Iowa Statewide
Emergency Alert System

REVISION CONTROL SHEET	
Revision date **10/97**	
Revision date 08/16 station roster	

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Iowa Statewide Emergency Alert System

Foreword

The New Emergency Alert System (EAS) has been developed at the mandate of the Federal Government to disseminate Presidential messages that would have National importance. At this level all broadcasters have mandatory participation. This same system becomes a great voluntary plan on a State and local level for dissemination of information that could save lives during an emergency. The following pages spell out a system that could reduce loss of life and property in the event of a natural or man made disaster.

This document has been prepared with the cooperation of Iowa State Emergency Management Association (EMA), the National Weather Service (NWS), the State Emergency Communications Committee (SECC),the Federal Communications Commission (FCC), the Federal Emergency Management Agency (FEMA), and local EMA officials.

The EAS will be used for a wide range of emergencies that have the potential to strike any area of the state. Severe weather, chemical spills, damage to nuclear power plants, severe flooding and more are all areas that can be addressed with the EAS.

The information can originate at the federal, state or local level. This plan explains how the system is operated at each of those levels and what your responsibility is when the system is activated.

With the new capabilities of the EAS equipment on Jan 1, 1997 we will have better security in the system and better reliability to meet the future. Staffing at broadcast facilities having been reduced in the past few years and unattended operation a reality in some facilities, this new system will enhance the distribution of timely emergency information to the public.

Other areas of change will be less on air testing of the system which should result in greater public attention when actual emergencies occur.

It is urged that all operating personnel take time to read and understand the information and concepts put forth in this plan.

Joe Schloss KICD AM & FM
Jim Davies WSUI & KSUI
Co-Chairs of the State Emergency Committee (SECC)   10/96

Iowa Statewide Emergency Alert System

Plan

The Emergency Alert System Plan (EAS) is divided into four levels: National level; State level; Operational area (Op Area) level; and Local Station level activations. The following sections of this manual detail the actions necessary for each activation. It also will define the level that each station in Iowa has responsibility for.

Under the EAS guidelines Iowa Broadcast Stations and Cable facilities will have three designations. These designations from highest to lowest responsibility are SP-1 (State Primary), LP1-LP2-LP3 (Local Primary), and PN (Participating National). This plan is organized by activation level and your station designation under that activated level. It then details your response for that activation.

The EAS is a plan of monitoring station signals, the Iowa Communications Network (ICN) and monitoring of the National Weather Service (NWS) signals to provide for the dissemination of timely, life saving information to the general public. WHO radio (the state primary) in Des Moines will have the capability to originate the state level information. This capability will be mirrored by the State EMA. This information will travel on WHO 1040 KHz and also on an audio channel on the ICN. The LP1 and LP2 in each Op Area will receive this information and relay it to the local PN's.

Local stations can also originate a local EAS message with proper authorization from local officials and/or station management. Prior coordination with local officials responsible for county Emergency Operating Centers (EOC's) should be done on an Op Area basis with the LP1, LP2, LP3's and suggested for the PN stations if necessary.

New in the EAS plans are the inclusion of the NWS input directly into the monitoring chain. All stations are urged to install equipment to monitor the local NWS VHF transmitting signal. It is understood that not all areas can reliably receive these signals as of this writing (October 1996).

Also new to the EAS plan is the inclusion of Cable. They will have to over-ride all cable channels beginning July 1, 1997 and provide the audio and video crawls of the emergency information. A provision of this plan is that local broadcast TV stations may request cable operators not over-ride their signals.

Program priorities for EAS are as follows:

1. **Priority One ---- Presidential messages**

2. **Priority Two ---- Operational (local) area programming**

3. **Priority Three -- State programming**

4. **Priority Four --- National programming and news**

Note: The focus of the state plan is Priority Two and Priority Three. Priority One and Priority Four level programming is explained in the National EAS plan. That FCC manual should be posted at your facility along with this plan.

Monthly State Wide Testing

A provision of the EAS is once-a-month state initiated test. Part of this plan is to detail the times of the Required Monthly Test (RMT). In odd number months the test will be initiated between 8:54AM and 8:59AM by the State Primary (WHO AM) on the first Wednesday of the month. In the even numbered months the test will be originated by WHO AM between 2:50AM and 2:59AM on the first Wednesday of the month. With prior agreement between WHO and the State EMA office, testing may be initiated by the State EMA office using the above times and dates.

Those facilities that are not on the air for the overnight RMT shall run it within 15 minutes after sign-on later that day.

Note: after receipt of the test you may delay it up to 15 minutes to fit it into your programming. Please realize that you must fit it in that window or risk FCC fine.

Class "D" FM's and LPTV stations are not required to transmit the test but do need to log receipt of the test.

REQUIRED MONTHLY TEST SCRIPT AND FORMAT

*   stop normal programming

*   optional intro: **This a test of the <u>(local area)</u> Iowa Emergency Alert System**

*   send header code 3 times (event code "RMT")

*   one second pause

*   send two tone attention signal (8-25 seconds).

*   read test script: **This is a test of the Iowa Emergency Alert System. In the event of an emergency, this system would bring you important information. This concludes this test of the Iowa EAS.**

*   one second pause.

*   send end of message code 3 times.

*   one second pause.

*   resume normal programming.

Note: "Local Area" is the name of your local Operational Area   as found in this plan.

The goal of the test is to fit into a :30 break.

Required Weekly Test Script and Format

To be performed by all broadcast and cable operators once per week on a random basis between the hours of 8:30AM and local sundown. Class "D" FM's and LPTV are not required to transmit this test but must log receipt.

*   stop regular programming

*   optional script: **This station (call sign) is testing its Emergency Alert System equipment.**

*   one second pause

*   send header code 3 times

*   one second pause

*   send end of message code 3 times

*   one second pause

*   optional end script: **The data tones you just heard are used in the Emergency Alert System. This concludes testing under the EAS. This station serves the   Operational area.**

*   resume normal programming

Note: there is no required script for the weekly test.

A suggestion for TV would be to run the data (it takes about 11 seconds) and use an ID slide for video. At the end you could give an aural ID. If the TV station should desire to they could follow the above "optional" begin and end scripts. When cable runs these tests they can identify the cable system and community they are serving.

State Level Activation

A state level activation request will start with the Governor or persons authorized by the Governor. This request will be made to WHO AM. They will then follow the State Level Activation procedures to comply with the request. If WHO is not available, the State Emergency Operations Center can initiate the State Level Activation.

A request for activation must meet certain criteria for it to be valid.

1. It must originate with the Governor or his designate.

2. It must be for emergency information only.

3. The need for the information must be immediate to protect life and property.

4. The reliability and immediacy of other communications systems are in question.

State Level Activation Procedure

*   Discontinue normal programming.

*   Optional script:
        We interrupt this program because of a State of Iowa emergency.
        Important information will follow.

*   Send EAS header code 3 times (event code "STA" --   state   activation).

*   one second pause.

*   Send two tone attention signal for 8 seconds.

*   Send script:
        We interrupt this program to activate the State of Iowa Emergency
        Alert System due to a statewide emergency.
        Important information will follow.
        This message is originating from the State Emergency Operating
        Center in Des Moines.

•   Governor or his designate will give address not to exceed 2
        minutes.

*   send script (or have Governor read):
        This concludes operation of the Emergency Alert System.

*   Send EAS end of message code 3 times.

*   one second pause.

*   resume normal programming.

Operational (Local) Area Activation

The "Operational Area" designation is one of twelve areas around the State of Iowa that were chosen based on the coverage and listenership to certain key radio stations (the coverage of dominant AM stations at the time). These Op Areas can be instantly divided into County activations under the EAS. With this ability to segment the Op Areas, the need for a local station activation is reduced. Most "Local Area" activations would likely need to include all of an area's broadcasters and not just one station. This plan does not exclude the individual broadcaster from activating the EAS if conditions warrant, nor does it mandate you run EAS if you decide that it does not impact the listeners (viewers) of your coverage area or cable system.

The authorization for activation will normally come from the National Weather Service or local Emergency Operating Centers. Activation requests should follow established procedures written into the "Op Area Plan". This plan should detail Who can initiate and under what circumstances an EAS activation should take place. This planning will protect the public from poor information, the station and local officials from credibility problems. In the case of Op Areas including a nuclear generating facility, these plans and all scripts are written in advance and reviewed at times to ensure that correct understandable information is given to the public. Such existing plans make good models for other local emergency situations and can be adapted without much trouble. This also shortens the alerting process time quite a bit.

