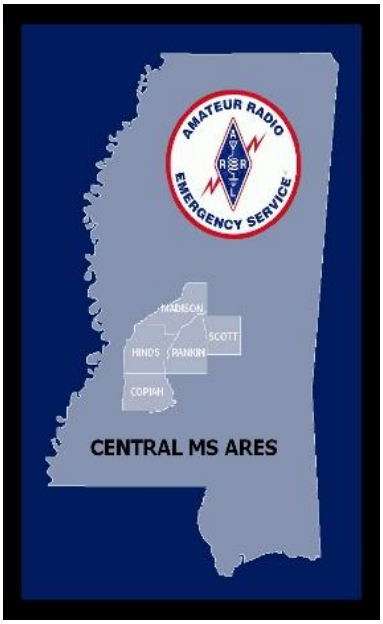
Central Mississipp Amateur Radio Emergency Service



Website: msares.com
Email: info@msares.com

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

Handbook and Emergency Communications Plan

CONTENTS

Authority

The Amateur Radio Emergency Service (ARES) consists of Amateur Radio licensees who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes.

ARES is a part of the field organization of the Amateur Radio Relay League (ARRL), the national association for amateur radio.

Under Federal regulations, Amateur Radio public service communications are furnished without compensation of any kind.

The ARES operates under the supervision of the Amateur Radio Relay League (ARRL) Field Services and Radiosport Manager or his/her designee. It operates to serve both governmental and non-governmental agencies through "Memorandums of Understanding;" non-binding letters explaining the roles and responsibilities of participating parties at the national and section levels.

ARES Mission Statement

"The Amateur Radio Emergency Service, a program of the ARRL, offers to its partners at all levels, trained Amateur Radio Service licensees who are skilled in the use of a wide range of emergency and disaster communications techniques and who are committed to supporting our partner's missions in service to the public."

ARES Vision Statement

The Amateur Radio Emergency Service (ARES), a program of ARRL, the national association for Amateur Radio, is composed of organized, trained, and identified Amateur Radio operators who augment and support vital communications on behalf of the public through partner agencies and organizations during emergencies and disasters. The Amateur Radio Emergency Service, through its volunteer radio communicators, strives to be an effective partner in emergency and disaster response, providing public service partners at all levels with radio communications expertise, capability, and capacity."

CMSARES Leadership

Central Mississippi Amateur Radio Emergency Service (CMSARES), a part of the Central Mississippi Amateur Radio Association. is comprised of licensed amateur radio operators in five counties: Hinds, Madison, Rankin, Copiah, and Scott. Information about the history and founding of CMSARES is available on our website at msares.com.

CMSARES functions under the direction of a local Emergency Coordinator (EC) appointed by the Section Manager (SM) in consultation with the Section Emergency Coordinator (SEC). Because of the nature of CMSARES, an Emergency Coordinator for each county served may be appointed; however, the EC-Operations has responsibility for overall leadership and guidance of the group. The EC-Training is considered the second-in-command and, in the absence, or vacancy of the EC-Operations may assume those duties.

ECs may appoint assistants (AECs) to assist with specific tasks. AECs do not assume authority of an EC in his absence as AECs are strictly local appointments made by the EC. Only the Section Manager in consultation with the SEC may appoint an EC.

CMSARES leadership is comprised of:

- EC- Operations/overall leadership
- EC- Training
- AEC- Webmaster/Winlink Net Manager
- AEC- Digital Net Manager
- AEC- Net Management
- AEC- Technical Advisor
- Public Information Officer

Succession

If a vacancy occurs among the ECs, the remaining ECs may consult with the Section Manager about a replacement and choose a replacement from among the members by unanimous vote. The senior EC will submit an agreed upon candidate to the Section Manager for approval and appointment.

Membership

All licensed amateurs, regardless of membership in ARRL or any other local or national organization are eligible to apply for membership in ARES; however, membership in Central MS Amateur Radio Association and ARRL is encouraged. Applications for Central MS Amateur Radio Association are available at centralmsham.club.

Applications for Central MS ARES are available on our website, msares.com. All amateur radio licenses will be verified. Applications with false or misleading statements will be rejected from consideration.

Our meetings are held at the Rankin County Emergency Operations Center located at 601 Marquette Rd. in Brandon, MS on the second Tuesday of each month immediately following the 7pm meeting of Central MS Amateur Radio Association. You do not have to be a licensed amateur to attend.

All CMSARES members shall download the appropriate GroupMe app, or other such apps as determined by the leadership to be used for notifications and activations. Members are expected to respond in a timely manner to tests, notifications and phone calls or texts.

CMSARES members are expected to regularly participate in training, practice, exercises, and activations and abide by the rules and regulations of the FCC, ARRL, and CMSARES.

Members shall immediately notify the ECs of changes to their address and contact information.

Training Standards and Requirements

Drills, training, and instruction are conducted to ensure readiness to respond quickly in providing effective amateur emergency communications when the need arises. Training for activation includes instruction and practice in ARES net procedures, traffic handling, storm spotter reporting and voice and digital communications. Winlink and NBEMS free software are used for digital training. Training Nets are used to improve skills and to prepare for Activation. In addition, we mentor members in areas where they need assistance.

Although we use a combination of the latest technology to conduct operations, recruit and maintain contact with members during normal times, our training focus is on RF communications due to the vulnerability of regular communications infrastructure.

CMSARES participates in the Simulated Emergency Test held annually to evaluate strengths and weaknesses in Amateur Radio emergency preparedness as well as to demonstrate amateur radio to our served agencies and the public. All members are encouraged to participate.

