

South Carolina Amateur Radio Emergency Service



Tactical Communications Guide

Richland County, South Carolina

Rev. 02/10/25

Table of Contents

NTRODUCTION	
PURPOSE	3
EMERGENCY PREPARATION (EXERCISES, TESTS AND ALERTS)	
ACTIVATION AND RESPONSE	
OPERATIONS	
APPENDIX	
A – NETS (Richland County ARES Regular Communication/Training Nets)	
B – FORMS (Most Frequently Used to record and pass emergency traffic)	9
C – COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET (FORM ICS-217)	11
D – Emergency Net Control Script	14
E – Health and Welfare Response	16
F – OPCON LEVELS and RESPONSE ACTIONS	17
PLAN REVISIONS	10

INTRODUCTION

The Richland County ARES functions under the current edition of the South Carolina Amateur Radio Emergency Service and Radio Amateur Civil Emergency Service Auxiliary Communication Tactical Communications Guide which is posted on the ARES-SC.ORG website. This emergency guide is a supplement to define key items as they relate directly to Richland County.

Emergency responses are conducted in accordance with the above guides and under the direction of the Richland County Emergency Coordinator (EC), who is appointed by the ARRL South Carolina Section Manager. The EC may appoint Assistant Emergency Coordinator's (AEC) as needed for the ARES to function efficiently. However, when invited to support one of the served agencies ARES members work under their direction.

The success of the organization is dependent on the individual ARES members. ARES members demonstrate a willingness to get involved, to learn new operating skills and prepare to use their equipment in challenging emergency situations.

The State of South Carolina includes Amateur Radio in its emergency communications planning documents and standard operating procedures and has a signed Memorandum of Understanding with SC ARES for providing radio operators during emergencies.

PURPOSE

The purpose of this plan is to provide a written guide containing the basic information that would be needed by the Richland County ARES members to respond in an emergency. Each emergency is different and flexibility is necessary to provide an appropriate response to each situation.

The primary responsibility of the Richland County ARES is to assist in providing communications in the event of a disaster, or any situation where normal communications are disrupted.

Richland ARES members may provide communications support to various government and NGO groups during an emergency. In that capacity they are to be prepared for a sustained deployment of up to 72 hours.

Typically, only ARES members who complete the training and certification required by the volunteer coordination component of/for the supported organization, will be eligible to deploy in support of that organization. Additionally, ARES members will only deploy at the request of the organization.

Examples: Supported Organizations and Coordinating Group

Local Communities - Through ARES

State Emergency Operation Center (SCEMD) - Through AUXCOM

Richland County Emergency Operation Center (RCEOC) – Through Richland CERT

DPH Area Command Center (SCDPH) – Through MMRC (Midlands Medical Reserve Corps

Healthcare Facility (Hospitals, SCDPH/specific facility) – Through MMRC / RCEOC

Mobile Communication Teams - Through Requesting Agency / MMRC

Shelter Operation – Through the American Red Cross

National Weather Service - SKYWARN program (NOAA) - Through SKYWARN

Supported agencies operate under the National Incident Management System (NIMS). This system provides consistency between Counties, State, Federal Agencies, as well as other responding organizations. It creates a common operational structure and language, standardizing the operational period and documentation. Richland ARES Emergency Operations will comply by operating within the guidelines of this standard.

EMERGENCY PREPARATION (EXERCISES, TESTS AND ALERTS)

Exercises, training, and instruction shall be conducted regularly to ensure readiness to respond quickly and provide effective and efficient Amateur Radio communications whenever the need may arise.

The Richland County ARES will periodically provide public service communications in conjunction with local events. These events must be for the benefit of the public.

Members are encouraged to participate in the following to test gear and practice emergency response skills:

Weekly Nets to share information concerning ARES and Amateur Radio news, build team comradery, and to provide/receive training. (See Appendix A for details.)

Quarterly Activation exercises to validate contact process and response processes.

Other events, such as the annual SC state CommEx, that provides the ability to practice emergency response in specific scenarios.

Respond to actual alerts and emergencies to experience real-world events.

Members should work towards learning and obtaining proficiency in the following areas and keep their ARES STANDARDIZED TRAINING PLAN TASK BOOK current on their progress:

HF Voice Communications (minimum of the 40 and 80 meter bands)

VHF / UHF Voice Communications (Simplex and Repeaters)

Winlink (Telnet as a minimum)

ICS and necessary Forms (See Appendix B for details.)

