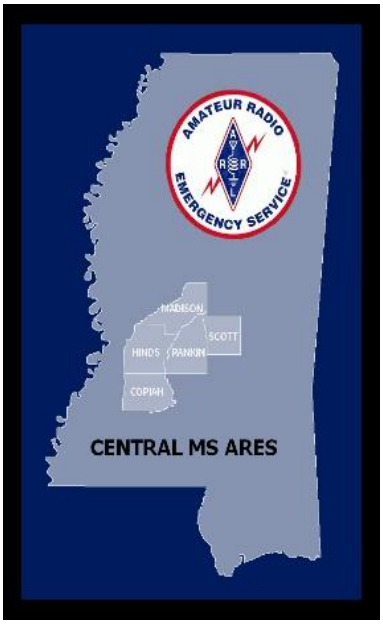
Central Mississippi Amateur Radio Emergency Service



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Serving the emergency communications needs of Hinds, Madison, Rankin, Scott, and Copiah Counties

EMERGENCY OPERATIONS PLAN

CONTENTS

Emergency Operations Plan

Purpose

The purpose of this plan is to provide a written guide containing the ***basic*** information needed to operate effectively during an emergency. CMSARES leadership shall review the plan periodically and update or amend it, as necessary.

ACTIVATION OF THE EMERGENCY NET

The Central MS ARES Emergency Net activates in response to requests from our served agencies, severe weather events, emergencies, and disasters which affect our coverage area and at other times as needed.

Alerts
Any EC may alert members to an emergency and make notification of the appropriate alert level by use of the GroupMe cell phone app or other agreed upon app or method. Members who do not respond to the alert will be notified by telephone.

Standby: used to notify members of a possible impending event such as severe weather. Members should closely monitor the situation and be prepared to Activate.

Activation: used to notify members to follow established procedures to initiate the Emergency Net.

Stand Down/Deactivation: An Activation has ended, and members and nets are free to secure their stations

Upon notification of an activation, members should check into the Emergency Net on the primary repeater, W5PPB, (145.390/ -77 Hz tone) giving their callsign, first name and location and await instructions. If conditions on this repeater are poor, we will meet on our first backup repeater, W5PPB (145.450 -/ 77Hz tone.

Any member who for any reason suspects a communication emergency exists should notify an EC and monitor the Primary repeater even if an activation has not been announced.

Members who routinely act as Net Control for SKYWARN should follow established procedures for volunteering for duty when activated for a severe weather event.

The Rankin County Emergency Operations Center has established an Amateur station within their Communications Center for use as a control point in support of disaster operations. The Comm Center may only be staffed by personnel authorized by the EOC Director or his/her designee. If the Comm Center is unavailable, the EC-Operations or EC-Training may authorize operations from other locations.

Net Operations

Central Mississippi ARES Emergency Net

All Emergency Net operations will be conducted in accordance with FCC Rules and Regulations Part 97. This net handles Emergency/Priority traffic and Storm Spotter Reports. We do not handle Welfare traffic because other systems are in place to better perform that service.

Operation under Normal Circumstances

The Emergency Net activates in response to requests from our served agencies, severe weather events, emergencies and disasters which affect our coverage area and at other times as needed. Initial activation of the Emergency Net will be on W5PPB (145.390 / -77 Hz tone); however, if conditions on this repeater are poor, we will move to our first backup repeater on W5PPB (145.450 /-77) Hz tone). Our second backup repeater is W5PFC (146.760 / -77 Hz tone), and our third backup repeater is KE5LIO (147.345/ +100 Hz tone).

The Emergency Net operates under the control of a Net Control Station (NCS). The Net Control Station is responsible for all aspects of the net including but not limited to conducting the net, passing traffic with served agencies, maintaining records, announcing frequencies to be used for Tactical, Resource, and Command Nets if required, making reports to the Net Manager and other duties as assigned by an EC.

The Central Mississippi ARES Emergency Net is a directed net. No station shall transmit without permission from Net Control except a station having EMERGENCY traffic.

