

CUMBERLAND COUNTY AMATEUR RADIO EMERGENCY SERVICE



STANDARD OPERATING PROCEDURES

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Introduction

The purpose of this Standard Operating Procedure is to cover the procedures for operations by Cumberland County ARES members during disasters, exercises and drills.

Purpose

The principal objective of Cumberland County ARES is to provide supplemental, backup communications resources when normal means of communications are overloaded or nonexistent.

To this end, Standard Operating Procedures are established to provide guidance to Cumberland County ARES members as to how to conduct operations during disasters, exercises and drills.

Scope

This Standard Operating Procedure applies to all ARES members in Cumberland County.

Concept of Operations

The ARRL Section ARES operates under the “lead agency” principle. This means that Cumberland County ARES (CCARES), as a local organization responds to requests from the agency that has the authority under local, county or state legislation to provide the lead in response to an emergency or disaster. In most instances, this will be the Cumberland County Emergency Management Agency (CCEMA). By following this guideline, amateur radio resources are coordinated through the CCEMA where emergency management officials who are in a better position to prioritize communications decide any conflicts for resources. This concept of operations conforms to the National Incident Management System (NIMS). In this document, the term “authorized CCARES official” refers to the Emergency Coordinator (EC), and/or an Assistant Emergency Coordinator (AEC) designated to act when the EC is not available.

Team Concept

CCARES operates by the team concept. This provides for relief of operators during disasters, exercises and drills. It is seldom that a single resource (operator) will be deployed.

It is important to know that in a team there are leaders and members. Team members should always follow the directives of their team leaders.

Alerting and Activation

Any member of Cumberland County ARES who, for any reason, suspects a communications emergency exists should monitor the 147.09 (+) (100.0 Hz) (W1QUI/R) repeater for net activity and/or announcements (in case of repeater failure, monitor 146.415 simplex).

Alerting of CCARES will be made by an authorized CCARES official by telephone, cell phone or e-mail.

Cumberland County ARES has adopted four levels of activation to better inform ARES members and teams of impending actions within Cumberland County, Maine and out of state. This will allow members and teams to judge, in an approximate time frame, the extent of the involvement they will be requested to respond to.

LEVEL 1 – *Notification of possible activation.* This will be a situation advisory and does not mean Cumberland County ARES/RACES will be activated. There will be no time frame attached to this level. ARES/RACES members and teams will be requested to monitor certain nets and frequencies and to update call trees, as required. Members and teams are requested to check all equipment, ready kits and operations plans for possible activation.

LEVEL 2 – *Notification of probable activation.* An approximate time frame will be given with this level. It allows ARES/RACES members and teams an opportunity to take time off from work, rearrange schedules, etc.. Definite net times and frequencies will be set, staging areas will be announced, as well as mission details.

LEVEL 3 – *Notification of activation.* This will put into motion call trees and nets to coordinate the activation of ARES/RACES members and teams in accordance with prescribed Cumberland County ARES/RACES procedures.

LEVEL 4- *-Demobilization* This will put into action the demobilization of ARES responders after operations have ceased.

Upon a notification of activation, available members of CCARES will call into the Cumberland County Emergency Net on the 147.09 (+) (100.0 Hz) (W1QUI/R) repeater. If, for any reason, the repeater is not in operation, the net will be called on simplex on 146.415 MHz.

CCARES members will report to the location specified in the activation notice for assignments and briefing.

The AEC for Operations will prepare the appropriate ICS forms for ARES operations during the incident. Copies will be forwarded to the Incident Communications Unit Leader for inclusion into the Incident Communications Plan.

The EC or AEC(s) will assume net control or designate another station as net control station (NCS).

Conduct

In all instances, CCARES operators are ***not*** to interfere with the business being handled by the entities we are supporting.