Operational (Local) Area Activation Procedure

* Discontinue normal programming

* Optional script:
  **We interrupt this program to activate the Emergency Alert system
  for (local op area) Operational area.
  Important information will follow.**

* Send EAS header code 3 times. (Use appropriate event code)

* One second pause.

* Send two tone attention signal (8-25 seconds).

* Send activation message:
  **We interrupt this program to activate the Emergency Alert System.
  All (local op area) operational area broadcast and cable
  facilities are requested to re-broadcast this message.**

* Send message.

* Send termination message:
  This concludes programming under the Emergency Alert System.

* One second pause.

* Send EAS end of message code 3 times.

* One second pause.

* Resume normal programming.

NOTE: The above is a suggested format for general use in Operational Areas
that may have not developed specific plans.
Some of the larger Op Areas may have alerts that might not pertain to a
particular station. A station or cable system may not have audience in the
area of the emergency. With the EAS headers you could filter alerts just aimed
at your target area and ignore the others so as not to needlessly interrupt
your programming.

Guidance for Originators of EAS Alerts

National Weather Service Personnel:

NWS personnel should issue EAS weather related alerts via Weather wire, and on NOAA weather radio using the NOAA-SAME EAS codes. NWS procedures should be followed relating to the transmission of the SAME/EAS codes, the 1050hz alert tone, and the reading of the weather bulletin script.

If NOAA weather radio is expanded in the future to include all-hazard warnings, NOAA personnel should use the procedures found in this Plan (and its associated Op Area plans) for non weather alerts.

Local Emergency Operation Centers / Officials:

You now have a tool for disseminating emergency messages to the public with accurate and timely information that will be heard over most of the broadcast and cable entities in the effected area. I say "most" because the EAS is still a voluntary system.

The entry point should be the LP1 station for the Operational Area. Most county/local alerts would still need the services of many broadcasters to get the message to the public. Written plans and agreements will ensure successful operation of the EAS. Keep in mind the limited scope that this system is being used for **"life threatening"** emergencies.

At some point you would want to have EAS equipment available at the EOC or other designated point. Keep in mind that some of the decoders at the broadcast and cable head ends are running automated and will pass **exactly** the message you have originated. This places a burden on the originator to be accurate and concise in the information to be passed along. The plans generated for failures at nuclear generating facilities are a good guide for this type of Messaging. If you need further information contact FEMA or the State EOC. Most of all, maintain a good relationship with the broadcasters and cable operators of your area. We all want to see that the public is served well in times of crisis.

Nuclear plants and Industrial plants:

By Federal regulation, Nuclear power generating facilities must have written agreements with key players in the EAS. They serve as a guaranteed source of information for evacuation if a nuclear hazard should happen. At this writing, from issuing an Alert to the time it is aired must be less than 15 minutes. With the capabilities of EAS, this time should be easily achievable. It is recommended that the local EOC responsible for the power plant issue the alert. Note also that the message length is now 2 minutes maximum under EAS.

Industrial plants should also coordinate with the local EOC for their area. They will then activate the EAS. Prior planning and scripting of disasters for your type of industry will make EAS more effective when an actual emergency occurs. You then will have pre-written statements which will shorten response time and may save lives. The local EOC should be able to help greatly in this planning.

Guidance for Programming EAS Decoders

This section is provided as a guide for programming EAS decoders. It can seem complicated on first look. Each EAS Alert that you want to respond to requires three elements:
1. Event Code.
2. Which County(s).
3. What mode of operation you want it to respond in.

Modes of Operation:

Manual Operation: Your EAS unit will notify you of an incoming EAS Alert that you have programmed it to respond to. Your operator will have to cause the unit to re-transmit the Alert.

Automatic Operation: This mode would be used if the Program interrupt connections are made the unit. It would cause local programming to be interrupted immediately and the   Alert passed through if it is one you have programmed it to respond to.

Semi-Automatic Operation: Not all units have this option. When the unit receives a valid Alert you have programmed it to respond to, it will begin a preset count-down to automatic interrupt. The idea being that the operator or automated system looks to run the Alert at his earliest convenience but no longer than 15 minutes. If at the end of that time the alert is not run, then the unit will do it for   the operator.

The EAS decoder unit can respond to different Alerts with different modes, such as responding to all Weather Watches in the manual mode, and all Weather Warnings in the automatic mode. The Required Monthly (RMT), which must be transmitted within 15 minutes of receipt, could be programmed in the semi-automatic mode with a 15 minute countdown. This will make sure that the RMT is run even if the operator forgets, preventing a FCC violation.

NOTE: Broadcasters and cable systems running "Unattended" <u>must</u> run their EAS gear in the Automatic mode.

County codes to use:

      An EAS Alert will contain county codes. PN stations, if an alert comes in to you that is for a county that you have no listeners/viewers you can log it and elect not to transmit. Optionally, if you want to, you can program in counties outside the Op Area if you have listeners/viewers in those areas. Some TV Stations will have significant audiences that transcend Op Area boundaries and may additionally monitor other LP1, LP2 stations in those areas. The Iowa EAS plan encourages those common sense choices. The LP1, LP2 stations do not have the same freedom as described above, they **must** run the Alert if it pertains to any county in their Op Area.

Event Codes You Must Program Your EAS Decoder for:

      The FCC requires EAS decoders to respond to the following   events.

1. "EAN" National EAS activation.
2. "EAT" National EAS termination.
3. "RMT" Required Monthly Test with your county of license code.
4. "RWT" Required Weekly Test with your county of license code.

Suggested Programming for Your EAS Decoder for Iowa:

	Event	Description	County Code	Mode
	*EAN	National EAS activation	does not apply	Automatic
	*EAT	National EAS termination	does not apply	Automatic
	NIC	National Info Center	does not apply	Manual
	RMT	Required Monthly Test	your county of lic.	Semi-Auto 15 minutes
	RWT	Required Weekly Test	your county of lic.	Manual (logged)
	TOR	Tornado Warning	all counties in your area	Automatic
	FFW	Flash Flood Warning	all counties in your area	Semi-Auto 5 minutes
	CEM	Civil Emergency Message	all counties in your area	Semi-Auto 5 minutes
**	STA	State Activa.--Governor	all Iowa counties	Automatic
**	IPW	Industrial Plant Warning	all counties in your area	Automatic
**	NUW	Nuclear Plant Warning	all counties in your area	Automatic
**	NCW	Nuclear Contam. Warning	all counties in your area	Automatic
**	LAA	Local Activation	all counties in your area	Automatic
	---	Any received alert	all counties in your area	Manual

*   Required by FCC

**   Pending FCC Approval

FCC Mandated Event Codes

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EAN    Emergency Action Notification
EAT    Emergency Action Termination
NIC    National Information Center
NPT    National Periodic Test
RMT    Required Monthly Test
RWT    Required Weekly Test
TOA    Tornado Watch
TOR    Tornado Warning
SVA    Severe Thunderstorm Watch
SVR    Severe Thunderstorm Warning
SVS    Severe Weather Statement
SPS    Special Weather Statement
FFA    Flash Flood Watch
FFW    Flash Flood Warning
FFS    Flash Flood Statement
FLA    Flood Watch
FLW    Flood Warning
FLS    Flood Statement
WSA    Winter Storm Watch
WSW    Winter Storm Warning
BZW    Blizzard Warning
HWA    High Wind Watch
HWW    High Wind Warning
HUA    Hurricane Watch
HUW    Hurricane Warning
HLS    Hurricane Statement
TOA    Tsunami Watch
TSW    Tsunami Warning
EVI    Evacuation Immediate
CEM    Civil Emergency Message
DMO    Practice/Demo Warning
ADR    Administrative message
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Iowa Adopted Codes (pending FCC approval)

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**STA State Activation
**STS State Test
**LAA Op Area/Local Activation
**NUW Nuclear Plant Warning
**IPW Industrial Plant Warning
**NCW Nuclear Contamination Warning

**  These codes pending FCC approval
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Iowa State and County FIPS Codes

Iowa code (all counties): 19000

County	Code
Adair	19001
Adams	19003
Allamakee	19005
Appanoose	19007
Audubon	19009
Benton	19011
Black Hawk	19013
Boone	19015
Bremer	19017
Buchanan	19019
Buena Vista	19021
Butler	19023
Calhoun	19025
Carroll	19027
Cass	19029
Cedar	19031
Cerro Gordo	19033
Cherokee	19035
Chickasaw	19037
Clarke	19039
Clay	19041
Clayton	19043
Clinton	19045
Crawford	19047
Dallas	19049
Davis	19051
Decatur	19053
Delaware	19055
Des Moines	19057
Dickinson	19059
Dubuque	19061
Emmet	19063
Fayette	19065
Floyd	19067
Franklin	19069
Fremont	19071
Greene	19073
Grundy	19075
Guthrie	19077
Hamilton	19079
Hancock	19081