Serving as Net Control

SKYWARN Spotter Certification

Courses IS-100 and IS-700

ACTIVATION AND RESPONSE

Any member of the Richland County ARES, who for any reason suspects that an emergency is imminent or has occurred, should prepare for possible activation as follows:

Be familiar with this plan as well as the South Carolina ARES Tactical Plan.

Inventory personal comm gear and verify serviceability.

Evaluate personal impact by the event.

Verify all those in your care are unharmed.

Verify all those in your care are in a safe environment.

Verify all those in your care are provisioned for 72 hours.

Evaluate impact to your immediate surrounding area.

Evaluate your circumstances and resources to determine availability to support an ARES mission.

Verify cell service availability and monitor.

Verify Zello connectivity and monitor.

Verify Richland ARES Primary repeater (147.330) is functional and monitor.

Verify SCHeart Columbia VHF Repeater (146.715) is functional and monitor.

Monitor public news.

Prepare to respond to and follow the Richland ARES Activation Plan.

Richland ARES response activities will fall within 3 categories or Operational Condition (OpCon) levels. These levels are determined and announced by Richland ARES leadership and may not reflect the same level as the county or state emergency services at the time.

OPCON Levels for Richland ARES

OpCon 3 (Normal Operations)

Definition: Normal operating condition where there is no immediate threat or emergency. Operations are functioning as usual with no significant events or disruptions. This is the period for planning and training.

OpCon 2 (Increased Readiness)

Definition: There is a potential threat or hazard that requires heightened awareness and preparation. It poses a serious risk that requires active monitoring and increased preparation for mobilization of resources. At this level all ARES volunteers should be monitoring emergency information sources as well as designated frequencies.

OpCon 1 (Active Response)

Definition: An emergency is imminent or ongoing, and response efforts are underway. This is the highest level of alert and response.

All ARES volunteers should respond according to the appropriate emergency plan and as directed by leadership.

(See appendix F for more detail)

Upon awareness or notification that an emergency exists, members of Richland County ARES will be contacted as follows:

(Listed by priority based on availability of service following the P.A.C.E strategy.)

- A Cell phone Text Message
- B Phone voice call
- C Richland ARES Primary Repeater (Primary 147.330 MHz (+) 156.7 Hz Secondary 147.360 MHz (+) 100.00 Hz)
- D Richland ARES Designated simplex (147.330)
- E Runner
- F Personal Contact

As directed, members will call into the designated repeater or simplex frequency and establish an Emergency Net.

A Richland County ARES Coordination Net will be established for coordinating ARES emergency response activities.

Emergency Nets are triggered by an event that creates a need to establish a controlled communication net. Other than the personal safety of an ARES member, the establishment of a control net should be the top priority. The first station to initiate the net becomes the control operator.

The control operator has the following responsibilities:

Please notify all stations monitoring the frequency that a directed net is being implemented. Provide the reason for this action and ensure that all communication is routed through Net Control.

Provide stations with information about checking into the net such as who should check in, how to check in to the net, i.e., call sign; name, location, and availability to help or if they are already supporting an agency or organization.

Document all stations checking into the net, where they are located and what organization they are supporting,

Assist stations in passing traffic that is essential to the communication objectives,

Develop an overview of the situation and provide relevant data to stations, as it becomes known,

Continue net control duties until relieved by another station or the emergency is over.

Remain calm and focused on the primary duty of passing accurate information in a timely manner.

As any member of the ARES team could be tasked with establishing and handling a net, all must be trained and prepared to function in the role of Net Control.

(See Appendix D for the Emergency Net Script.)

The EC will assume net control or delegate another station (NCS) which may be set up at the Richland County Emergency Operation Center (EOC) or where most feasible for the communications emergency. This station will be extensively utilized during the emergency. It will have full emergency power capability and relief operators assigned to ensure continuous operation. A minimum of a two-person team is optimal (operator and runner/note taker/logger).

If needed mobile/qualified members will be dispatched to augment communications or other operations for supported organizations.