Any member with knowledge of a situation requiring net activation should notify an EC. If that member is part of the Net Control Team, he/she should open the Emergency Net and assume the duty of Net Control until properly relieved. Once the net is activated and an EC has been notified, arrangements for relief Net Control Stations will be implemented.

The ECs and AEC-Digital Net Manager will delegate or establish liaison with the Rankin County EOC, SKYWARN, the MS Digital Emcomm Group, the MS Section Phone Net, and other entities as necessary.

If Net Control should go off the air unexpectedly, a member of the Net Control Team shall attempt to make contact with NCS. If no contact is made, he/she should determine if the problem is repeater related by calling a checked-in participant. If the repeater is still functioning normally the relief NCS should announce that he/she is taking over the net, give their call sign, ask for any Emergency traffic, conduct roll call, and resume the net.

If the problem appears to be that the repeater has gone off the air, all members should move to the first backup repeater (145.450 /- 77 Hz tone) and standby for roll call. After moving to another repeater, Net Control will conduct roll call to ensure all participants have moved to the new frequency. If Net Control is absent, the relief NCS should take control of the net. In the unlikely event that both the primary and first backup repeater go off the air, members should switch to the second backup repeater (146.760 / - 77 Hz tone) and check in. The third backup repeater (147.345/ + 100 Hz tone) will be used as a last resort. If not needed for primary operations, backup repeaters may be utilized for secondary nets.

Operations under Abnormal conditions

If normal communications are out of service, members should check in on the Emergency Net beginning with the primary repeater followed by the backup repeaters. If no contact is made, and it appears telephone, cell phone and internet service are disrupted, those members with digital capabilities should use VHF/HF NBEMS to contact an EC and other members of the team. Those with HF capabilities should check in on designated calling frequencies on 80, 40 and 20 meters as established in the communications plan and await instructions. If voice contact is not established, HF digital will be used beginning with Winlink VARA or ARDOP followed by P2P.

Appendix 1

CMSARES uses the following frequencies for training and activation.
All CMSARES members should have these frequencies programmed into their radios.

FREQUENCIES / MODES OF OPERATION USED FOR TRAINING / PRACTICE / ACTIVATIONS

2 Meter Frequencies

CMSARES Primary frequency:	**145.390 (-. 6MHz offset 77Hz tone)**
First Backup repeater:	**145.450 (- .6 MHz offset 77 Hz Tone)**
Second Backup repeater:	**146.760 (- .6MHz offset 77 Hz tone)**
Third Backup repeater:	**147.345 (+.6 MHz offset 100 Hz tone)**
SKYWARN:	**146.940 (-.6MHz offset 100 Hz tone)**
VHF NBEMS:	**145.390 MT-63-2KL centered at 1500 on waterfall Backup repeater 145.450**

HF Frequencies

CMSARES HF NBEMS:	**3.575 USB Thor 22 centered at 1000 on waterfall Up/down depending on conditions**
MS ARES HF NBEMS	**3.581 USB Thor 22 centered at 1000 on waterfall Alternate- Olivia 8/500 for poor conditions**
MS SECTION PHONE NET	**3.862 LSB backup on 7.238 LSB**
Central Gulf Coast Hurricane Net	**3.935 LSB 7.268 Tactical Night Hurricane Watch 14.325 Tactical Day Hurricane Watch**
Winlink:	**VARA, ARDOP, or Telnet using any gateway on any band you are licensed for on HF (160, 80, 60,40, 20 17,15,10) that you can connect to**