Many ARES served agencies now require ARES participants to be trained to a degree that would qualify them to assume any position to which assigned; therefore, ARES has instituted a national system for qualifying, certifying and credentialing to insure consistent training for all levels of ARES. These standards are outlined in the ARRL ARES PLAN and should be reviewed by all members.

There are 3 levels to membership in ARES. Level 1 is primarily for those new to emergency communications and those who desire a non-leadership role. For those interested in advancing to a higher level, including deployment and leadership, the requirements are presented in the ARRL ARES Plan (available at arrl.org). ECs will sign Task books, (downloadable at arrl.org) to verify completion of requirements for each level.

All members are encouraged to take advantage of the numerous training documents on our website and to pursue Basic/Advanced Storm Spotter training and Basic First Aid/CPR in addition to other advanced training. Members interested in digital modes should download the FLDIGI, FLMSG, AND FLAMP suite of free software as well as the free Winlink download. VARA and P2P are the standard modes for Winlink operation.

Members at all levels are required to download and become familiar with the following documents found at arrl.org:

- ARRL ARES Plan
- ARES Manual
- ARES Field Resources Manual

Responsibility

By enabling EchoLink, linking repeaters and utilizing Winlink, NBEMS and voice and digital modes on HF and UHF/VHF frequencies, we provide service to a broad local area as well as to the state and region during normal times; however, the primary responsibility of CMSARES is to furnish communications in the event of a natural or man-made disaster where regular communications fail or are inadequate.

The responsibility of the ARES operator is to move messages to specified parties by any combination of means available such as phone, fax, internet, UHF/VHF or HF voice and digital communications. In keeping with this concept our philosophy is “use it until you lose it” but because of the vulnerability of normal communications infrastructure, our primary resource for emergency communications is RF based and is the focus of our preparations.

CMSARES provides service to the Rankin County Emergency Operations Center, the National Weather Service SKYWARN program, the MS Digital Emcomm Group (MSDEG), and any other government agency or non-governmental organizations (NGO) requesting assistance if resources permit.

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.

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

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, KF5SEB, (147.045/100 Hz tone).

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.

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 KF5SEB (147.045 /100) Hz tone.

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.

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; conducting the net, passing traffic with served agencies, maintaining records, announcing frequencies to be used for Tactical, Resource, and Command Nets if required and making reports to the Net Manager

Any member with knowledge of a situation requiring net activation should notify an EC. If that member is part of the Net Control Team, and is asked by an EC, he/she should open the Emergency Net using the script found on msares.com 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.

If Net Control should go off the air unexpectedly, a member of the Net Control Team shall attempt to make contact. 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 (147.045 /100 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 (147.345 / 100 Hz tone) and check in. If not needed for primary operations, backup repeaters may be utilized for secondary nets.

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

MESSAGES

As ARES operators our primary job is to move messages.

Message types fall into two categories: (1) Tactical / informal (2) Formal / written

Tactical: Unstructured messages originated by an operator to typically cover status, progress, or situational information. Examples: weather status, resource or logistics needs, search and rescue operations, damage assessment, security, road closures, mutual assistance coordination, or command communications.

Formal: Structured messages using a written format. ARRL and ICS use standardized forms. We use Incident Command System (ICS) forms because our served agencies use these documents as part of their standard protocol and doing so makes it much easier forus to work together.

During an activation, the most used forms will be the Radiogram, the FSD-244 Amateur Radio Disaster Welfare Message, and the ICS 213-General Message Form . During a severe weather event, the Storm Spotter Report, a National Weather Service form, will be used. Members should become familiar with these forms and practice using them A crisis is not the time to try to learn a new skill.

Points to Remember

- All ***written*** messages shall be in standard ARRL or ICS format
- All ***written*** messages must be signed by the official originating them, with their title, taking responsibility for their contents.
- Message precedence of EMERGENCY, Priority, Welfare, and Routine as defined by the ARRL form FSD-3 shall be used on all ***written*** messages.
- ***Written*** messages should be delivered as written except that the word count may be corrected if incorrect.

When normal communications are down or overloaded, messages may be passed using RF by voice or digital modes. In many instances tactical traffic using voice mode will be preferable and tactical callsigns may be utilized; however, station identification by FCC rules will still be followed.

Advantages of Voice mode:

More practical for mobile and portable operations
Greater availability of operators
Faster communications for tactical or command communications
More readily understood by untrained members of the public
Allows direct official-to-official and phone patch communications

Advantages of Digital modes

Greater speed than some other modes
Use of error detection/correction by some modes improves accuracy
Some data modes offer store-and-forward capability to move messages via automatically controlled relay points
Less interference in most amateur bands

Duties of Net Control Stations when passing Formal/Informal messages

Record incoming and outgoing activity on appropriate forms
Retain a copy of all logs
Deliver messages and replies to intended recipients
Handle and file messages according to established protocol
After the net, submit the Net Report and any necessary accompanying forms to the Net Manager at NetManager@MSARES.com

HIPPA ACT

During a disaster or emergency, patient information may be requested to be sent via amateur radio. While it is not the role of the radio operator to determine what is and is not permitted under the Health Insurance Portability and Accountability Act (HIPPA), it is appropriate for the operator to remind the originator of the message that there can be no expectation of privacy of information sent via amateur radio and that encryption is not permitted under FCC rules and regulations. If you are ordered to pass this type of sensitive information, be sure to document the circumstances, the name/position of the originator and the substance of your discussion about it.

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 77 Hz tone)**
First backup repeater:	**147.045 (+.6MHz offset 100 Hz tone)**
Second backup repeater:	**147.345 (+.6MHz 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 147.045**

HF Frequencies

HF NBEMS:	**3.575 USB Thor22 centered at 1000 on waterfall**
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** **7268 Tactical Night Hurricane Watch** **14325 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**