- When you arrive at an assigned location, notify the person in charge of that area that you are there and are ready to provide communications.
- Ask where would be the best place for you to locate, out of the way, but available when needed.
- Operators should check-in with Net Control when arriving at an assigned location and when being relieved by another operator or released by the person in charge of that area.
- Once regular communications are re-established, (if applicable) notify Net Control and inform the person in charge of that area that you are leaving if further assistance is not required. ***Do not*** leave your assigned area until relieved by a relief operator or until released by the person in charge of that area, or re-assigned or relieved of your duties by Net Control.
- Inform Net Control when you are once again available for further assistance.
- CCARES members will not speak to the media regarding the event. Direct all members of the media to the on-site Public Information Officer (PIO) or person in charge of the area.
- Operators are to adhere to ***all*** applicable FCC rules and regulations, including keeping a written record of all third party traffic handled. Remember, we are only to provide communications where normal means do not exist or are overloaded.

Frequencies

The primary frequencies for CCARES operations are:

Repeater: 147.090 (+) (100 Hz CTCSS)
Simplex: 146.415

The simplex frequency is to be used if the repeater is off the air.

Other frequencies are available for tactical operations as described in the following pages.

Cumberland County ARES Frequencies

CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
AH01	STATEWIDE COORDINATION	3940 kHz	COMMUNICATIONS CENTER	STATEWIDE HF (NIGHT) PRIMARY
AH02	STATEWIDE COORDINATION	7262 kHz	COMMUNICATIONS CENTER	STATEWIDE HF (DAY) SECONDARY
AH03	LOCAL COORDINATION	28.450 MHz	TACTICAL NET	LOCAL COORD./TACTICAL NET (USB)
AH04	LOCAL COORDINATION	29.650 MHz	TACTICAL NET	LOCAL COORD./TACTICAL NET (FM SIMPLEX)
AV01	STATEWIDE COORDINATION	52.525 MHz	STATEWIDE COORDINATION	6 METER (FM SIMPLEX)
AV02	LOCAL COORDINATION	52.565 MHz	TACTICAL NET	LOCAL COORD./TACTICAL NET (FM SIMPLEX)
AV03	LOCAL COORDINATION	53.570 MHz	TACTICAL NET	(FM REPEATER) (-1 MHz), (103.5 Hz CTCSS)
AV04	PRIMARY TACTICAL SIMPLEX	146.415 MHz	TACTICAL NET	LOCAL PRIMARY SIMPLEX NET (FM SIMPLEX)
AV05	INTER-COUNTY COORDINATION	146.520 MHz	COMMUNICATIONS CENTER	(FM SIMPLEX)
AV06	ADMINISTRATIVE / COMMAND	146.535 MHz	ADMINISTRATIVE / COMMAND NET	(FM SIMPLEX)
AV07	TACTICAL REPEATER	146.730 MHz	TACTICAL NET	(FM REPEATER) (-600 kHz), (100.0 Hz CTCSS)
AV08	STATEWIDE COORDINATION	146.880 MHz	COMMUNICATIONS CENTER	(FM REPEATER) (-600 kHz), (100.0 Hz CTCSS)
AV09	PRIMARY TACTICAL REPEATER	147.090 MHz	PRIMARY TACTICAL NET	(FM REPEATER) (+600 kHz), (100.0 Hz CTCSS)
AV10	ADMINISTRATIVE / COMMAND	147.360 MHz	ADMINISTRATIVE / COMMAND	(FM REPEATER) (+600 kHz), (100.0 Hz CTCSS)
AV11	ADMINISTRATIVE / COMMAND NET	147.525 MHz	ADMINISTRATIVE / COMMAND NET	(FM SIMPLEX)
AV12	PORTABLE REPEATER	147.550 MHz	TACTICAL NET	(FM REPEATER) (-3 MHz), (100.0 Hz CTCSS)
AV13	TACTICAL NET	223.440 MHz	TACTICAL NET	(FM SIMPLEX)
AV14	INTER-COUNTY COORDINATION	223.500 MHz	COMMUNICATIONS CENTER	(FM SIMPLEX)
AV15	TACTICAL REPEATER	224.840 MHz	TACTICAL NET	(FM REPEATER) (-1.6 kHz), (103.5 Hz CTCSS)
AU01	TACTICAL REPEATER	444.100 MHz	TACTICAL NET	(FM REPEATER) (+5 MHz), (82.5 Hz CTCSS)
AU02	TACTICAL REPEATER	444.250 MHz	TACTICAL NET	(FM REPEATER) (+5 MHz), (82.5 Hz CTCSS)
AU03	INTER-COUNTY COORDINATION	446.000 MHz	COMMUNICATIONS CENTER	(FM SIMPLEX)
AU04	TACTICAL NET	446.075 MHz	TACTICAL NET	(FM SIMPLEX)
AS01	TACTICAL NET	1294.525 MHz	TACTICAL NET	(FM SIMPLEX)
AA01	LOCAL OPERATOR / CLIENT LIAISON	27.065 MHz	COMMAND POST / LOCAL OPERATOR	CB CH. 9 EMERGENCY USE ONLY (AM)
AA02	LOCAL OPERATOR / CLIENT LIAISON	27.185 MHz	COMMAND POST / LOCAL OPERATOR	CB CH. 19 TRANSPORTATION (AM)

CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
AA03	LOCAL OPERATOR / CLIENT LIAISON	154.600 MHz	COMMAND POST / LOCAL OPERATOR	MURS CHANNEL 5 (FM SIMPLEX)
AA04	LOCAL OPERATOR / CLIENT LIAISON	462.6125 MHz	COMMAND POST / LOCAL OPERATOR	FRS CHANNEL 5 (FM SIMPLEX)
AA05	LOCAL OPERATOR / CLIENT LIAISON	462.6625 MHz	COMMAND POST / LOCAL OPERATOR	FRS CHANNEL 5 (FM SIMPLEX)
AA06	LOCAL OPERATOR / CLIENT LIAISON	462.7125 MHz	COMMAND POST / LOCAL OPERATOR	FRS CHANNEL 7 (FM SIMPLEX)

Nets

All CCARES nets are to be directive in nature. In a directed net all communications must go through the net control station. If you wish to call another station in the net, ask permission to do so through the net control station before doing so.

- Listen to the instructions of the net control station
- Follow all instructions of the net control station
- Keep all transmissions short and to the point
- Keep the net control station informed as to the status of your station
 - If you are going to be away from your station
 - If you are being relieved by another operator
 - If you are closing your station
- Use tactical call signs, as assigned
- Identify your station properly as per Part 97

Tactical Call Signs

Tactical call signs will be used during all CCARES operations. Tactical call signs identify an operating location no matter who the operator is. They reduce confusion as to who is operating at a particular location.

Tactical call signs are assigned either in the initial activation briefing or by the net control station.

Be sure to use your assigned tactical call sign and be sure to properly identify your station with your assigned FCC call sign. Your FCC call sign must be given at the end of your transmission or series of transmission or every 10 minutes.

It is recommended that you use the *“tactical in, call sign out”* protocol. Call a station using your tactical call sign and end your transmission or series of transmissions with your FCC call sign. In this way, the net control station knows when he or she hears your FCC call sign that you have completed your communication and the frequency is again clear.

Plain Language

Per NIMS and ICS protocols, all transmissions shall be in plain language. Codes and jargon will be avoided.

Avoid the use of “10” codes, “Q” signals and jargon during your transmissions.

ITU Phonetics

Use proper ITU phonetics when spelling out words. These are the clear standard. Do not use made up or “cute” phonetics as they may be confused by the receiving operator.

Standard ITU Phonetics

A – Alpha B – Bravo C – Charlie D – Delta E – Echo F – Foxtrot
 G – Golf H – Hotel I – India J – Juliet 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 – Zebra

Numbers

Numbers are pronounced as individuals. The number 60, for example is pronounced as *six zero* rather than *sixty*. The number 509 is pronounced as *five zero nine* and *not* as *five hundred nine* or *five oh nine*

Prowords

Procedural words or “prowords” are words or phrases that have special meaning to expedite the flow and accuracy of voice communications

<u>PROWORD(S)</u>	<u>EXPLANATION</u>
ACKNOWLEDGED	I acknowledge your transmission
AFFIRMATIVE	You are correct. What you have transmitted is correct. Yes.
CORRECT	You are correct. What you have transmitted is correct.
DISREGARD, OUT.	This transmission is in error. Disregard it.
I SAY AGAIN	I am repeating the transmission
NEGATIVE	Not received. No.
OUT	End transmission no answer is required or expected.

