecil / Harford County EAS Local Area</b>			
Cecil County Dept. ES	Cecil County Department of Emergency Services 107 Chesapeake Blvd. Suite 108 Elkton, MD. 21921 Office: 410-996-5350 Fax: 410-398-0536	024015	024015 024025
Harford County 911	Harford County Division of Emergency Operations 2220 Ady Road Forest Hill, MD 21050-1707 Office: 410-638-3409 Fax: 410-879-5091	024025	024015 024025
<b>Southern Maryland EAS Local Area</b>			
Calvert County EOC	Calvert County Division of Emergency Management Court House 175 Main Street Prince Frederick, MD 20678 Office: 410-535-1623 Fax: 410-535-3997	024009	024009 024017 024037
Charles County 911	Charles County Department of Emergency Services P.O. Box 2150 200 Baltimore Street La Plata, MD 20646 Office: 301-609-3402 Fax: 301-609-3410	024017	024009 024017 024037

County and Local Emergency Management Agency Areas of Responsibility-			
EM/EOC Name:	Contact Information:	FIPS for Local Responsibility	Other FIPS for your Operational Area
St. Mary's County 911	St. Mary's County Emergency Management Agency Emergency Operations Center 23090 Leonard Hall Drive P.O. Box 653 Leonardtown, MD 20650-0653 Office: 301-475-4440 Fax: 301-475-4512 301-475-4924	024037	024009 024017 024037
<b>Upper Eastern Shore EAS Local Area</b>			
Caroline County 911/EOC	Caroline County Department of Emergency Management 7 N. First Street Denton, MD 21629 Office: 410-479-2622 Fax: 410-479-4200	024011	024011 024015 024029 024035 024041
Kent County 911	Kent County Emergency Management Agency Unit D, 104 Vickers Drive Chestertown, MD 21620 Office: 410-778-3758 Fax: 410-778-4601	024029	024011 024015 024029 024035 024041
Queen Anne's County 911	Queen Anne's County 911 100 Communications Drive Centerville, MD 21617 Office: 410-758-4500 Fax: 410-758-2194	024035	024011 024015 024029 024035 024041
Talbot County 911/EOC	Talbot County Emergency Management Agency 605 Port Street Easton, MD 21601 Office: 410-770-8160 Fax: 410-770-8163	024041	024011 024015 024029 024035 024041
<b>Lower Eastern Shore EAS Local Area</b>			
Dorchester County 911/EOC	Dorchester County Emergency Management Agency 829 Fieldcrest Road Cambridge, MD 21613 Office: 410-228-1818 Fax: 410-228-1216	024019	024019 024039 024045 024047
Ocean City 911	Ocean City Office of Emergency Management P.O. Box 158 6501 Coastal Highway Ocean City, MD 21843-0158 Office: 410-723-6646 Fax: 410-723-6962	024047	024019 024039 024045 024047

County and Local Emergency Management Agency Areas of Responsibility-			
EM/EOC Name:	Contact Information:	FIPS for Local Responsibility	Other FIPS for your Operational Area
Somerset County 911/EOC	Somerset County Department of Emergency Services 11916 Somerset Avenue Princess Anne, MD 21853 Office: 410-651-0707 Fax: 410-651-3350	024039	024019 024039 024045 024047
Wicomico County 911/EOC	Wicomico County Emergency Management Agency Public Safety Complex 411 Naylor Mill Road, Suite 200 Salisbury, MD 21801 Office: 410-548-4921 Fax: 410-548-4932	024045	024019 024039 024045 024047
Lower Eastern Shore EAS Local Area Continued			
Worcester County 911	Worcester County Emergency Services 1 West Market Street Court House, Room L14 Snow Hill, MD 21863 Office: 410-632-1311 Fax: 410-632-2141	024047	024019 024039 024045 024047
Washington DC Metropolitan EAS Local Area (Maryland Counties Only)			
Montgomery County Fire 911	Montgomery County Fire 911 Box 4117 Gaithersburg, MD 20885-4117 Office: 240-777-2325 Fax: 240-777-2345	024031	024031 024033
Prince George's County EOC	Prince George's County Office of Emergency Preparedness 6820 Webster Street, Suite 113 Landover, MD 20784 Office: 301-583-1899 Fax: 301-583-1986	024033	024031 024033

**MD FIPS CODE MAP**



**EAS TRAINING RECOMMENDATIONS**

# EAS Training Recommendations Annex

To get the most from the EAS system, it is important that everyone is trained on their part of the EAS system. Currently the MD SECC does not have a full training program available. For the present time a list of available resources is provided for EAS-related materials.

