# Amateur Radio Emergency Service ® New Hampshire Section

## **Emergency Operations Plan**



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#### 1.0 DEFINITIONS

- 1.01 Amateur Radio Emergency Service® (ARES®): A volunteer organization sponsored by the American Radio Relay League® (ARRL®), the national association for Amateur Radio, providing various communications capabilities in times of emergency. All ARES volunteers are FCC licensed Amateur Radio operators who have registered their abilities and equipment, and have been trained to serve as emergency communicators.
- 1.02 **ARES Groups:** Each Group serves a specific operational area of towns and cities, and is managed by an Emergency Coordinator (EC). (See Attachments D & E)
- 1.03 ARES Leadership Roles and Titles: As used in this plan, the titles shown below indicate an operational function which may be held by an administrative appointee or their designee.
  - Section Emergency Coordinator (SEC): The NH-ARES official who coordinates the Groups' response at the Section level during an incident or drill, or their designee, usually an ASEC. Appointed by the ARRL Section Manager (SM).
  - Assistant Section Emergency Coordinator (ASEC): Appointed by the SEC as a backup, and/or for a specific task area, such as training, liaison to agencies, or administrative responsibilities.
  - Emergency Coordinator (EC): Appointed by the SEC to coordinate and manage Group operations.
  - Assistant Emergency Coordinator (AEC): Assistant appointed by the EC either as a back-up leader or for specific areas of responsibility, such as training or specific served agency support.
  - Net Manager: The person in charge of organizing and managing one or more voice or digital nets and arranging for NCS operator coverage. May be at the Group or Section level.
  - Team Leader: For permanent or ad hoc subgroups assigned to a specific task, the EC or other leader may assign one member to act as a Team Leader.
  - Net Control Station (NCS): The assigned station operator who coordinates a net on the air.
- 1.04 ARESMAT: ARES Mutual Assistance Team. An ARES team of any size that responds to assist another ARES Group. May be from within the same Section or across the country.
- 1.05 **ARES Net:** Local or Section radio network for handling messages for served agencies and coordinating ARES operations, or for training.
- 1.06 American Radio Relay League (ARRL): National membership organization that promotes and supports the Amateur Radio Service in the United States. Membership is open to all – full membership is open to those holding a valid Amateur Radio Service license.
- 1.07 Amateur Radio Service: As defined in Part 97 of the Federal Communications Commission rules and regulations: "voluntary noncommercial communication service, particularly with respect to providing emergency communications."
- 1.08 Client or "Served" Agencies: Government or non-profit agencies and organizations with which NH-ARES or the ARRL has formal or informal agreements to support during a communications outage. (See Attachment I)
- 1.09 Communications Emergency: Normal agency and/or public communications have been disrupted or overloaded, additional communication paths are needed, or disaster intelligence is requested.
- 1.10 Disaster Intelligence: Information collected and reported regarding the local situation, including but not limited to flooding conditions, power and phone outages, closed or damaged roads, dam failures, downed trees, weather conditions, shelter status, and similar information needed or requested by a client agency. Also see "SITREP."

