



ARES Strategic Plan

The Amateur Radio Emergency Service® (ARES®) has held to the same precepts virtually since its inception in 1935, encouraging participation by any licensed Amateur Radio operator with a sincere interest in Public Service Communications. With the advent of more uniformly functioning public safety organizations across the nation, more requirements imposed upon agencies and organizations assisting them, and the development of the Incident Command System (ICS) and The National Incident Management System (NIMS), ARRL was challenged to align the standards of ARES with current needs of our served partner agencies.

ARRL consulted with experienced and talented resources from a broad cross-section of radio amateurs in the U.S. to examine the needs of our served agencies and their partners. A mission statement was developed for ARES — one that is versatile, tells why ARES exists, and provides an overview of what ARES does and how it does it. There are countless individuals who have made contributions to the new program. To each, we extend our thanks and appreciation.

These updates to the ARES program are being developed to allow the implementation of a policy of Best Practices and Continuous Improvement. With these concepts in place, we envision a more flexible ARES program that can adapt to meet new and emerging communication needs as identified by partners and program participants.

This program introduces many changes that were asked for by our partner agencies. Notably, all have been included in the Strategic Plan, and from the mission statement itself, new ARES Guidelines were created, which appear in this document

A deficiency in record-keeping and reporting has been filled by a new software program called *ARES Connect*, which allows each Emergency Coordinator to maintain his or her records and member database in an easily downloadable and secure format.

Our formerly inconsistent training is now organized into a consistent and achievable format. This is a first step towards our long-term goal of being recognized by our served partner agencies as the “gold standard” of volunteer communications support based upon ARES unique Expertise, Capability and Capacity as those attributes are described below.

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 partners' 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 comprised of organized, trained, qualified, and credentialed 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.

Our Expertise, Capability, and Capacity

Expertise

Amateur Radio operators (“hams”) possess unique skills. While a ham’s FCC license allows the operation of radio equipment on a wide range of frequencies with varying propagation conditions, hams also are capable of setting up field stations and portable antennas, and using non-conventional means of getting a message through when other systems are overloaded or have failed.

These skill sets are created and improved by the local ARES group through thorough training that is formal or informal, and often in conjunction with local agencies where the team can meet the individuals with whom they can expect to be operating during a true emergency. This effort is a strong contributor to developing mutual trust and understanding among the key individuals managing any emergency operation, and should be exercised at every opportunity.

Capability

The ARES group has actively engaged in the following steps so that it has the ability to perform certain actions and meet its objectives. Further, a goal of the ARES program is to ensure that program participants continue to improve and develop additional capabilities for serving the needs of partners.

- Net operations and traffic passing provide experience in on-the-air operating, including net procedures and routines that are easily learned and adopted. Experience resulting from regular net participation ensures that established procedures and routines for net participation become rote practices for participants.
- The Amateur Radio discipline of DXing (contacting distant stations) offers ways of improving skills in operating under adverse conditions like interference (QRM) and static (QRN). The skills involved in copying transmissions subject to severe noise levels or interference come only through the actual experience of operating under severe conditions. Contacting DX stations, even occasionally, offers the unique experience necessary for skill level improvement.
- Radiosport, also known as “contesting,” teaches ways to operate with a fixed format at high contact rates. Learning a fixed routing plan and employing common practices and terminology sets the expectations for network participants so they can anticipate the procedures used by the net and more readily adapt to the net routines.
- Effective exercises offer locally developed scenarios to practice for hazards and threats. Having an established written policy relating to the most likely emergency scenarios allows ARES participants to understand the procedures for activating for a given situation. Severe weather events may be quite different from a wildfire, for example, requiring contact with different agencies and different skill sets from ARES participants. A well-written emergency communications plan greatly simplifies activation procedures and ensures that smaller items are not inadvertently overlooked.
- Emergency and disaster response provides experience with actual pressures and changing requirements found in such environments. Having the opportunity to participate in emergency or disaster response offers one with valuable lessons and experiences. Therefore, it is important for those involved in the response to participate in the After-Action Review (AAR) and debriefing process, so that all participants can learn from those who have operated in emergency conditions. Careful attention to details and retention of notes is an important part of completing this important educational task.