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Hardin           19083
Harrison         19085
Henry            19087
Howard           19089
Humboldt         19091
Ida              19093
Iowa             19095
Jackson          19097
Jasper           19099
Jefferson        19101
Johnson          19103
Jones            19105
Keokuk           19107
Kossuth          19109
Lee              19111
Linn             19113
Lousia           19115
Lucas            19117
Lyon             19119
Madison          19121
Mahaska          19123
Marion           19125
Marshall         19127
Mills            19129
Mitchell         19131
Monona           19133
Monroe           19135
Montgomery       19137
Muscatine        19139
O' Brien         19141
Osceola          19143
Page             19145
Palo Alto        19147
Plymouth         19149
Pocahontas       19151
Polk             19153
Pottawattamie    19155
Powashiek        19157
Ringgold         19159
Sac              19161
Scott            19163
Shelby           19165
Sioux            19167
Story            19169
Tama             19171
Taylor           19173
Union            19175
Van Buren        19177
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Wapello          19179
Warren           19181
Washington       19183
Wayne            19185
Webster          19187
Winnebago        19189
Winneshiek       19191
Woodbury         19193
Worth            19195
Wright           19197
```

Originator Codes:

EAN	Emergency Action Notification (National only)
PEP	Primary Entry Point System (National only)
NWS	National Weather Service
CIV	Civil Authorities
EAS	Broadcast Station or Cable System

Iowa "L" Codes

This 8-character code is affixed to every EAS message originated or re-transmitted by every EAS encoder. The code identifies the particular entity operating the encoder. "L" code ID's must adhere to the following formats:

Broadcasters:
        Single station: KXXX(FM)
        Two Stations: KXXXKYYY

Cable TV:
        To be determined

Weather Service Offices:

Civil Authorities:
        This code uses three components in constructing its 8 character code.

        Portion of L code   Source of characters

        first four characters   =   first four letters of
                                        jurisdiction (name of county,
                                        city, etc)

        next two characters   =   abbreviation for type of
                                        jurisdiction.
                For County use   CO
                For City use   CY

        last two characters   =   abbreviation for type of
                                        agency.

                For Sheriff   SH
                For Fire Dept   FD
                For Police Dept   PD
                For Emerg. Manage. EM

        Examples: Polk County EOC = POLKCOEM

                  Johnson Co Sheriff = JOHNCOSH

21.

Burlington Operational Area Monitoring Assignments

All stations in the Burlington Op Area will monitor:

LP1   KBUR AM   1490KHz
        KGRS FM   107.3 MHz

LP2   KKMI FM   93.5 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1.

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you
can receive the signal.

A feed from AP to the data port on your unit, if these are available to you.
 You may use Learfield data.

Changes:

Burlington Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                               Call Letters:_____

_____   _____

                               Date:_____

State SECC Co-chair

_____

Carroll Operational Area Monitoring Assignments

All stations in the Carroll Op Area will monitor:

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LP1   KCIM AM      1380 KHz
      KKRL FM      93.7 MHz


LP2   KIKD FM      106.7 MHz
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The LP1 to monitor the LP2 and the LP2 to monitor the LP1

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can receive the signal.

A feed from AP to the data input on your unit, if these are available to you. You may use Learfield data.

Changes:

Carroll Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                                 Call Letters:_____

_____   _____

                                 Date:_____

State SECC Co-chair

_____

25._____

Cedar Rapids Operational Area Monitoring Assignments

All stations in the Cedar Rapids Op Area will monitor:

LP1   WMT AM   600KHz   (also designated as SR)
      KKSY FM   96.5MHz   (also designated as SR)

LP2   KHAK FM   98.1 MHz   (also designated as SR)

The LP1 to monitor the LP2 and the LP2 to monitor the LP1.

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you
can get the signal.

A feed from AP to the data input of your unit, if these are available to you.
 You may use Learfield data.

Changes:

Cedar Rapids Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                                 Call Letters:_____

_____   _____

                                 Date:_____

State SECC Co-chair

_____

Davenport Operational Area Monitoring Assignments

All stations in the Davenport Op Area will monitor:

LP1   WOC AM   1420 KHz
      WLLR FM   103.7 MHz

LP2   WQB-261   450.450 MHz

LP1 to monitor LP2 and LP2 to monitor LP1.

LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can get the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Davenport Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any
other special assignments that may be required by the State EAS committee.
It shall also be agreed that all **WARNINGS** issued by the National Weather
Service or information from the State EOC be passed on to the stations in the
Operational Area affected. Any cost involved to get audio from the ICN "Point
of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                             Call Letters:_____

_____   _____

                             Date:_____

State SECC Co-chair

_____

Des Moines Operational Area Monitoring Assignments

All stations in the Des Moines Op Area will monitor:

LP1   WHO AM   1040 KHz   (also designated as SP)
       KDRB FM   100.3 MHz   (also designated as SR)

LP2   WOI FM   90.1 MHz   (also designated as SR)

LP1 to monitor LP2 and LP2 to monitor LP1

LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can get the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Des Moines Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that   all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                               Call Letters:_____

_____   _____

                               Date:_____

State SECC Co-chair

_____

Dubuque Operational Area Monitoring Assignments

All stations in the Dubuque Op Area will monitor:

LP1   KDTH AM   1370 KHz
       KATF FM   92.9 MHz

LP2   KLYV FM   105.3 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1

LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can receive the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Dubuque Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                               Call Letters:_____

_____   _____

                               Date:_____

State SECC Co-chair

_____

Fort Dodge Operational Area Monitoring Assignments

All stations in the Dubuque Op Area will monitor:

LP1   KWMT AM   540 KHz
       KKEZ FM   94.5 MHz

LP2   KQWC FM   95.9 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1

LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can receive the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Fort Dodge Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                               Call Letters:_____

_____   _____

                               Date:_____

State SECC Co-chair

_____

Mason City Operational Area Monitoring Assignments

All stations in the Mason City Op Area will monitor:

LP1   KGLO AM   1300 KHz
       KIAI FM   93.9 MHz

LP2   KIOW FM   107.3 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you
can get the signal.

A feed from AP to the data input of your unit, if these are available to you.
You may use Learfield data.

Changes:
12/96   KUNI/KUNY designated NN

Mason City Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                             Call Letters:_____

_____   _____

                             Date:_____

State SECC Co-chair

_____

Spencer Operational Area Monitoring Assignments

All stations in the Spencer Op Area will monitor:

LP1   KICD AM   1240 KHz
      KICD FM   107.7 MHz

LP2   KMRR FM   104.9 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1.

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can get the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Spencer Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                                    Call Letters:_____

_____   _____

                                    Date:_____

State SECC Co-chair

_____

Shenandoah Operational Area Monitoring Assignments

All stations in the Shenandoah Op Area will monitor:

LP1   KMA AM   960 KHz
       KMA FM   99.1 MHz

LP2   NONE

The LP1 to monitor the LP2 and the LP2 to monitor the LP1

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you can get the signal.

A feed from AP to the data input of your unit, if these are available to you.
 You may use Learfield data.

Changes:

Shenandoah Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any
other special assignments that may be required by the State EAS committee. It
shall also be agreed that all **WARNINGS** issued by the National Weather Service
or information from the State EOC be passed on to the stations in the
Operational Area affected. Any cost involved to get audio from the ICN "Point
of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                               Call Letters:_____

_____   _____

                               Date:_____

State SECC Co-chair

_____

Sioux City Operational Area Monitoring Assignments

LP1   KMNS AM   620 KHz
       KSEZ FM   97.9 MHz

       KSUX FM   105.7 MHz

The LP1 to monitor the LP2 and the LP2 to monitor the LP1.

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service WX Radio that applies to your area if you can get the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

Changes:

Sioux City Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                                 Call Letters:_____

_____   _____

                                 Date:_____

State SECC Co-chair

_____

Waterloo Operational Area Monitoring Assignments

All stations in the Waterloo Op Area will monitor:

```
LP1   KPTY AM      1330 KHz
      KFMW FM      107.9 MHz   (also designated as SR)
      KXEL AM      1540 KHz

LP2   KNWS FM      101.9 MHz   (also designated as SR)
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The LP1 to monitor the LP2 and the LP2 to monitor the LP1.

The LP1 and LP2 to monitor the ICN and WHO AM.