Note:

- In an emergency where Amateur Radio may be needed, Amateur Radio operators may be alerted by a served agency. This alert should be shared immediately with the EC and/or AECs, or their representatives who will then coordinate the deployment.
- It is essential that all ARES volunteers remember the following three rules:
 - 1 You never self-deploy except under the prior direction of the emergency plan of the organization you are authorized and trained to support.

 Example: AUXCOMM volunteers are authorized, without notification, to report to the SEOC in the event of a 5.0 or greater earthquake.

- 2 You are a volunteer at the event where you serve, and you must follow the supported organization's procedures and rules as instructed. (This includes completing their required paperwork.)
- 3 As a volunteer, you are not there to direct the organization nor instruct them on how they should be doing their mission.

OPERATIONS

For most emergencies Richland County ARES will utilize communication means and frequencies that are preassigned. These may be assigned directly to RC ARES by South Carolina ARES, or those designated for use by a supported organization. A listing of those most likely to be used will be maintained on Form ICS- 217, Communications Resource Availability Worksheet. (See Appendix C for current listing) Normally, the means and frequencies needed to support a specific emergency will be taken from this listing as guided by the response requirements. The specific requirements will be documented on a Form ICS-205 form, Incident Radio, Communications Plan, and provided to all response personnel.

Formal communications will utilize standard ICS forms except for the Palmetto Resource Request form which was developed to comply with Palmetto 800 input format.

All formal messages must be signed by the official who originates them, with his/her title, taking responsibility for the content.

During a directed emergency, net stations must not transmit unless directed to do so by the NCS. The exception is that a station may break into an existing conversation to call Net Control with EMERGENCY traffic. However, with NCS permission, short tactical messages may be authorized for transmission.

Information obtained or overheard by Amateur Radio operators assisting served agencies should be treated as FOR OFFICIAL USE ONLY. Operators should refer information queries to the served agency.

All operators should be familiar with the South Carolina Tactical Communications Plan. This plan may be found at https://ares-sc.org/. It is recommended that you print two copies, keeping one at your shack and an additional in your mobile vehicle.

All operators should be familiar with the basic forms that will normally be used by ARES in an emergency response.

(See Appendix B for details of the commonly used forms.)

APPENDIX

A – NETS (Richland County ARES Regular Communication/Training Nets)

South Carolina A.R.E.S. Statewide HF Net: 6:00pm 3.990 (Every Tuesday) Central SC Simplex Net: 7:00 pm 146.400 (1st & 3rd Thursday) SC Midlands A.R.E.S. Training Net 7:00 pm 147.330 Repeater (2nd & 4th Thursday)

Statewide A.R.E.S. Net: 8:00pm 146.715 SCHEART Repeater (Every Sunday) Winlink Tuesday 10:00am – 10:00pm – Any Mode

B – FORMS (Most Frequently Used to record and pass emergency traffic)

Palmetto Resource Request

This resource request is used to order resources through the Palmetto system. It is a custom form for South Carolina use only.

ICS-205

The Incident Radio Communications Plan (ICS 205) provides information on all radio frequency or trunked radio system talk-group assignments for each operational period. The plan is a summary of information obtained about available radio frequencies or talk-groups and the assignments of those resources by the Communications Unit Leader for use by incident responders

FIELD SITUATION REPORT

Stations use this form to report abnormal situations based on firsthand knowledge at their location.

The information in this report aids the SEOC Team in determining which areas are experiencing infrastructure degradation and failures.

ICS-214 ACTIVITY LOG

The Activity Log (ICS 214) records details of notable activities at any ICS level, including single resources, equipment, Task Forces, etc. These logs provide basic incident activity documentation, and a reference for any after-action report.

ICS 213

The General Message (ICS 213) is used by the incident dispatchers to record incoming messages that cannot be orally transmitted to the intended recipients. The ICS 213 is also used by the Incident Command Post and other incident personnel to transmit messages (e.g., resource order, incident name change, other ICS coordination issues, etc.) to the Incident Communications Center for transmission via radio or telephone to the addressee. This form is used to send any message or notification to incident personnel that requires hard-copy delivery.

Link to Forms: https://training.fema.gov/icsresource/icsforms.aspx and https://aressc.org/

All forms are also available on the Winlink Express application.

C – COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET (FORM ICS-217)

Channel Name	Usage	Mobile Rx	Rx Tone	Mobile Tx	Tx Tone
ARES-Richland Tact Rptr	Richland ARES Primary Tact Comm	147.330	156.7	147.930	156.7
ARES-Richland Secondary Tact Rptr	Richland ARES Secondary Tact Comm	147.360	100	147.960	100
ARES-Richland Tact Rptr (Future)	Richland ARES Primary Tact Comm	145.270	632	144.670	632
ARES-Lexington Tact Rptr	Lexington ARES Primary Tact Comm	147.000	123	147.600	123
ARES-Calhoun Tact Rptr	Calhoun ARES Primary Tact Comm	146.670	156.7	146.070	156.7
ARES- Newberry Tact Rptr	Newberry ARES Primary Tact Comm	147.210	156.7	147.810	156.7
ARES- Kershaw Tact Rptr	Kershaw ARES Primary Tact Comm	146.775	156.7	146.175	156.7
ARES- Saluda Tact Rptr	Saluda ARES Primary Tact Comm	146.91	123	146.31	123
DMR Columbia CC	Command Primary Central	440.6125	TG= Local	445.6125	TG= Local
			TG-27500		TG-27500
DMR Columbia West	Command Primary Central	443.5375	TG= Local	448.5375	TG= Local
			TG-27500		TG-27500
DMR Columbia East	Command Primary Central	442.5125	TG= Local	447.5125	TG= Local
			TG-27500		TG-27500
ARES-RC – Coord - Simplex	Richland Tactical Coordination	146.5850		146.5850	
ARES-RC – Tactical Simplex	Richland Tactical Simplex	147.330			
ARES Statewide HF 80M	Emergency Relay	3.990 +/- LSB		3.990 +/- LSB	
ARES Statewide HF 80M Alt	Emergency Relay	3.9935 +/- LSB		3.996 +/- LSB	
ARES Statewide HF 80M NTS	SC NTS Net - 19:00	3.915 +/- LSB		3.915 +/- LSB	
ARES Statewide HF 40M	Emergency Relay	7.232 +/- LSB		7.232 +/-LSB	
ARES SCEMD	Statewide Tactical Simplex	146.595		146.595	
SCHEART - Cola / VHF	SCHEART Operators	146.715	91.5	146.115	91.5
SCHEART - Cola / UHF	SCHEART Operators	441.725	91.5	446.725	91.5
Zello / Richland ARES	Richland ARES Coordination	'Richland County ARES'		-	-
Winlink	Reporting	SEOC = NCS800	RC EOC = RCEOC,	KC4ERT	-
PIPS)	Public Emergency Reporting	(866) 246-0133			
State Warning Point	Public Telephone to SEOC	(803) 737-8500	-	-	-
Richland Emergency Services	Public Phone	(803) 576-3400	-	-	-
NWS – SKYWARN Phone	Trained Spotters	(803) 822-8037	-	-	-
ARES Spartanburg Tact Rptr	Spartanburg ARES Secondary Tactical Com	·· · · ·	123	147.915	123
NWS – SKYWARN - Columbia	Trained Spotters Reporting	147.330	-	-	-
NWS – SKYWARN - Columbia (Fut)	Trained Spotters Reporting	442.875	315	447.875	315
NWS – SKYWARN - Wedgefield (Fut)		147.060	315	152.060	315
NWS – SKYWARN - Blythewood (Fut)	Trained Spotters Reporting	443.650	315	448.650	315
Zello - NWS SKYWARN	Trained Spotters	Channel Midlands SKYWARN'			-

D - Emergency Net Control Script

This script is to be used to establish an emergency net.

Adapt this script as necessary based on requirements of the specific emergency. Always prioritize safety and effective communication during emergency situations.

Opening the Net

Net Control Station (NCS):

"Emergency, Emergency, (For and exercise you would use: "This is an exercise, This is an exercise), this is (NCS Callsign Phonetically) the Net Control Station for the 'Richland County ARES Emergency Net'. This net is being activated to coordinate emergency communications in the Richland County area of South Carolina for _____ ("Hurricane Helene or "the 'coming winter weather," etc.).

We ask that all non-emergency or priority traffic be moved to another frequency.

Emergency Response stations are asked to stand by and listen.

(Pause)

Any stations with emergency or priority traffic, please call now." [Pause for response.]