**Emergency Officials - Recommended resources:**

EMnet training via MEMA by calling 1-877-MEMA-USA (1-877-636-2872)

**Broadcasters and Cable Operators - Recommended resources:**

FCC EAS Handbooks and other information found at: [www.fcc.gov/eb/eas](http://www.fcc.gov/eb/eas)

Society of Broadcast Engineers (SBE) Emergency Alert Pages found at: <http://sbe.org/>  
Click on Emergency Alert System in the Left Menu section.

SBE also has a great EAS discussion list called the SBE-EAS Remailer that is probably the best information and help forum on EAS for Broadcasters. They have an extensive archive of discussions too. To sign up for the SBE-EAS remailer or to see the information in the archive, go to:  
<http://www.broadcast.net/mailman/listinfo/sbe-eas>

Additional help may be available from the Maryland, D.C., Delaware, Broadcasters Association (MDCD), who have a good Alternate inspection program available that includes EAS. More information might be found at <http://www.mdcd.com/> or by calling MDCD at: 410-653-4122.

Also for government recommendations about Emergency Preparedness you can go to:

FEMA's Website:  
[www.fema.gov](http://www.fema.gov)

Media Security and Reliability Council's web sites - at the FCC:  
<http://www.fcc.gov/MSRC/> and at their own web site:  
<http://www.mediasecurity.org/>

NOAA Weather Radio information is available at: <http://www.nws.noaa.gov/nwr/>

## Terms and Definitions

# Terms with Definitions As Used in This Plan

## DEFINITIONS

**Automation:** A system of using equipment to operate normal sequences of events with NO human intervention. Thanks to Part 11 Rules, Broadcast and Cable operations can now be automated 24/7 if the management so desires and sets up their operation accordingly. This means that Emergency Managers wanting to provide emergency messages to the public using the Emergency Alert System can not reasonably rely on broadcasters to insert the message into the system, as there literally may not be anyone there to help.

**Daisy Chain:** A method of relaying messages from one broadcaster to another until all broadcasters have received the message. Started during the EBS days, this method is slow at getting the message to all participants, as it adds levels of hops (from one broadcaster to another) which consume time. By design the Daisy Chain segments must be capable of reliably receiving the broadcast signal of the previous tier in the chain, and while slow, it is only reliable when all broadcasters forward the messages received.

**Designated Local Government Officials:** The person or persons designated by the local government signatory to this procedure to make emergency announcements and/or broadcasts.

**EAS:** Abbreviation for the Emergency Alert System. Officially became the national emergency alerting system on January 1, 1997.

**EAS OPERATIONAL AREA:** An area based on grouping EM Operational Areas in a way consistent with broadcast patterns as assigned by the State EM or traditional relationships.

**EBS:** Abbreviation for the Emergency Broadcast System. Served as the official national emergency alerting system until December 31, 1996, when it ceased to exist.

**EM:** Abbreviation for Emergency Management.

**EM Operational Area:** An area controlled by one Emergency Management organization or authority. These operational areas are based on county and municipal Geo-political boundaries in Maryland.

**Emergency:** A situation posing an extraordinary threat to the safety of life and property. Examples are: tornadoes, hurricanes, floods, severe thunderstorms, earthquakes, icing conditions, heavy snows, widespread commercial power failures, chemical spills, explosions and fires, nuclear hazards, transportation accidents involving hazardous materials, and industrial accidents with possible severe environmental pollution effects.

## Terms and Definitions

**EMnet:** Abbreviation for Emergency Managers Network. It is also used to indicate computer and satellite equipment used to facilitate communications via that network. This is a system designed to provide a fast and secure communications link for emergency managers, Emergency Operations Centers, and other government agencies for communication about alert and warning matters. This equipment also allows authorized personnel to issue EAS Alert messages directly to individual or grouped broadcasters, or into the State Relay Network. Thus, broadcasters, cable operators and others concerned with warning the public may receive the emergency communications simultaneously and directly for all of those who are so equipped. This is a closed loop system that automatically reports back to the originating authority that messages are received and/or acknowledged at EMnet EAS equipped locations.

**EMnet EAS:** It refers to the Emergency Managers Network for Emergency Alert System messaging and equipment. It consists of a computer terminal running specialized software and satellite downlink equipment designed to allow broadcast stations, cable companies, and others in the State EAS Relay Network for the fast reception of EAS alerts. It is a secure system that enables all messages to be sent to all receivers, but only allows decoding of the messages intended for the correct terminal. This means that all EAS alerts received via this system are authentic. It is fast, and can process a full EAS Activation complete with a 2 minute vocal message (which is compressed and decompressed) when sent via the satellite link in about 30 seconds from the time it was uplinked. (It will still take two minutes for the computer to play back the Alert message to regular Endec equipment.) For video programmers, it will also include the full vocal text for EAS crawls in electronic form that can be instantly added via the simple EMnet Remote Node interface, or copied and pasted into a EAS Crawl Program. (Future releases may include generic graphics, like maps and video screens as attachments, with appropriate instructions for the EAS alert being received. EMnet non-EAS messaging currently allows such attachments.)