OVER	End of my transmission, I am ready to copy your reply.
ROGER	I have received and understand your last transmission.
SAY AGAIN	Repeat all of your last transmission.
SILENCE	All stations cease transmitting
STANDBY	Station calling please wait to be called
WAIT	I must pause for a few seconds. Do not transmit.

Brevity and Clarity

Make all transmissions short and to the point. Do not add editorial comments unless they are essential to the meaning of the message. Say what you need to say with the fewest possible words. Make sure all of your transmissions are sent in plain language, avoiding codes and jargon.

Logs

Although logs are no longer required by the FCC, in emergency communications, logs are essential. All traffic to and from your station will be logged along with transmissions of significance to and from your station.

The ICS-309 or 309A should be used to log communications.

In addition, all CCARES members should keep an individual log of significant events at their operating location. The individual log will be used to document observations of events at their location to be used later for an after action report.

The ICS-214a should be used as an individual log.

Team Leaders and Group Supervisors should keep a unit log which is similar log for their team or group. The unit log will be used to document unit team or group actions and observations on the performance of team or group members during the incident. The unit log may be used to document actions for an after action report or for individual team member performance for a performance report.

The ICS-214 should be used as a unit log.

All logs will be returned to the EC after the incident.

Message Forms

All formal messages will be in writing and a copy will be retained and returned to the EC after the incident. Formal messages will be recorded on a message form.

The two most common message forms are the ARRL Radiogram and the ICS Form 213 (used in incidents run under the Incident Command System (ICS)). Other served agencies may have their own message forms. Always use the message for prescribed by the served agency at your operating location.

All formal messages must have the name of the releaser of the message.

Retain copies of all formal messages and return them to the EC after the incident.

Message Security

It is important to remember that no mode of amateur radio is ever secure. By FCC regulations all messages must be sent in the clear, with no encryption. Keeping this in mind, certain types of messages should never be sent via amateur radio.

Types of messages that should not be sent via amateur radio include, but are not restricted to:

- Casualty Reports
- Injury Reports
- Medical Records
- Shelter Resident Lists
- Any message with a person's
 - Social Security Number
 - Credit Card Numbers
 - Medical Status
 - Prescriptions

Persons requesting that messages with secure or sensitive information should be informed that amateur radio is not a secure means of message transmission. An effort should be made to find another method of transmission which is secure.

CCARES members are advised if a person insists that messages containing secure or sensitive information be sent via amateur radio that the releaser of the message sign a communications release absolving the CCARES member of any liability if the message falls into the wrong hands.

Types of secure communications include:

- Telephone
- Cell Phone
- Fax
- Encrypted Radio
- Encrypted E-mail
- Courier

Communications Alternatives

The aim of effective communications is to get the message from the sender to the receiver in the most efficient means possible. Many amateur radio operators fail to “think outside the box” when it comes to getting a message through. Often, messages are held up when a message is only sent via amateur radio. Be sure to utilize all communications at your disposal to get a message through in the shortest time.

Alternate communications methods include:

- Telephone
- Cell Phone
- Text Messaging
- Satellite Phone
- Fax
- Other Radio Services
 - Public Safety Radio
 - Served Agency Systems
 - Citizens Radio Service
 - General Mobile Radio Service
 - Multi-Use Radio Service
- Family Radio Service
- E-Mail
- Courier

Required Training

Training on equipment is essential for effective communications. The following applies to all served agency and personal communications equipment for all CCARES members.

The following are required training items for this SOP:

- How to set up communications equipment
- How to program communications equipment
- How to operate communications equipment

Required Testing

Testing to ensure all communications equipment is working properly is essential to our communications effort. All communications equipment should be tested at least quarterly to ensure that it is in good working order. This applies to both served agency and personal equipment.

The following should be checked (applies to all equipment to be used for emergency communications):

- All radio equipment
- All power generating equipment and batteries
- Battery chargers
- Power line to equipment
- Inspection of feedline for condition
- Antennas
- Accessory equipment

Cumberland County ARES



“When All Else Fails”