- 1.11 ESF-2: Emergency Support Function 2. Communications support guidelines described in the State of New Hampshire's Emergency Operations Plan, which outlines procedures and available communication resources. The state's Office of Emergency Communications is the ESF-2 lead.
- 1.12 **Group:** An ARES team with responsibility for supporting a defined group of towns and cities.
- 1.13 Hotline Circuit: A point-to-point radio connection used to handle large or frequent message volume between two locations. May be voice, digital or both.
- 1.14 New Hampshire Amateur Radio Emergency Service (NH-ARES): The ARES organization that has responsibility for the emergency communications functions of the ARRL New Hampshire Section.
- 1.15 New Hampshire Office of Homeland Security and Emergency Management (HSEM): The Department of Safety agency responsible for resource and response coordination at the state level during declared disasters and major emergencies for New Hampshire.
- 1.16 New Hampshire Section: A geographically defined subdivision of the ARRL's field organization. The United States and its possessions are divided into 71 ARRL Sections, each managed by an elected **Section Manager**. The New Hampshire Section includes all counties in the state.
- 1.17 **Office of Emergency Communications (OEC):** The Department of Safety agency that operates the 9-1-1 system, and is the lead ESF2 (communications) agency for the state. OEC is our primary point of contact with the state.
- 1.18 Rapid Response Team (RRT): A group of Active Members tasked with rapidly establishing initial communication links at either the Section or Group level.
- 1.19 Section Leadership/Staff: The appointed ARES Section officials, including the Section Manager (SM) and their staff, the SEC, any ASECs, State Emergency Operations Center (EOC) Team, and the ARES Section Net Manager. (See also: Attachment A, and the Section Organization Plan)
- 1.20 **SITREP:** Abbreviation for "situation report." Refers to any formal or informal message format used for tactical disaster intelligence reporting. SITREP message data may vary with agency, purpose, and need. Also known as a "ground-truth" report.
- 1.21 State EOC (SEOC) Team: ARES members who have been selected by the SEC, approved by the OEC, and received additional training to operate within the State Emergency Operations Center (SEOC) and related state facilities. Team may be led by its own EC.

#### 2.0 PURPOSE AND LIMITS OF THIS PLAN

- 2.01 The intended audience for this plan includes NH-ARES members and client agency staff.
- 2.02 This plan sets certain standards and guidelines, but does not replace task-specific training.
- 2.03 This plan provides a framework for emergency communication support operations. It describes the networks, and the organization and functions responsible for supporting those networks, and basic guidelines for message handling and network operations.
- 2.04 The operational information contained in this plan is meant as a guide. Actual operations will necessarily reflect the situation at the time.

#### 3.0 COOPERATION WITH THE STATE OF NEW HAMPSHIRE

- 3.01 MOU: NH-ARES and NH OEC maintain a formal Memorandum of Understanding (MOU). NH-ARES is designated as the state's sole Amateur Radio ESF-2 provider.
- 3.02 The State's ESF-2 protocol requires that all state agencies make requests for communications support through the OEC. NH-ARES cannot offer services directly to state agencies during an emergency. Any requests received directly should be referred to the State EOC unless an urgent and immediate need exists. In that case, the SEC and SEOC team must be notified as soon as possible.
- 3.03 When the OEC activates the NH-ARES State EOC Team, they act on behalf of the Governor and at the direction of the OEC. The EOC Team may also be asked to operate state-owned radio communications systems, telephone systems or shadow key emergency response operations personnel. EOC Team members are approved by the OEC, and OEC-specific training is required.

#### **4.0 EMERGENCY ACTIVATION CLASSIFICATIONS**

- 4.01 **Status 1:** Normal everyday operations. No emergency or known potential exists.
- 4.02 Status 2: The potential for a communication emergency exists. ECs should monitor the situation. Members should monitor primary net frequencies and email for information on preparation and possible activation.
- 4.03 Status 3: An unusual condition exists that has caused government officials to declare a warning. A communications emergency does not yet exist but is possible. Members should prepare for activation. Affected ECs will initiate their Group net, and members should continuously monitor their local net frequency. Members should check in to their Group nets and let leadership know their availability and resources. The SCTN may also be activated by the SEC if needed.
- 4.04 Status 4: A communication emergency exists and ARES operators and radio resources have been requested by one or more agencies. Group nets in affected areas should be activated, and if needed, the SCTN, as determined by the SEC. ECs in un-affected areas should monitor the appropriate nets in the event additional assistance is required.
- 4.05 **ARES status levels** are designed to closely resemble those used by the State of New Hampshire.

#### **5.0 SECTION ACTIVATION PROCEDURES**

- 5.01 **Section-level activations** will be coordinated by the SEC or a designee.
- 5.02 The SEC may activate any NH-ARES resources after notification by a client agency or Group leadership that a communications emergency exists.
- 5.03 Status 2 activation notifications may be made via email. Status 3 and 4 activations will be made using the Activation Plan (Attachment A) and call-ups on net frequencies, in addition to email.
- 5.05 The Section Coordination and Traffic Net (SCTN) will be initiated and maintained for the duration of the emergency. (See also Attachments B and C)
- 5.06 Each affected NH-ARES Group will appoint a liaison to the Section Coordination Net when a Status 3 or Status 4 activation is declared.
- 5.07 The SM, SEC, or a designee will notify ARRL HQ at the time of activation or as soon as possible.