The National Weather Service NOAA WX Radio that applies to your area if you get the signal.

A feed from AP to the data input of your unit, if these are available to you. You may use Learfield data.

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        Changes:
        12/96        KUNI/KUNY designated NN.
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Waterloo Operational Area LP1, LP2 Agreement

The LP1, LP2 stations agree to monitor WHO-AM, the ICN, each other and any other special assignments that may be required by the State EAS committee. It shall also be agreed that all **WARNINGS** issued by the National Weather Service or information from the State EOC be passed on to the stations in the Operational Area affected. Any cost involved to get audio from the ICN "Point of Presence" (POP) to the EAS receiver is the responsibility of the station.

State SECC Co-chair   Station Representative

                                         Call Letters:_____

_____   _____

                                         Date:_____

State SECC Co-chair

_____

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone
Burlington	Des Moines	**KBUR AM 1490**	**LP1**	610 N.4th St, Ste 300, Burlington	52601	319 752 5402
		KGRS FM 107.3	**LP1**	"	"	319 752 2701
		KKMI FM 93.5	**LP2**	"		319 752 5402
		KCPS AM 1150	PN	205 S. Gear Ave, Burlington	52601	319 754 6698
		KDMG FM 103.1	PN	610 N.4th St, Ste 300, Burlington	52601	319 752 5402
		KGCW TV 26	PN	200 Jefferson St, Burlington	52601	319 752 0026
	Henry	KILJ AM 1130	PN	2411 Radio Rd, Mt Pleasant	52641	319 385 8728
		KILJ FM 105.5	PN	"	"	
		KHDK FM 97.3	PN	610 N.4th St, Ste 300, Burlington	52601	319 752 5402
	Jefferson	KMCD AM 1570	PN	57 S. Court Street, Fairfield	52556	515 472 4191
		KKFD FM 95.9	PN	"	"	
		KHOE FM 90.5	PN	1000 N. 4th Street, Fairfield	52557	641 469 5463
	Lee	KBKB AM 1360	PN	610 N. 4th St, Ste 300, Burlington	52601	319 372 1241
		KBKB FM 101.7	PN	"	"	319 752 2701
		WQKQ FM 92.1	PN	"	"	319 752 5402
		KOKX AM 1310	PN	108 Washington, Keokuk	52632	319 524 5410
		WCEZ-FM 93.9	PN	"	"	
		KOKX FM 95.3	PN	EMF		916 251 1600
		KRNQ FM 96.3	PN	" "		"
	Van Buren	NO BROADCAST STATIONS				
Carroll	Carroll	**KCIM AM 1380**	**LP1**	1119 E. Plaza, Carroll	51401	712 792 4321
		KKRL FM 95.3	**LP1**	"	"	
		KIKD FM 106.7		"	"	
	Audubon	KSOM FM 96.5	PN	413 Chestnut St, Atlantic	50022	712 243 6885
	Calhoun	**KTLB FM 105.9**	**LP2**	200 N. 10th St	Ft. Dodge	51501	515 955 5656
	Crawford	KDSN AM 1530	PN	1530 Ridge, Denison	51442	712 263 3141
		KDSN FM 107.1	PN	"	"	
	Greene	KGRA FM 98.9	PN	116 E. State St., Jefferson	50129	515 465 5357
	Guthrie	KKRF FM 107.9	PN	212 S. Division, Stuart	50250	515 523 1107
	Ida	KKIA FM 92.9	PN	910 Flindt Dr. Storm Lake	50588	712 364 9200
	Sac	NO BROADCAST STATIONS				
	Shelby	KNOD FM 105.3	PN	902 Chatburn Ave. Harlan	51537	712 755 3883
Cedar Rapids	Linn	**WMT AM 600**	**LP1/SR**	600 Old Marion Rd NE, Cedar Rapids	52402	319 395 0530
		KKSY FM 96.5	**LP1/SR**	"	"	"
		KMJM AM 1360	PN	"	"	"
		KOSY FM 95.7	PN	"	"	"
		KGAN TV 2	PN	600 Old Marion Rd NE, Cedar Rapids	52402	319 395 9060
		KFXA TV 28	PN	"	"	
		KCCK FM 88.3	PN	6301 Kirkwood Blvd SW, Cedar Rapids	52406	319 398 5446
		KCRG TV 9	PN	501 2nd Ave SE, Cedar Rapids,	52401	319 398 8418
		KHAK FM 98.1	**LP2**	425 2cd St SE, Cedar Rapids	52401	319 365 9431
		KDAT FM 104.5	PN	"		319 365 9431
		KMRY AM 1450	PN	1957 Blairs Ferry Rd. NE, Cedar Rapids	52402	319 393 1450
		KRNL FM 89.7	PN	Cornell College, Mt Vernon	52314	319 895 5765
		KZIA FM 102.9	PN	1110 26th Ave SW, Cedar Rapids	52404	319 363 0261
		KGYM AM 1600	PN	"		
		KPXR TV 48	PN	1957 Blairs Ferry Rd. NE, Cedar Rapids	52402	319 378 1260
		KXGM FM 89.1	PN			

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone
Cedar Rapids (continued)	Benton	KRQN FM 107.1	PN	425 2nd Street SE	Cedar Rapids	52401 319 365 9431
	Cedar	NO BROADCAST STATIONS				
	Delaware	KMCH FM 94.7	PN	223 W Main St,	Manchester	52059 319 927 6249
		KDST FM 99.3	PN	1931 20th Ave SE,	Dyersville	520409 563 875 8193
	Iowa	NO BROADCAST STATIONS				
	Johnson	KCJJ AM 1560	PN	845 Quarry Rd, Ste 120, Iowa City		52244 319 354 1242
		KRNA FM 94.1	PN	425 2nd St SE Cedar Rapids, IA		52401 319 365 9431
		KRUI FM 89.7	PN	Iowa Memorial Union,	Iowa City	52242 319 335 9525
		KXIC AM 800	PN	N Dubuque & I-80,	Iowa City	52240 319 354 9500
		KKRQ FM 100.7	PN	"		"
		WSUI AM 910	PN	710 S. Clinton St.	Iowa City	52240 319 335 5730
		KSUI FM 91.7	PN	"		"
		KIIN TV 12	PN	IPTV	Johnston	50131 515 725 9700
		KWKB TV 25	PN	1547 Baker Ave, West Branch		52358 319 643 5952
	Jones	NO BROADCAST STATIONS				
	Tama	KZAT FM 95.5	PN	205 West 3rd St	Tama	52339 641 484 5958
	Washington	KCII AM 1380	PN	110 E Main St,	Washington	52363 319 653 2112
		KCII FM 95.3	PN	"		"
Davenport	Scott	**WOC AM 1420**	**LP1**	3535 E Kimberly Rd,	Davenport	52807 319 344 7000
		WLLR FM 103.7	**LP1**	"		"
		WQB261 405.450	**LP2**	Scott Co EMD 416 W 4th St, Davenport		319 326 8663
		KCQQ FM 106.5	PN	3535 E Kimberly Rd,	Davenport	52807 319 344 7000
		KALA FM 88.5	PN	518 W. Locust St	Davenport	52803 319 386 6219
		KJOC FM 93.5	PN	1229 Brady St,	Davenport	52803 319 326 2541
		KJOC AM 1170	PN	"		"
		KLJB TV 18	PN	231 18th St.	Rock Island, IL 61201 319 786 5441	
		KWQC TV 6	PN	805 Brady Street,	Davenport	52803 319 383 7000
		KQIN TV 36	PN	IPTV	Johnston	50131 515 725 9700
	Clinton	KMXG FM 96.1	PN	3535 E Kimberly Rd,	Davenport	52807 319 344 7000
		KMCN FM 97.7	PN	1853 442nd Ave,	Clinton	52732 319 243 1390
		KCLN AM 1390	PN	"		"
		KROS AM 1340	PN	870 13th Ave N,	Clinton	52732 319 242 1252
	Muscatine	KWPC AM 860	PN	3218 Mulberry Ave,	Muscatine	52761 319 263 2442
		KMCS FM 93.1	PN	"		"
		KBEA FM 99.7	PN	1229 Brady St,	Davenport	52803 319 326 2541
	Louisa	NO BROADCAST STATIONS				
Des Moines	Polk	**WHO AM 1040**	**LP1/SP**	2141 Grand Ave,	Des Moines	50312 515 245 8900
		KDRB FM 100.3	**LP1/SR**	"		"
		KKDM FM 107.5	PN	"		"
		KDXA FM 106.3	PN	"		"
		KXNO AM 1460	PN	"		"
		WHO TV 13	PN	1801 Grand Ave	Dea Moines	50309 515 242 3500
		KDFR FM 91.3	PN	2350 NE 44th Ct,	Des Moines	50308 515 262 0449
		KGGO FM 94.9	PN	4143 109th St	Urbandale`	50322 515 331 9200
		KBGG AM 1700	PN	"		"
		KJJY FM 92.5	PN	"		"
		KHKI FM 97.3	PN	"		"
		KWQW FM 98.3	PN	"		"
		KDPS FM 88.1	PN	1800 Grand Ave,	Des Moines	50308 515 284 7723
		KPSZ AM 940	PN	1416 Locust St,	Des Moines	50309 515 280 1350
		KIOA FM 93.3	PN	"		"
		KRNT AM 1350	PN	"		"
		KSTZ FM 102.5	PN	"		"
		KAZR FM 103.3	PN	"		"
		KMYR FM 104.1	PN	"		"
		KJMC FM 89.3	PN	1169 25th St	Des Moines	515 279 1811
		KWKY AM 1150	PN	501 Hwy 28,	Norwalk	50211 515 223 1150