Acknowledging Stations with Emergency Traffic

Net Control Station (NCS):

"[Callsign], this is 'Richland County ARES Emergency Net' Net Control, please provide your emergency message. Over."

[Wait for response. If the station has an emergency message, continue.]

NOTE: Instruct the station reporting the emergency to call 9-1-1 directly, if they have the means and there local 9-1-1 is operational.

If they do not have phone access, we are to report for them.

The following are guidelines and general information to help us when reporting emergencies to 9-1-1 for ourselves or on behalf of those we serve.

When taking information always try to get correct spelling of names, people, streets, towns, etc.

Try to keep the caller on the radio or phone but get call-back information. 9-1-1 will initiate a response as soon as they have basic details and the location. This is information to pass on to the caller so they are comfortable remaining on the phone, knowing that a response is underway.

Critical Details:

- **Who** You will want to get a full name, first and last, of the person with the emergency.
- What Describe the nature of the emergency in enough detail that responders can determine appropriate action necessary. Avoid getting too deep into the details and focus on the current emergency. Consider the following: Condition of those involved, number of people involved, potential hazards, imminent dangers, etc.
- **When** Provide detail on how long the emergency condition has existed.
- Where Exact location is critical. Gather all information necessary to pinpoint the precise location, street address including city, county, GPS coordinates, etc.

Also, each county has their own 9-1-1 system and responding resources. Once the location has been determined, ensure that you are contacting the correct 9-1-1 center for that county. (9-1-1 Call Center Contact information for all SC counties is noted below.)

Weapon – Weapons category replaced 'Why' because we are not to worry about why. If a weapon is involved, gather details about the weapon and pass on promptly. Consider the following: details about the suspect, size, clothing, gender, etc.

Taking Additional Emergency Traffic Information, if necessary.

Net Control Station (NCS):

Talk freely with the reporting station and gather any additional information necessary for emergency services to respond.

[Allow the station to deliver additional information.]

Net Control Station (NCS):

"[Callsign], message received. Is there any additional information you would like to provide? Over."

[Wait for any further details.]

[When there is no additional information]

Net Control Station (NCS):

"If anyone has additional traffic or emergency messages, please call. We will continue to monitor the frequency. This is the 'Richland County ARES Emergency Net' net control, standing by.

Announcements or Updates

Net Control Station (NCS):

Net Control must identify themselves and the net, including purpose and any updates, on a regular basis. (Every 15 minutes if no traffic has been passed. Every half hour if traffic is very light. Every hour when traffic is consistent.)

Acknowledging Monitors

Net Control Station (NCS):

"We are now opening the net for monitoring station identification. If you are monitoring in support of this emergency, please give your call sign now, one at a time." [Wait for stations to check in.]

Acknowledging Check-ins

Net Control Station (NCS):

"[Callsign(s)], you are checked in. Any further stations wishing to check in, please call now."

[Continue until all stations are checked in.]

Closing the Net

Net Control Station (NCS):

"We will now close the [Name of Net] at [Time]. Please monitor the frequency for further updates. This is [NCS Callsign], Net Control Station, closing the net. All stations are cleared to resume normal operations. 73."

Optional: Extended Net Operations (if needed)

If the emergency or net continues for an extended period, Net Control may request check-ins periodically, update stations on changes in status, or report on new emergencies. This should be done every three hours; however, it is left to the discretion of the NCS, based on the level of traffic.

Additional Tips:

Clarity and Brevity: Encourage operators to keep messages clear and concise to avoid confusion.

Control Traffic Flow: Ensure that all communications flow through net control to maintain order.

Emergency Protocols: Remind operators of emergency protocols and procedures specific to your region or organization.

E – Health and Welfare Response

Google Person Finder (google.org/personfinder): This service is activated during major disasters and allows you to search for and update the status of missing persons.

Red Cross's Safe and Well Registry (redcross.org/safeandwell): The American Red Cross provides a platform where people in disaster zones can register their safety. You can search for your loved one's name there.

(This section is a place holder for process being developed at the state level.

F – OPCON LEVELS and RESPONSE ACTIONS

This flow identifies the actions that each ARES volunteer is to take based on the OpCon Level that currently exists. Those named by 'Leadership' only apply to individuals in leadership positions. Information in the current 'ARES Emergency Comm Plan for Richland County SC' document provide details regarding each action.