Appendix 2

IMPORTANT DOCUMENTS

- Q CODES
- VOICE CODES
- PHONETIC ALPHABET
- The R-S-T SYSTEM
- UTC CONVERSION CHART

Q Signals

QRG	Your exact frequency (or that of_____)is _____kHz Will you tell me my exact frequency (or that of _____)?
QRL	I am busy (or I am busy with _____). Are you busy? Usually used to see if a frequency is busy
QRM	Your transmission is being interfered with _____ 1.Nil: 2. Slightly; 3. Moderately: 4. Severely; 5. Extremely Is my transmission being interfered with?
QRN	I am troubled by static_____. 1 to 5 as under QRM
QRO	Increase power. Shall I increase power?
QRP	Decrease power. Shall I decrease power?
QRQ	Send faster (_____wpm). Shall I send faster?
QRS	Send more slowly(_____wpm). Shall I send more slowly?
QRT	Stop sending. Shall I stop sending?
QRU	I have nothing for you. Have you anything for me?
QRV	I am ready. Are you ready?
QRX	I will call you again at_____hours (on_____kHz). Who is calling me?
QRZ	You are being called by _____(on _____kHz). Who is calling me?
QSA	Give Signal Report
QSB	Your signals are fading. Are my signals fading?
QSK	I can hear you between signals; break in on my transmission. Can you hear me between your signals and if so can I break in on your transmission?
QSL	I am acknowledging receipt. Can you acknowledge receipt (of a message or transmission)?
QSO	I can communicate with _____direct (or relay through_____) Can you communicate with _____direct or by relay?
QSP	I will relay to_____. Will you relay to _____?
QST	General call preceding a message addressed to all amateurs and ARRL members. This is in effect “CQ ARRL.”
QSX	I am listening to _____on _____kHz. Will you listen to _____on_____kHz?
QSY	Change to transmission on another frequency (or on _____kHz).

	Shall I change to transmission on another frequency (or on_____kHz)?
QTC	I have_____messages for you (or for_____). How many messages have you to send?
QTH	My location is_____. What is your location?
QTR	The time is_____. What is the correct time?

Voice	**Code**	**Situation**
Go ahead	**K**	Used after calling CQ, or at the end of a transmission, to indicate any station is invited to transmit
Over	**AR**	Used after a call to a specific station before the contact has been established.
	KN	Used at the end of any transmission when only the specific station contacted is invited to answer.
Stand by or wait	**AS**	A temporary interruption of the contact
Roger	**R**	Indicates a transmission has been received correctly and in full
Clear	**SK**	End of contact. SK is sent before the final identification.
Leaving the air or closing the station	**CL**	Indicates that a station is going off the air and will not listen or answer any further calls. CL is sent after the final identification

- **International Telecommunication Union Phonetic Alphabet-**

  Word list adopted by the International Telecommunication Union

  A--Alfa
  B--Bravo
  C--Charlie
  D--Delta
  E--Echo
  F--Foxtrot
  G--Golf
  H--Hotel
  I--India
  J--Juliett
  K--Kilo
  L--Lima
  M--Mike
  N--November
  O--Oscar
  P--Papa
  Q--Quebec
  R--Romeo
  S--Sierra
  T--Tango
  U--Uniform
  V--Victor
  W--Whiskey
  X--X-ray
  Y--Yankee
  Z--Zulu

THE R-S-T SYSTEM

READABILITY

1. Unreadable
2. Barely Readable, occasional words distinguishable
3. Readable with considerable difficult
4. Readable with practically no difficulty
5. Perfectly readable

SIGNAL STRENGTH

1. Faint signals, barely perceptible
2. Very weak signals
3. Weak signals
4. Fair signals
5. Fairly good signals
6. Good Signals
7. Moderately strong signals
8. Strong signals
9. Extremely strong signals

UTC (ZULU) TIME CONVERSION CHART

UTC ZULU	PST/ ALDT	PDT/ MST	MDT/ CST	CDT/ EST	EDT/ AST	ALST	HST
0000	1600	1700	1800	1900	2000	1500	1400
0100	1700	1800	1900	2000	2100	1600	1500
0200	1800	1900	2000	2100	2200	1700	1600
0300	1900	2000	2100	2200	2300	1800	1700
0400	2000	2100	2200	2300	0000*	1900	1800
0500	2100	2200	2300	0000*	0100	2000	1900
0600	2200	2300	0000*	0100	0200	2100	2000
0700	2300	0000*	0100	0200	0300	2200	2100
0800	0000*	0100	0200	0300	0400	2300	2200
0900	0100	0200	0300	0400	0500	0000*	2300
1000	0200	0300	0400	0500	0600	0100	0000*
1100	0300	0400	0500	0600	0700	0200	0100
1200	0400	0500	0600	0700	0800	0300	0200
1300	0500	0600	0700	0800	0900	0400	0300
1400	0600	0700	0800	0900	1000	0500	0400
1500	0700	0800	0900	1000	1100	0600	0500
1600	0800	0900	1000	1100	1200	0700	0600
1700	0900	1000	1100	1200	1300	0800	0700
1800	1000	1100	1200	1300	1400	0900	0800
1900	1100	1200	1300	1400	1500	1000	0900
2000	1200	1300	1400	1500	1600	1100	1000
2100	1300	1400	1500	1600	1700	1200	1100
2200	1400	1500	1600	1700	1800	1300	1200
2300	1500	1600	1700	1800	1900	1400	1300
2400	1600	1700	1800	1900	2000	1500	1400