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone	
Des Moines (continued	Polk	KCCI TV 8	PN	888 9th St,	Des Moines	50309	515 247 8888
		KDSM TV 17	PN	4023 Fleur Dr,	Des Moines	50321	515 287 1717
		KDIN TV 11	PN	IPTV	Johnston	50131	515 725 9700
		KWDM FM 88.7	PN	1140 Valley W Dr,	W Des Moines	50266	515 226 2600
		KFPX TV 39	PN	4570 114th St	Urbandale	50322	515 331 3939
		KCWI TV 23	PN	500 SW 7th St Ste 300	Des Moines	50309	515 964 2323
		KDMI TV 19	PN	"		"	
	Adair	KKRF FM 107.9	PN	22562 141st Dr,	Perry	50220	515 465 5357
	Appanoose	KCOG AM 1400	PN	402 N 12th St,	Centerville	52544	800 373 4930
		KMGO FM 98.7	PN	"		"	
	Boone	KDLF AM 1260	PN	1541 E. Grand Ave,	Des Moines	50016	515 432 2092
		KWBG AM 1590	PN	724 Story St,	Boone	50036	515 432 2046
	Clarke	KNWI FM 107.1	PN	Northwestern College			
	Dallas	KDLS AM 1310	PN	22562 141st Dr,	Perry	50220	515 465 5357
		KDLS FM 105.5	PN	950 Office Park Rd	W Des Moines	50265	515 278 4117
		KIHS FM 88.5	PN	501 Hwy 28,	Norwalk	50211	515 223 1150
	Davis	KOJY FM 106.9	PN	22620 195th St,	Bloomfield	52537	641 664 3721
	Decatur	KNSL FM 97.9	PN	Friley Hall, ISU	Ames	50012	515 294 4332
	Jasper	KCOB AM 1280	PN	611 1st Ave E,	Newton	50208	641 792 5262
		KCOB FM 95.9	PN	"		"	
		KKLG FM 88.3	PN	EMF			916 251 1600
	Keokuk	NO BROADCAST STATIONS					
	Lucas	KEDB FM 105.3	PN	402 N 12th St	Centerville	52544	800 373 4930
	Madison	KPUL FM 101.7	PN	33365 335th St	Waukee	50263	515 987 9995
		KICP FM 105.9	PN	ISU			
	Mahaska	KMZN AM 740	PN	2172 230th St	Oskaloosa	52577	641 673 3493
		KBOE FM 104.9	PN	"		"	
		KCWN FM 99.9	PN	304 Oskaloosa St,	Pella	50219	202 857 4532
		KIGC FM 88.7	PN	201 Trueblood Ave,	Oskaloosa	52577	641 673 1095
	Marion	KNIA AM 1320	PN	1610 N Lincoln,	Knoxville	50538	641 842 3161
		KRLS FM 92.1	PN	"		"	
		KCUI FM 89.1	PN	Central College,	Pella	50219	641 628 5263
		KICL FM 96.3	PN	ISU			
	Marshall	KDAO AM 1190	PN	1930 N Center St,	Marshalltown	50158	641 752 4122
		KDAO FM 99.5	PN	"		"	
		KTDV FM 91.9	PN	"		"	
		KDAO TV 45	PN	"		"	
		KFJB AM 1230	PN	123 W Main St,	Marshalltown	50159	641 753 3361
		KXIA FM 101.1	PN	"		"	
	Monroe	KIIC FM 96.7	PN	10 N Clinton,	Albia	52531	641 932 2112
	Poweshiek	KSKB FM 99.1	PN	Hwy V18 S,	Brooklyn	52211	641 522 7202
		KDIC FM 88.5	PN	Grinnell College,	Grinnell	50112	641 269 3335
		KGRN AM 1410	PN	909 & 1/2 Main St,	Grinnell	50112	641 236 6106
		KRTI FM 106.7	PN	611 1st Ave E,	Newton	50208	641 792 5262
		KVCI FM 89.7	PN				
	Story	KASI AM 1430	PN	415 1/2 Main St,	Ames	50010	515 232 1430
		KCYZ FM 105.1	PN	"		"	
		KURE FM 88.5	PN	Friley Hall ISU,	Ames	50012	515 294 4332

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone	
Des Moines (continued)	Story	WOI AM 640	PN	2111 Grand Ave,	Des Moines	50312	515 725 1700
		WOI FM 90.1	**LP2/SR**	"		"	
		KHOI FM 89.1	PN	3714 Woodland St,	Ames	50014	515 268 1510
		KTIA FM 99.3	PN	3850 Merle Hay Rd	Des Moines	50310	515 457 9645
		WOI TV 5	PN	3903 Westown Pky,	W. Des Moines	50266	515-457 9645
	Wayne	NO BROADCAST STATIONS					
	Wapello	KBIZ AM 1240	PN	416 E. Main,	Ottumwa	52501	641 628 9999
		KTWA FM 92.7	PN	"		"	
		KLEE AM 1480	PN	"		"	
		KOTM FM 97.7	PN	"		"	
		KKSI FM 101.5	PN	"		"	
		KQLF FM 88.3	PN	416 S. Market St,	Oskaloosa	52577	918 261 5474
		KTVO TV 3	PN	111 S. Market St,	Ottumwa	52501	641 627 3333
		KYOU TV 15	PN	820 W. 2nd St,	Ottumwa	52501	641 684 5415
	Warren	KXLQ AM 1490	PN	810 Main St,	Indianola	50125	515 961 6291
		KSTM FM 88.9	PN	701 N C St,	Indianola	50125	515 961 1220
Dubuque	Dubuque	**KDTH AM 1370**	**LP1**	1055 University Ave,	Dubuque	52001	563 690 0800
		KATF FM 92.9	**LP1**	"		"	
		KGRR FM 97.3	PN	"		"	
		WVRE FM 101.1	PN	"		"	
		WDBQ AM 1490	PN	5490 Saratoga Rd,	Dubuque	52001	563 557 1040
		WDBQ FM 107.5	PN	"		"	
		KLYV FM 105.3	**LP2**	"		"	
		KXGE FM 102.3	PN	"		"	
		WJOD FM 103.3	PN	"		"	
		KFXB TV 43	PN	744 Main St.	Dubuque	52001	563 690 1704
		KDST FM 99.3	PN	1931 20th Ave SE,	Dyersville	52040	563 875 8193
		KIYX FM 106.1	PN	51 Means Dr.	Plattvile,	53818	608 349 2000
		KNSY FM 89.7	PN	324 Communication Arts	Cedar Falls	50614	319 273 6400
		KIAD FM 88.5	PN	American Family Radio			662 844 8888
	Allamakee	KMRV AM 1160	PN	14 W. Main,	Waukon	52172	563 568 3476
		KNEI FM 103.5	PN	"		"	
	Clayton	KADR AM 1400	PN	24493 Highway 128,	Elkader	52043	563 245 1400
		KCTN FM 100.1	PN	"		"	
	Jackson	KMAQ AM 1320	PN	129 N Main St,	Maquoketa	52060	563 652 2426
		KMAQ FM 95.1	PN	"		"	
Fort Dodge	Webster	**KWMT AM 540**	**LP1**	200 N 10th St,	Fort Dodge	50501	515 955 5656
		KKEZ FM 94.5	**LP1**	"		"	
		KVFD AM 1400	PN	"		"	
		KZLB FM 92.1	PN	"		"	
		KXFT FM 99.7	PN	"		"	
		KNSK FM 91.1	PN	2111 Grand Ave	Des Moines	50312	515 725 1700
		KICB FM 88.1	PN	One Triton Circle,	Fort Dodge	50501	515 574 1213
		KLFG FM 89.5	PN	EMF			916 251 1600
		KIIN TV 12	PN	IPTV,	Johnston	50131	515 281 4500
	Franklin	KLMJ FM 104.9	PN	1509 4th Street NE,	Hampton	50441	641 456 5656
	Hamilton	KZWC AM 1570	PN	Hwy 20 E,	Webster City	50595	515 832 1570
		KQWC FM 95.9	**LP2**	"		"	
	Hardin	KIFG AM 1510	PN	406 Stevens St,	Iowa Falls	50126	641 648 2521
		KIFG FM 95.3	PN	"		"	
		KQCR FM 98.9	PN	1509 4th Street NE,	Hampton	50441	641 456 5656
	Humboldt	KHBT FM 97.7	PN	2196 Montana Ave,	Humboldt	50548	515 332 4100
	Wright	KIAQ FM 96.9	PN	200 N 10th St,	Fort Dodge	50501	515 955 5656
		KJYL FM 100.7	PN	12089 380th Ave	Blue Earth MN	56013	507 526 3233