**EN/DEC or Endec:** Abbreviation for specialized EAS equipment designed to Encode and Decode EAS Messages that are either inserted or received via the State Relay Network.

**FIPS Code:** Code provided for a given state and county as created by the National Institute of Standards and Technology. FIPS is an abbreviation for Federal Information Processing Standard. In EAS and the SAME encoding for the NWS, this FIPS code can be prefaced by a subdivision code that is not currently authorized for use in Maryland. These subdivisions will be defined at a future date by the NWS and its emergency management partners.

**Forwarding (an EAS Bulletin):** An emergency message maybe forwarded by a receiving station by interrupting the normal broadcast audio (and video) feed at the final stage before transmission and inserting the emergency message. This process can be done either automatically, or manually. By forwarding the emergency message as received, you will not cause other EAS receivers to see your EAS bulletin as a separate incident (proper protocol).

**Initiation of EAS Messages:** It is the originator's obligation to provide the full EAS encoding, attention signal, vocal message, and end of message marker, and insert it into the monitored EAS stream. This is done using Endec equipment specially designed for this

## Terms and Definitions

purpose. This may only be done by those who are authorized and trained to do so, and only when approved by the designated local government official as being necessary. EAS should be a last resort method to notify the public of an emergency which threatens the safety of their life and property.

**LECC or LAECC:** Local Emergency Communications Committee or Local Area Emergency Communications Committee. This is the committee of volunteers who oversee the Local Emergency Alert System Plan (for an EAS Operational Area). For our purposes here, an LECC serves one EAS Operational Area based on a geographical area assigned (or by traditional grouping). An LAECC would serve as the committee for a group of EAS Operational Areas based on broadcast patterns and community identity boundaries. In this way an LAECC's geographical boundary can span a broader area and include people in more than one state, county, or EAS Operational Area.

**Local Primary Source (LP):** This is the official designation for a broadcaster or other communication source which is capable of monitoring one of the FCC required PEP sources for National Level EAS messages. These national level EAS messages can include any of the following messages: Emergency Action Notification (EAN), Emergency Action Termination (EAT), and National Information Center (NIC). In Part 11 of the FCC the sole purpose required for LP source is the relaying of National level EAS messages into the local EAS Area. Besides relaying National level EAS messages, the only other requirement for an LP station is that they are usually operational 24 hours a day and 7 days a week. **These are the official monitoring requirements for all broadcasters and cable outlets in a given EAS operational area, as you are required to receive two sources for EAN activations.** LP sources are usually numbered LP1, LP2, and there may be more available as necessary to provide adequate coverage for an area or as more redundancy becomes available. LP Sources are not necessarily required to be broadcasters, they can be a state relay network or other background network that is capable of providing PEP coverage. Where possible, both should not be located in one facility. If only one is available for a given EAS operational area, then an LP source for an adjacent EAS operational Area may be assigned for monitoring as your second source. See your State EAS Plan for the official monitoring assignments for your EAS Operational Area.

(Note: EMnet EAS does not yet qualify here as a PEP source. While it may in the future, it is not yet considered as a source for EAN. It may be considered for other than the first two EAS listening port connections on an Endec.)

As key LP stations have in the past been relied upon to also be key in processing local EAS alerts. This can not be considered reliable for local EAS message initiation now under the new Part 11 automation rules, as broadcasters are no longer required to be manned.

**Local Relay:** A message outlet needed to complete the message chain. Here this refers to a broadcaster who is not an LP station designation, but who is needed to relay messages to a remote location so others further down the daisy chain can receive the messages.

## Terms and Definitions

**Local Relay Network:** A message relay network system designed and operated in a local area for inserting EAS messages into the monitored EAS stream. It may be separate from a State Relay Network.

**MEMA:** Maryland Emergency Management Agency

**NWR:** NOAA Weather Radio. (See Annex 3 of this plan for NWR related information.)

**Network:** A system of communication points who assist each other with information or are a part of one in the same.

**One Time System:** This is a reminder to EM officials that EAS is a one shot deal when broadcast stations are automated. As current EAS equipment do not provide a means of periodically repeating the emergency message, but will only forward it one time. It is advisable that EM be sure to get the message right the first time, as it may be their only chance to be heard by the public.