*0000 and 2400 are interchangeable

2400 is associated with the date of the day ending, 0000 with the day just beginning

UTC=Coordinated Universal Time (ZULU)
PST= Pacific Standard Time (UTC-8 hours)
ALDT= Alaska Daylight Time (UTC-8 hours)
PDT= Pacific Daylight Time (UTC-7 hours)
MST=Mountain Standard Time ((UTC-7 hours)
MDT=Mountain Daylight Time (UTC-6 hours)
CST=Central Standard Time (UTC-6 hours)
CDT= Central Daylight Time (UTC-5 hour
EST=Eastern Standard Time (UTC_-5 hours)
EDT=Eastern Daylight Time (UTC-4 hours)
AST=Atlantic Standard Time (UTC-4 hours
ALST=Alaska Standard Time (UTC-9 hours)
HST=Hawaii Standard Time (UTC-10 hurs)

Appendix 3

FORMS

Available at arrl.org

ARRL RECOMMENDED PRECEDENCES (See Below)
MESSAGE HANDLING INSTRUCTIONS (See Below)
ARRL NUMBERED RADIOGRAMS
https://nts2.arrl.org/numbered-texts/
RADIOGRAM
https://www.arrl.org/files/media/Group/Fillable%20Radiogram%20Form.pdf
ICS 213 / INSTRUCTIONS
https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20213,%20general%20message%20(v3).pdf
ICS 214 /INSTRUCTIONS
https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20214,%20activity%20log%20(v3.1).pdf

Available at msares.com

STORM SPOTTER REPORT
https://msares.com/cmaresStormSpotterReport.pdf
CENTRAL MS ARES RADIO NET LOG
https://msares.com/cmaresEmcommRadioNetLog.pdf
NET REPORT FORM
https://msares.com/CMATNNetRosterLogSheet.pdf

ARRL Recommended Precedences

Please observe the following ARRL provisions for PRECEDENCES in connection with written message traffic. These provisions are designed to increase the efficiency of our service both in normal times and in emergency.

EMERGENCY-- message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. On CW/RTTY, this designation will always be spelled out. When in doubt, do not use it.

PRIORITY--abbreviation P on CW/RTTY. This classification is for a) important messages having a specific time limit b) official messages not covered in the emergency category c) press dispatches and emergency—related traffic not of the utmost urgency d) notice of death or injury in a disaster area, personal or official.

WELFARE——This classification, abbreviated as W on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or an advisory from the disaster area that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).

ROUTINE——Most traffic in normal times will bear this designation. In disaster situations, traffic labeled
Routine (R on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic.
Note——the precedence always follows the message number. For example a message number may be 207 R on CW and 'Two Zero Seven Routine' on phone.

ARRL Message Handling Instructions

Handling instructions (HX) convey special instructions to operators handling and delivering the message. The instruction is inserted in the message Preamble between the Precedence and the Station of Origin. Its use is optional with the originating stations, but once inserted it is mandatory with all relaying stations. .

PROSIGN	INSTRUCTION
HXA	(Followed by number) Collect landline delivery authorized by addressee within_____miles.
HXB	(Followed by number) Cancel message if not delivered within ____hours of filing time.
HXC	Report date and time of delivery (TOD) to originating station.
HXD	Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.
HXE	Delivering station get reply from addressee, originate message back.
HXF	(Followed by number) Hold delivery until _____(date).
HXG	Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.