Iowa EAS Stations

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone	
Mason City	Cerro Gordo	KLKK FM 103.7	PN	201 N. Federal,	Mason City	50401	641 421 7744
		KGLO AM 1300	**LP1**	341 S. Yorktown Pike,	Mason City	50401	641 423 1300
		KIAI FM 93.9	**LP1**	"		"	
		KRIB AM 1490	PN	"		"	
		KLSS FM 106.1	PN	"		"	
		KCMR FM 97.9	PN	316 N. Federal,	Mason City	50402	641 424 9300
		KRNI AM 1010	PN	2111 Grand Ave,	Des Moines	50312	515 725 1700
		KNSM FM 91.5	PN	"		"	
		KBDC FM 88.5	PN	American Family			662 884 8888
		KIMT TV 3	PN	112 N Pennsylvania,	Mason City	50401	641 423 2540
		KYIN TV 24	PN	IPTV	Johnston	50131	515 725 9700
	Hancock	KHAM FM 103.1	PN	18643 360th St,	Forest City	50436	641 585 1073
	Kossuth	KLGZ AM 1600	PN	2102 80th Ave,	Algona	50511	515 295 2475
		KLGA FM 92.7	PN	"		"	
	Winnebago	**KIOW FM 107.3**	**LP2**	18643 360th St,	Forest City	50436	641 585 1073
		KZOW FM 91.9	PN	106 S. 6th St	Forest City	50436	641 251 4595
	Worth	KYTC FM 102.7	PN	341 S. Yorktown Pike,	Mason City	50401	641 423 1300
		KSMA FM 99.7	PN	201 N. Federal,	Mason City	50401	641 421 7744
		KBDC FM 88.5	PN				
Shenandoah	Page	**KMA AM 960**	**LP1**	208 N Elm,	Shenandoah	51601	712 264 5270
		KMA FM 99.1	**LP1**	"		"	
		KYFR AM 920	PN	112 N. Elm St,	Shenandoah	51601	712 246 5151
	Adams	NO BROADCAST STATIONS					
	Cass	KJAN AM 1220	PN	N Olive St,	Atlantic	50022	712 243 3920
		KSOM FM 96.5	PN	413 Chestnut St	Atlantic	50022	712 243 6885
		KSWI FM 95.7	PN	"		"	
	Freemont	NO BROADCAST STATIONS					
	Mills	KXKT FM 103.7	PN	5010 Underwood Ave,	Omaha NE	68102	402 561 2000
		KIMI FM 107.7	PN	87 Jasper Lake Rd,	Loveland, CO	80537	
	Montgomery	KOAK AM 1080	PN	1991 Ironwood Ave,	Red Oak	51566	712 623 2584
		KCSI FM 95.3	PN	"		"	
		KFOM FM 88.7	PN	1500 S. 14th St,	Clarinda	51632	712 542 7399
		KHIN TV 36	PN	IPTV	Johnston	50131	515 725 9700
	Pottawattamie	KIWR FM 89.7	PN	2700 College Rd,	Council Bluffs	51503	712 325 3254
		KLNG AM 1560	PN	120 S. 35th St,	Council Bluffs	51501	712 323 0100
		KQKQ FM 98.5	PN	5011 Capitol Ave,	Omaha NE	68132	402 342 2000
		KBIN TV 32	PN	IPTV	Johnston	50131	515 725 9700
	Taylor	KCJA FM 89.5	PN	1500 S. 14th St,	Clarinda	51632	712 542 7399
	Union	KSIB FM 101.3	PN	P.O. Box 426	Creston	50801	641 782 2155
		KSIB AM 1520	PN	"		"	
		KLOX FM 90.0	PN	505 Josephine St,	Titusville, FL	32796	321 267 3000
	Ringgold	NO BROADCAST STATIONS					
Sioux City	Woodbury	**KMNS AM 620**	**LP1**	901 Steuben St,	Sioux City	51101	712 258 0628
		KSEZ FM 97.9	**LP1**	"		"	
		KMSC FM 88.3	PN	1501 Morningside Ave,	Sioux City	51106	712 274 5299
		KSCJ AM 1360	PN	2000 Indian Hills Dr,	Sioux City	51104	712 239 2100
(Lic. Winnebago, Nebraska)		**KSUX FM 105.7**	**LP2**	"		"	
		KTFC FM 103.3	PN	1534 Buchanan Ave,	Sioux City	51106	712 252 4621
		KWIT FM 90.3	PN	4647 Stone Ave, Bldg	Sioux City	51106	712 274 6406
		KKSC AM 1470	PN	Box 1737,	Sioux City	51102	712 255 1470
		KGLI FM 95.5	PN	"		"	
		KMSC FM 92.9	PN	1501 Morningside Ave,	Sioux City	51106	712 724 5299

Iowa EAS Stations

Operational Area	County	Call Sign Frequency	Desig.	EAS Address		Phone	
Sioux City (continued)	Woodbury	KSIN TV 27	PN	IPTV	Johnston	50131	515 725 9700
		KCAU TV 9	PN	625 Douglas St,	Sioux City	51101	712 277 2345
		KMEG TV 14	PN	100 Gold Circle Dr, Dakota Dunes SD		57049	712 277 3554
		KPTH TV 44	PN	"		"	
		KTIV TV 4	PN	3135 Floyd Blvd,	Sioux City	51105	712 239 4100
	Harrison	NO BROADCAST STATIONS					
	Lyon	NO BROADCAST STATIONS					
	Plymouth	KLEM AM 1410	PN	2000 Indian Hills Dr,	Sioux City	51104	712 239 2100
		KKMA FM 99.5	PN	"		"	
	Monona	KQNU FM 102.3	PN	2000 Indian Hills Dr,	Sioux City	51104	712 239 2100
		KKYY FM 101.3	PN	"		"	
		KILV FM 107.5	PN	EMF			916 251 1600
	Sioux	KDCR FM 88.5	PN	498 4th Ave, Sioux Center 51250			712 722 0885
		KSOU AM 1090	PN	128 20th St SE, Sioux Center 51250			712 722 1090
		KTSB FM 94.3	PN	"		"	
		KSOU FM 93.9	PN	"		"	
		KIHK FM 106.9	PN	"		"	
Spencer	Clay	**KICD AM 1240**	**LP1**	2600 Hwy Blvd,	Spencer	51301	712 262 1240
		KICD FM 107.7	**LP1**	"		"	
		KMRR FM 104.9	PN	"		"	
	Buena Vista	KAYL AM 990	PN	910 Flindt Dr,	Storm Lake	50588	712 732 3520
		KAYL FM 101.5	PN	"		"	
		KTFG FM 102.9	PN	Community Broadcasting Kansas City			913 642 7770
		KBVU FM 97.5	PN	610 W. 4th St	Storm Lake	50588	712 749 1220
		KOIA FM 88.1	PN	P.O. Box 3205	Sioux City	51102	712 224 5342
		KWIA FM 100.9	PN	P.O. Box 681155	Indianapolis IN	46268	317 373 3945
	Cherokee	KCHE AM 1440	PN	201 S 5th,	Cherokee	51012	712 225 2511
		KCHE FM 92.1	PN	"			"
	Dickinson	KUOO FM 103.9	PN	3200 18th St,	Spirit Lake	51360	712 336 5800
		KUQQ FM 102.1	PN	"		"	
		KJIA FM 88.9	PN	12089 380th Ave	Blue Earth MN	56013	507 526 3233
		KOJI FM 90.7	PN	WITCC			712 274 6466
	Emmet	KILR AM 1070	PN	3875 150th St,	Estherville	51334	712 362 2644
		KILR FM 95.9	PN	"			"
	O'Brien	KIWA AM 1550	PN	411 9th St,	Sheldon	51201	712 324 2597
		KIWA FM 105.3	**LP2**	"		"	
		KXIM FM 98.3	PN	5404 S. Tomar Rd	Sioux Falls SD	57108	605 929 0413
	Osceola	KZTP FM 104.3	PN	25138 C-60,	Hinton	51024	712 253 1807
	Palo Alto	KUYY FM 100.1	PN	2303 W. 18th St,	Spencer	50536	712 264 1074
	Pocahontas	NO BROADCAST STATIONS					
Waterloo	Black Hawk	**KPTY AM 1330**	**LP1**	514 Jefferson St,	Waterloo	50701	319 234 2200
		KFMW FM 107.9	**LP1**	"		"	
		KXEL AM 1540	PN	"		"	
		KOKZ FM 105.7	PN	"		"	
		KNWS FM 101.9	**LP2**	NW College,	Waterloo	50702	319 296 1975
		KNWS AM 1090	PN	"		"	
		KWWL TV 7	PN	500 E 4th St,	Waterloo	50703	319 291 1200
		KBBG FM 88.1	PN	918 Newell St,	Waterloo	50703	319 235 1515
		KRIN TV 32	PN	IPTV	Johnston	50131	515 725 9700
		KCFI AM 1250	PN	721 Shirley St,	Cedar Falls	50613	319 277 1918
		KCVM FM 93.5	PN	"		"	
		KCNZ AM 1650	PN	"		"	