**Relay:** A means of communicating between several points. A relay is repeating a message to others who are dependent on you to understand what is happening, and how they should react.

**Repeating the EAS Message:** While it could be done automatically at unmanned broadcast stations, repeating the message usually requires manual intervention at a broadcast station as it is currently done. To enable doing this, broadcasters need the actual bulletin text in hard copy to re-read the information over the air. Television and Cable outlets need the text in electronic form to repeatedly crawl the information on screen, or create a video screen page. Everyone needs it electronically to create informational web pages with the information. While Older EAS Endec equipment do not provide a way yet to send the text of the vocal message contained in the bulletin with the original EAS message, newer EMnet EAS equipment can do this. It is advisable to use a system like this whenever possible. Fax is also usable, but can cause delays with electronic media outlets as manual typing messages is time consuming.

**RMT:** Abbreviation and event code for Required Monthly Test.

**RWT:** Abbreviation and event code for Required Weekly Test.

**Satellite Relay Network System:** A relay system or network using satellite (uplinks and downlinks) to communicate the EAS message by more directly connecting the sender and receiver. This is a modern and up-to-date method of relaying critical emergency information. It speeds communication by using increased bandwidth, and eliminating dependence on relayed information from other broadcasters.

## Terms and Definitions

**State Relay Network:** The State Relay Network is a background communications channel which relays Emergency Messages to all Emergency Management and Media Outlets who have available receivers. This network when used allows direct communication between Emergency

Management (EM) officials and media outlets such as broadcasters and cable operators who are capable of providing the public the emergency message instantly, or with minimum delay. This can include networks of many types, but is usually done using Radio, Microwave Communications Relay Systems, Satellite, and even sometimes the Internet, where a communication backbone is available and can be monitored by EAS Endec Equipment.

## FCC Rule Changes

### FCC RULE CHANGES – CAP Alerting Protocol

The FCC's role includes prescribing rules that establish technical standards for EAS, procedures for EAS participants to follow in the event EAS is activated, and EAS testing protocols. Additionally, the FCC ensures that EAS state and local plans developed by industry conform to the FCC EAS rules and regulations.

The FCC continues to implement its EAS responsibilities in an on-going rulemaking proceeding. In its July 12, 2007 [Second Report and Order and Further Notice of Proposed Rulemaking](#) issued in EB Docket 04-296, the FCC addressed various aspects of the current EAS and also explored necessary steps to advance the so-called "Next Generation EAS." The Commission stated that a reliable "wide-reaching public alert and warning system is critical to public safety" and that the EAS network should permit "officials at the national, state and local levels to reach affected citizens in the most effective and efficient manner possible." Among actions taken by the Second Report and Order, the Commission ordered that all EAS Participants must be able to receive messages formatted pursuant to the Common Alert Protocol (CAP 1.1) within 180 days of the adoption of said protocol by FEMA. The Commission also allowed mandatory use of the EAS by a state governor following introduction of CAP, providing that the delivery and transmission of such messages is described in a state EAS plan that is reviewed by the FCC.

In the Further Notice attached to the Second Report and Order, the FCC has requested comment on various issues, including enhancing the provision of EAS alerts to non-English speakers and persons with sight and hearing disabilities, whether EAS participants should be required to receive and transmit alerts initiated by government entities other than a state governor, and options for ensuring that EAS operates as designed in an emergency.<sup>i</sup>

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<sup>i</sup> Text was taken from the FCC's Public Safety and Homeland Security Bureau Emergency Alert System website: <http://www.fcc.gov/pshs/services/eas/>

**STATE EMERGENCY COMMUNICATIONS COMMITTEE**

<b>Position Title:</b>	<b>Name:</b>	<b>Contact Information:</b>
<b>CO-CHAIRS:</b>	<b>Jeff Halapin</b>	WBAL TV, 3800 Hooper Avenue Baltimore, MD 21211 V: jhalapin@hearst.com
	<b>Chip Weinman</b>	Maryland, D.C., Delaware Broadcasters Assn. 106 Old Court Road Suite 300 Baltimore, Maryland 21208 V: 410-653-4122 cweinman@mdcd.com
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	Ken Evans	WMDT-TV47 P.O. Box 4009 - 202 Downtown Plaza Salisbury, MD 21803 V: 410-742-4747 F: 410-742 5767 ken_evans@wmdt.com
	Christopher Strong	NOAA NWS Sterling 44087 Weather Service Road Sterling, Va. 20166 V: 703-260-0107 F: 703-260-0809 Christopher.strong@noaa.gov
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