#### 6.0 SECTION DE-ACTIVATION PROCEDURES

- 6.01 All activated nets will operate until a termination notice is given by the SEC or designee. The termination notice will be given on the SCTN and will be relayed to all activated Groups. ARRL HQ will be notified as soon as possible.
- 6.02 Groups should not self-terminate from an activation or exercise without the approval of the SEC. If appropriate, an EC or designee can contact the SEC or designee to request early termination of operations prior to Section termination.
- 6.03 **An after-action review** should be held by Section and Group leadership within seven days.

#### 7.0 GROUP ACTIVATION, OPERATIONS, AND DEACTIVATION PROCEDURES

- 7.01 The EC or designee coordinates and manages emergency activations and operations, and interfaces with served agencies in their assigned area.
- 7.02 Upon notification of a communications emergency, the EC will activate their Group notification plan and open a net on the assigned repeater or simplex frequency listed in Attachment B.
- 7.03 The EC or designee should notify the SEC and ARRL HQ of all Group emergency operations within one hour of activation and de-activation, or as soon as possible.
- 7.04 Activation may be requested by any served agency, town, city, or county government. A Group member who believes a communication emergency exists should contact their leadership before taking any action, unless necessary to immediately protect life or property.
- 7.05 Each Group will work independently unless additional outside resources are requested.
- 7.06 When additional resources are required, the EC will contact the SEC. The SEC will coordinate an ARESMAT response to support the affected area. ECs should request resources directly from each other only when all reasonable attempts to reach the SEC have failed, or where imminent danger to life or property exists.
- 7.07 To avoid an unnecessary missing person response, members must avoid leaving any emergency net or operations without notifying the Net Control Station or EC.
- 7.08 The EC may end Group operations if all served agencies indicate that ARES support is no longer required, or if ARES resources are unable to continue. If the Group net has a liaison to the SCTN, they must obtain permission to secure from the Section Net NCS and from the SEC. This is to ensure that no pending messages are left undelivered or issues left unresolved.

#### 8.0 NET AND MESSAGE HANDLING PROTOCOLS

- 8.01 NH-ARES uses a two-tiered network system. The top tier is the SCTN, the bottom tier is the Group net. Messages are moved between nets by Liaison Stations. (See Attachment G, Net Diagrams)
- 8.02 Tactical voice messages must be delivered exactly as received directly to the recipient without relays.
- 8.03 Complex or relayed messages must be sent in text form either by voice, NBEMS or Winlink.
- 8.04 Message Routing: messages within Groups will be handled by the Group's net(s). Messages to outside the Group's area will be passed through the Section Coordination and Traffic Net via liaison stations or directly via a "hot-line circuit." Out of area messages my be routed via Winlink email, NTS nets, or any other appropriate means taking the message's Precedence into account.