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Iowa EAS Stations

Operational Area	County	Call Sign Frequency	Desig.	EAS Address			Phone
Waterloo (continued)	Black Hawk						
		KOEL FM 98.5	PN	501 Sycamore	Waterloo	50701	319 833 4800
		KHKE FM 88.5	PN	UNI,	Cedar Falls	50614	319 273 6400
		KUNI FM 90.9	PN	"		"	
	Bremer	KWAR FM 89.1	PN	Wartburg College,	Waverly	50677	319 352 8200
		KWAY AM 1470	PN	605 29th Ave SW,	Waverly		319 352 3500
		KWAY FM 99.3	PN	"		"	
		KWVI FM 88.9	PN	American Family			662 884 8888
	Buchanan	KQMG AM 1220	PN	1812 3rd Ave SE,	Independence	50664	319 332 1812
		KQMG FM 95.3	PN	"		"	
	Butler	NO BROADCAST STATIONS					
	Chickasaw	KCZE FM 95.1	PN	201 Main St,	Charles City	50406	641 228 1000
	Fayette	KOEL AM 950	PN	1259 Park Rd,	Oelwein	50662	319 283 1234
		KKHQ FM 92.3	PN	501 Sycamore,	Waterloo	50701	319 833 4800
		KRJE FM 89.9	PN	202 N. 2nd St,	Hawkeye	52147	563 425 3281
	Floyd	KCHA FM 95.9	PN	201 Main St,	Charles City	50406	641 228 1000
		KCHA AM 1580	PN	"		"	
	Grundy	KCRR FM 97.7	PN	501 Sycamore,	Waterloo	50701	319 833 4800
	Howard	KCZQ FM 102.3	PN	116 1st Ave West,	Cresco	52136	563 547 1000
	Mitchell	KJCY FM 99.5	PN	12089 380th Ave,	Blue Earth MN	56013	507 526 3233
	Winneshiek	KDEC AM 1240	PN	110 Highland Drive,	Decorah	52101	319 382 4251
		KDEC FM 100.5	PN	"		"	
		KWLC AM 1240	PN	700 College Drive,	Decorah	52101	319 387 1240
		KVIK FM 104.7	PN	501 W. Water St,	Decorah	52101	563 382 5845
		KLCD FM 89.5	PN	MPR 480 Cedar St,	St. Paul MN	55101	651 290 1259
		KLNI FM 88.7	PN	480 Cedar St,	St Paul MN	55101	651 290 1259

These pages for cable

53. - 56.

Glossary of Terms

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

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

Attention Signal: eight seconds of two tones (853.0 and 960 hz) used as an audio alert. (formerly used as signaling between equipment)

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

Authenticator Word List(s): a list of words that Federal Officials send prior to official EAS national activation; used to substantiate the information being sent.

Authorization Letter: the official authorization letter given by the FCC after a station requests NN status. Allows a station to become a "Non-participating National" and mandates they go off the air during national level activation of the EAS.

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

Class D FM Station: an educational FM station whose output power is 100 watts or less.

Decoder (EAS): an electronic device used by EAS participants to receive EAS Alerts and translate EAS codes into a visual message.

Decoder (two tone): an electronic device that alerts operators to the reception of the Attention Signal (853 and 960 hz)

Emergency Action Notification (EAN): the message for national EAS activation.

Emergency Action Termination (EAT): the message for national EAS termination.

Encoder (EAS): an electronic device used by EAS participants to originate EAS alert by creating the EAS codes for transmission to other participants and the public.

Encoder (two tone): an electronic device that produces the two tone signal (853 and 960 hz).

EOM Code: in ASCII form "NNNN", this burst of data, sent three times signifies the end of an EAS message and EAS activation

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

Federal Emergency Management Agency (FEMA): one of three federal agencies that administer EAS.

FIPS Number: a five character ASCII code in the EAS headers that represent those counties affected by an EAS activation, as defined by the Federal Information Processing System that assigns each state and their respective counties a five digit number.

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

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

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

Local Primary (LP): a key source within an EAS Local Operational Area that is the primary source of EAS programming for that area.

Location Code: an ASCII code in an EAS header that specifies the location of an emergency utilizing the five character FIPS code of a state and county, and a sixth character to designate nine divisions of a county. **NOTE: the Iowa EAS Plan does not call for subdividing the counties as of 12/96.**

Low Power Television (LPTV): a television signal translator station which also originates programming.

Mapbook:

Monitoring Assignment: the station(s) and sources assigned for sources of EAS activations and programming as identified in the Iowa EAS Plan.

National Control Point Procedures: the national EAS procedures used only by national networks and program suppliers.

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

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

National Periodic Test (NPT): tests of Nation Primary sources.

National Primary (NP): a primary source of Presidential or other EAS activations and programming, including broadcast stations involved with the PEP system and EAN networks.

National Weather Service (NWS): an operation of NOAA that is directly responsible for issuing local weather-related emergency alerts and warnings as well as day to day forecasts and other weather related activities.

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

Non Participating National (NN): an EAS source (usually a broadcast station) that has elected not to participate in the National level EAS and signs off in the event of a National Level activation.

Operating Handbook: a document Issued by the FCC that instructs broadcast and cable operators of the actions they must take during an EAS activation.

Operator Interruption: the transmission of an EAS activations which has been manually initiated by operating personnel.

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

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

Preselected Code: an EAS event which the operator of EAS equipment has chosen to be automatically encoded and transmitted upon reception.

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

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

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

Radio Broadcast Data Systems (RBDS): a defined protocol for data that is transmitted on the 57KHz subcarrier of FM stations utilized mainly by consumer devices equipped to receive it.

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

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

RS-323: a common interface standard which specifies the mechanical connection, electrical signal, and the function of the signals carried across the interface.

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

State Primary (SP): a primary source of EAS programming which can activate the EAS statewide for the Governor or his designate to disseminate emergency information. **NOTE- Iowa uses WHO AM 1040 KHz as its State Primary.**

State Relay (SR): an entity which receives and retransmits EAS activations in a state relay network to assist in bringing a national or state activation to other EAS Operational areas of the state.

State Relay Network: a system of facilities to distribute State EAS activations and programming across the state. **NOTE- Iowa will use the Iowa Communications Network (ICN) for its State Relay as well as several broadcast stations.**

Subcarrier: an inaudible portion of a broadcast signal that is added to the program signal of FM or TV sound carriers and can include 57 KHz, 67KHz, and 92KHz and TV SCA services.

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

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

WRSAME: Weather Specific Area Message Encoder, a device used by the National Weather Service to broadcast WRSAME data on the National Weather Service "NOAA Weather Radio" for day to day forecasts and weather related emergency announcements.