Actions within each OpCon level are generally sequential but would deviate somewhat based on circumstances.

1. No Imminent or Existing Emergencies (OpCon 3)

- **If:** There are no imminent or existing emergencies requiring a Richland ARES response.
 - Leadership Activate OpCon 3 Leadership activates
 Operational Condition Level 3 (OpCon 3), indicating normal
 readiness.
 - 2. **Attend training nets and events** Personnel should attend regularly scheduled training events and nets to maintain readiness.
 - 3. Progress on personal training as outlined in ARES Position Task Book Personnel should work on their individual training and certifications as per the ARES Position Task Book.
 - 4. Make personal preparations to participate during an emergency Ensure personal readiness for potential future activation.

2. Potential Emergency (OpCon 2)

- **If:** A potential emergency is detected.
 - Make personal preparations Personnel should begin preparations for a possible emergency.
 - Leadership Activate OpCon 2 Leadership activates
 Operational Condition Level 2 (OpCon 2), indicating an elevated
 state of readiness.

- 3. **Monitor assigned frequencies for emergency situations** Continuously monitor emergency frequencies for any alerts or requests.
- 4. **Monitor information services for emergency situations** Stay updated with official information sources like news services or emergency management channels.
- 5. **Maintain availability and readiness for call out** Personnel should remain ready and available to respond if the situation escalates.
- 6. **Attend briefings** Attend briefings to receive updates about the situation and prepare for potential escalation.

3. Imminent or Occurring Emergency (OpCon 1)

- If: An emergency is imminent or occurring.
 - Make personal preparations Personnel should take final personal steps to ensure readiness.
 - Leadership Activate OpCon 1 Leadership activates
 Operational Condition Level 1 (OpCon 1), which is the highest level of emergency response readiness.
 - 3. **Monitor assigned frequencies for emergency situations** Continue monitoring frequencies for any alerts or requests.
 - 4. **Monitor information services for emergency situations** Keep track of updates through official information channels.
 - 5. **Maintain availability and readiness for call out** Prepare to deploy to or support designated Served Agencies as requested
 - 6. **Prepare a Field Situation Report (FSR)** Prepare a report to provide to County/State authorities upon request, summarizing their home situation.
 - 7. **Attend briefings** Attend briefings to receive updates on the emergency and coordinate actions.
 - 8. **Activate emergency net on primary repeater** Activate the emergency net to ensure effective communication among responders.
 - 9. **Leadership Establish shift schedule** Organize shifts to ensure that personnel are available for continuous operations.
 - 10. Leadership Establish Liaisons (Served agencies and adjacent counties) Set up coordination channels with relevant agencies and neighboring counties to ensure support and information exchange.
 - 11. **Leadership Establish briefings** Hold frequent briefings to keep all responders informed and on track with actions.

4. Emergency Situation Dissipates or is Resolved

- **If:** The emergency situation has dissipated or been resolved.
 - Leadership Activate OpCon 2 or 3 Leadership adjusts the operational condition level based on the status of the emergency, either back to OpCon 2 (elevated readiness) or OpCon 3 (normal readiness).
 - 2. **Take appropriate action for OpCon level** Once the OpCon level is determined, take corresponding actions such as returning to training, monitoring, or maintaining readiness depending on the current situation.

Summary:

- **OpCon 3 (No Emergencies):** Normal readiness with personal training, event participation, and preparation.
- **OpCon 2 (Potential Emergency):** Elevated readiness, including monitoring, availability for call-out, and briefing participation.
- OpCon 1 (Imminent or Occurring Emergency): Full emergency readiness, including the activation of primary communication channels, establishment of leadership structures, and preparation for field situation reporting.
- **Post-Emergency:** Transition to a lower readiness level (OpCon 2 or 3), depending on the situation's resolution, and take appropriate actions based on the determined level.

PLAN REVISIONS

The Richland County ARES Plan will be reviewed annually to evaluate the needs and requirements of served agencies, as well as plans and procedures. Critical information will be updated as it changes to keep plan effective for emergency needs. The current revision of the plan will be identified by date following the title of the plan.

Comments or corrections to the guide may be sent to the ARRL ARES Richland County Emergency Coordinator.