- 8.05 **The Section Coordination & Traffic Net** will operate as a Directed Net. (See Attachment C)
- 8.06 Liaison and agency stations will use tactical call signs, such as "Coos County" or "State EOC."
- 8.07 **Tactical call signs** will be used for calling and answering other stations. FCC identification rules will be followed, with FCC call signs used at the end of each exchange, or every ten minutes.
- 8.08 **Do not change** or paraphrase messages in any way. Only the message's author may do so.
- 8.09 **Official messages** MUST be signed by the author, including any official title.
- 8.10 **Privacy and Operational Security:** Members must respect the privacy of served agencies, their staff, and clients, and not discuss privileged or sensitive information with anyone not directly involved. Regardless of the mode of transmission, the content of all messages should be considered confidential and never discussed with anyone, even other ARES members. Members will use extreme care not to transmit or divulge any information that could compromise the agency's operations, the safety of others, or that contain personal or sensitive information. Information regarding deaths must NEVER be transmitted over an Amateur frequency or net.
- 8.11 **Situation Reports** (**SITREPS**): Report only agency-requested information unless something unusual happens that could affect served-agency response or decisions. Report conditions precisely as observed, without editorializing. Skywarn observer reports should be signed with the observer's name and NWS observer number if possible.
- 8.12 **Group club call signs** should be used for generic Group Winlink addresses. This reduces the need to know which station is currently taking email for that area. Report any address changes to the SCTN and anyone you are exchanging email messages with.
- 8.13 When a time-sensitive message is sent via Winlink, a tactical voice notification (service message) must be made to the receiving station or location alerting them to the fact that the message is in their inbox (for Internet users), or must be retrieved from a Winlink server via radio.
- 8.14 Standard message forms should be used, and the form should not be changed in transit.
- 8.15 Exercise and drill messages must be clearly identified at both the beginning and end.

#### 9.0 NON-COMMUNICATIONS ASSIGNMENTS

- 9.01 **ARES is organized to provide** communications services only. ARES operators are under no obligation to serve in any other capacity. However, members who are cross-trained for an agency function that includes a radio communications function may be assigned to perform both.
- 9.02 **An on-duty member who chooses** to serve an agency in a different or dual capacity must first notify their EC or the SEC. This is to prevent gaps in service.

#### 10.0 ARRL HQ NOTIFICATION AND SUPPORT

- 10.01 **ARRL headquarters** in Newington, CT must be notified by phone, voicemail, or email of all NH-ARES Group and Section activations and de-activations. Notification should take place as soon as possible, ideally within one hour, and should be made directly to the HQ EC.
- 10.02 **Periodic Situation Reports** (SITREPS) should be sent by ECs or the SEC to ARRL HQ to keep them informed of our status. The preferred methods are email, Winlink email, or telephone.

- 10.03 **Requests for ARESMAT OR Ham-Aid support** to ARRL HQ must be sent in as soon as NH-ARES leadership can reasonably anticipate the need. Requests for Ham-Aid equipment packages must be sent in well before any storm hits or other factors occur that will end deliveries by Federal Express or UPS. Requests should be made by the SM, SEC, or their designee rather than by an EC, when possible.
- 10.04 **Ham-Aid** equipment provided by ARRL HQ will be issued only to members who agree to remain in direct or indirect control of the equipment, and agree to be accountable for its location and condition. Equipment must be returned to ARRL HQ as soon as practical after use, and in the same or better condition. HQ staff will provide specific details at the time of the request.

#### 11.0 ARESMAT MUTUAL AID SYSTEM

- 11.01 **ARES Mutual Assistance Teams** (**ARESMAT**) may be requested by an EC to supplement or replace local resources. *Requests should be made well in advance of the anticipated need.* ARESMAT requests should be made to the SM, SEC or a designee, who will decide where to request resources. ECs should not attempt to request an ARESMAT response directly from ARRL HQ or another Group unless they are unable to reach the SM or SEC in a reasonable time, or as described in 11.05 (below).
- 11.02 **ARESMAT response plans** will be created and maintained by each EC so as to allow rapid response to any ARESMAT requests. ECs are encouraged to create and train standing teams for the purpose.
- 11.03 **In-Section Requests:** When only a small portion of the state is likely to be impacted, requests for additional resources should be made to other NH-ARES Groups first.
- 11.04 **Regional Requests:** When nearby support from outside the Section is needed, requests may be made to the SECs or SMs of unaffected neighboring ARRL Sections. Requests will be handled in accordance with any Division-level ARESMAT plan in effect.
- 11.05 **National Requests:** The SEC or SM may contact ARRL national headquarters in Newington to request resources from outside the region if conditions dictate. Ask for the HQ Emergency Coordinator.
- 11.06 **Adjacent-Group ARESMAT agreements:** Adjacent NH-ARES Groups are encouraged to create written mutual aid agreements. (This does not apply to Groups in neighboring states without specific approval of both Section's SECs.) These arrangements should be made well in advance of any actual emergency and should be part of each Group's formal Emergency Operations Plan. When any such plan is activated during an emergency, the SEC or a designee should be notified as soon as practical to help maintain an accurate picture of the response effort, and plan for additional resource needs.
- 11.07 **Resource Nets:** A Group and/or the Section may establish a separate Resource Net to handle and assign incoming volunteers, and to field requests for additional resources.
- 11.08 **ARES Volunteer Reception Centers:** In a large-scale disaster where ARESMAT and other volunteers may be coming from outside the state in significant numbers, the SEC or a designee may assign one or more Groups to establish and staff reception centers at suitable locations on functioning major roads near the state line. The site will need HF communications with the SCTN, or a Section Resource Net if in operation and local talk-in on 146.52 MHz.