ACRONYMS

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AFSK      Audio Frequency Shift Keying
AM        Amplitude Modulation
AP        Associated Press
ASCII     American Standard Code for Information Interchange
BPS       Bits per second
BZW       Blizzard Warning
CATV      Cable Television
CEM       Civil Emergency Message
CEW       Civil Emergency Warning
CFR       Code of Federal Regulations
CIV       Civil Authority
CONELRAD  Control of Electromagnetic Radiation (prior to EBS and
EAS)
DMO       Practice/Demo warning
EAN       Emergency Action Notification
EAS       Emergency Alert System
EAT       Emergency Alert Termination
EBS       Emergency Broadcast System (prior to EAS)
EMA       Emergency Management Association
EOC       Emergency Operations Center
EOM       End of Message
EPZ       Emergency Planning Zone
EVI       Evacuation Immediate
FCC       Federal Communications Commission
FEMA      Federal Emergency Management Agency
FFA       Flash Flood Watch
FFS       Flash Flood Statement
FFW       Flash Flood Warning
FIPS      Federal Information Processing Standards
FLA       Flood Watch
FLS       Flood Statement
FLW       Flood Warning
FM        Frequency Modulation
hz        Hertz
IPW       Industrial Plant Warning
LAA       Local Activation
LECC      Local Emergency Communications Committee
LP        Local Primary
LPTV      Low Power Television
NAWAS     National Warning System
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NIC       National Information Center
NN        Non-participating National
NOAA      National Oceanic and Atmospheric Administration
NP        National Primary
NPT       National Periodic Test
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NUW        Nuclear Plant Warning
NWR        NOAA Weather Radio
NWS        National Weather Service
PEP        Primary Entry Point
PN         Participating National
RBDS       Radio Broadcast Data System
RMT        Required Monthly Test
RPU        Remote Pickup Unit (Marti)
RWT        Required Weekly Test
SAME       Specific Area Message Encoding
SBE        Society of Broadcast Engineers
SCTE       Society of Cable Telecommunications Engineers
SECC       State Emergency Communications Committee
SMATV      Satellite Master Antenna Television
SP         State Primary
SPS        Special Weather Statement
SR         State Relay
STA        State Activation
STS        State Test
SVA        Severe Thunderstorm Watch
SVR        Severe Thunderstorm Warning
SVS        Severe Weather Statement
TOA        Tornado Watch
TOR        Tornado Warning
TV         Television
UPI        United Press International
UTC        Coordinated Universal Time
VHF        Very High Frequency
WCHA       White House Communications Agency
WRSAME     Weather Radio Specific Area Message Encoding
WSA        Winter Storm Watch
WSW        Winter Storm Warning
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63.
Iowa EAS Plan Approval

This plan of the Emergency Alert System for the State of Iowa is
approved by the following persons:

_____   _____
Jim Davies, Chief Engineer WSUI   Date
Co-Chairman, SECC

_____   _____
Joe Schloss, Chief Engineer KICD   Date
Co-Chairman, SECC

_____   _____
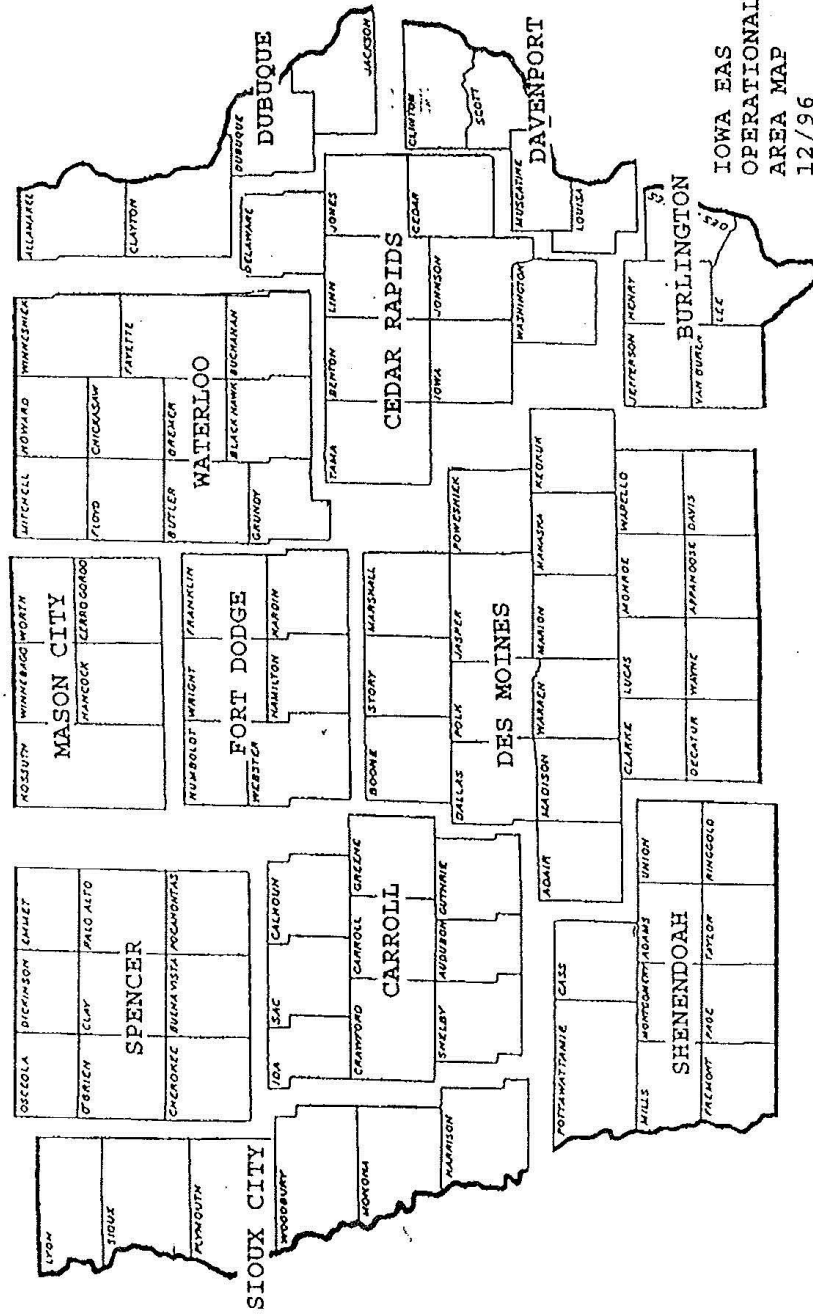Ellen M. Gordon, Administrator   Date
Iowa Emergency Management Division

_____   _____
Beverly J. Baker, Chief   Date
Compliance and Information Bureau, FCC

64.

IOWA EAS
OPERATIONAL
AREA MAP
12/96

DUBUQUE

DAVENPORT

BURLINGTON

ALLAMAKEE
CLAYTON
DELAWARE
DUBUQUE
JACKSON
CLINTON
SCOTT
MUSCATINE
LOUISA

JONES
LINN
CEDAR
CEDAR RAPIDS
BENTON
JOHNSON
IOWA
WASHINGTON
TAMA

JEFFERSON
HENRY
VAN BUREN
LEE

WATERLOO
WINNESHIEK
HOWARD
FAYETTE
CHICKASAW
MITCHELL
FLOYD
BREMER
BUCHANAN
BUTLER
BLACK HAWK
GRUNDY

MASON CITY
WINNEBAGO
WORTH
HANCOCK
CERRO GORDO
KOSSUTH

FORT DODGE
FRANKLIN
HARDIN
HUMBOLDT
WRIGHT
HAMILTON
WEBSTER

DES MOINES
POWESHIEK
KEOKUK
MAHASKA
WAPELLO
DAVIS
MONROE
APPANOOSE
JASPER
MARION
LUCAS
POLK
WARREN
CLARKE
WAYNE
BOONE
STORY
MARSHALL
DALLAS
MADISON
DECATUR

SPENCER
OSCEOLA
DICKINSON
EMMET
CLAY
PALO ALTO
O'BRIEN
BUENA VISTA
POCAHONTAS
CHEROKEE

CARROLL
CALHOUN
GREENE
CARROLL
GUTHRIE
SAC
AUDUBON
IDA
CRAWFORD
SHELBY

SHENENDOAH
UNION
RINGGOLD
CASS
MONTGOMERY
ADAMS
TAYLOR
POTTAWATTAMIE
MILLS
PAGE
FREMONT
ADAIR

SIOUX CITY
LYON
WOODBURY
MONONA
HARRISON
SIOUX
PLYMOUTH