Locations could include parking areas at:

- 1) Salem I-93 Welcome Center (Western Rockingham County ARES)
- 2) Seabrook I-95 State Liquor Store (Eastern Rockingham County ARES)
- 3) Nashua Rt. 3 Pheasant Lane Mall (Hillsboro County ARES)
- 4) Keene Rte. 9 State Liquor Store in Ashbrook Plaza (Cheshire County ARES)
- 5) Lebanon I-89 Welcome Center (West Central ARES)

No arrangements have been made with these sites – make contact with on-site managers on arrival.

#### 12.0 VHF/UHF PROTOCOLS

- 12.01 Repeater failure fall-back: If a repeater fails, all stations should switch to the repeater's output frequency and turn off their CTCSS decode function, if used. Leave CTCSS encode turned on. Staying on the repeater frequency will make it easier for Group members, ARESMAT teams and spontaneous volunteers to find the net.
- 12.02 **Assigned simplex frequencies** should be used in addition to, not instead of, local repeater frequencies. Simplex frequencies should be used for additional nets, localized operations, or hot-line circuits.
- 12.03 High-point relay stations: When repeater or simplex signals can't reach a particular station, a fixed, mobile or portable high-point relay station should be established. For a 2m simplex SCTN this is especially important. ECs should maintain a list of usable high-elevation sites with good paths to both local sites and the SEOC. Fixed home stations are best, but year-round drive-up sites can also be used. If parking on private property, prior arrangements are a good idea. When parking long-term on a public road, notify the local police department.

#### 13.0 LEADERSHIP SUCCESSION DURING OPERATIONS

- 13.01 Not all regular appointed ARES leaders will be available when an emergency occurs. Widely shared, clear written succession plans ensure uninterrupted operations when the regular leader is unavailable.
- 13.02 Each Group must have a succession plan in their Emergency Operations Plan. At least two AECs should be specifically identified to operate as "Acting EC" for the duration of operations.
- 13.03 At the Section level, at least two ASECs will be authorized to operate as "Acting SEC" for the duration of operations. First in line is the ASEC-Operations. Either the SEC, acting SEC, or SM may make a temporary appointment as needed.
- 13.04 It is important to have a designated leader at all times. Leaders and acting leaders will appoint someone to take over anytime they go off-duty or are unavailable, such as during rest periods or travel.
- 13.05 In the event that no clear leader is available, the SM, SEC, or their successors may appoint one.

#### 14. EDUCATION, TRAINING & EXERCISES

- 14.01 The SEC or a designated ASEC will set knowledge standards for all Groups.
- 14.02 Primary responsibility for implementation at the Group level will rest with the EC or a designated AEC.
- 14.03 Education and training (ET) activities should cover both the Section and Group Operations plans and related skills. In any 12-month period, ET should cover every topic and attachment in this plan and the Group's plan.
- 14.04 Skills ET topics should include all net operations, tactical voice and digital message handling, ARESMAT, ground-truth SITREPs, and technical skills.
- 14.05 Groups should hold several small drills and one larger exercise with a service agency each year.
- 14.06 The Section will hold a full-scale Simulated Emergency Test (SET) each fall.
- 14.07 Public service events should follow standard ARES procedures and training wherever possible so as to enhance their training value.