Capacity

In this application, *capacity* means the limits imposed by available ARES resources and the scope of the Amateur Radio service. These limits may be technical, personnel, equipment, or regulatory, in nature, and may prevent the ARES group from providing additional services. Each ARES group has capacity limits, and it is incumbent for ARES Leadership to be acutely aware of their capacity to serve, so the group is never overcommitted. Further, each group should strive to match their capacity with partner needs and plan for extension of that capacity as appropriate. An emergency communications plan should detail existing ARES group capacity and plans for expansion, depending upon local needs.

There are two methods for establishing and determining capacity:

1. Utilization of effective communications methodologies, including
 - Various available field resources for communicating, such as VHF, UHF, HF, repeaters, accepted simplex frequencies, and local/regional HF networks
 - Integrating messaging networks such as high-speed multimedia (HSMM) networks, the National Traffic System (NTS), and NTS-Digital (NTSD), along with new technology and data communications, and
 - Cross-training with other communications services such as Salvation Army Team Emergency Radio Network (SATERN), Military Auxiliary Radio Service (MARS), and local public safety.
2. Engagement with the Community through
 - Working with state and local officials
 - Participation in neighborhood programs
 - Cooperating with local CERT, National Weather Service SKYWARN, and similar programs, and
 - Assisting with community events.

ARES® and Its Relationship with Message Traffic

The Amateur Radio Emergency Service® (ARES®) is chartered with providing emergency communications support. This support can take many forms, but it does by its very concept include the transmission of third-party messages for the organizations and communities we serve.

This document provides a high-level perspective on ARES, which may be incorporated into any ARES operation, whether it is providing service in a disaster, or at a community public service event. Training in both net operating and message formatting can be found in several well-regarded publications, including The Amateur Radio Public Service Handbook, first edition; The ARRL Operating Manual, eleventh edition; The NTS Methods and Practices Guidelines (http://www.arrl.org/files/file/NTS_MPG2014.pdf); The NTS Manual (http://www.arrl.org/files/file/Public%20Service/NTS_Manual2015.pdf); and The ARES Field Resource Manual.

It is incumbent upon every Emergency Coordinator (EC) to develop a Standard Operating Procedure for his or her organization that includes clear liaison procedures for working with served partner agencies and regional traffic nets for fast and efficient handling of both tactical and strategic messages. This is what we do! The organization should not limit itself to any specific messaging format or system, but develop the operating skills and capacity to accommodate a wide variety of formats to meet the ever-changing needs due to propagation, agency requirements, or technology.

Some things to keep in mind:

- ARES, as it is working with its partners, will need to handle messages and send those messages using partner-preferred forms — not just NTS Radiograms.
- ARES will need to accept responsibility and be held accountable for timely delivery and tracking of messages, which were sent on behalf of partners.
- ARES participants — as their skills (qualifications) improve via training and performing tasks — shall be familiar with, and use, multiple digital communication protocols for messaging.
- ARES groups should invite NTS personnel to work with them as they assist with messaging for their Partners. But, the needs of ARES and its partners will take priority over the protocols used by NTS personnel.

The leadership of the local ARES group should have a clear knowledge of local and regional traffic nets. Knowing the schedules of these nets may allow rapid access to a trained and ready outlet for urgent traffic. Further, knowledge of the organizational structure for these nets, specifically the names, call signs, and contact information of the Net Managers, is extremely valuable in the event that a net needs to be activated outside of its normal schedule. Liaison, participation, and traffic handling with these nets are all vitally important to having an effective relationship and the ability to pass important traffic when it needs to happen.

The EC should examine the potential types of emergencies that may affect his or her communities and formulate a basic “Quick-Start” plan for each scenario. This plan should include each served partner agency, expected operating frequencies, how each will be utilized, what liaisons will be required, and how stations will be prioritized and assigned. The Quick-Start document can serve as a standard policy for consistent procedures when an activation occurs.

Qualifications for Membership in ARES

All participants shall have a valid Amateur Radio license issued by the Federal Communications Commission. All participants must have a serious interest in providing volunteer radio communications support in an emergency. All participants shall have an interest in self-improvement and maintaining standards for excellent community service.

Previously, participation in ARES was open to all interested Amateur Radio operators. The only requirements were a valid FCC license and an interest in serving. There were no requirements for ARES participants to be trained and no skill sets were specified. In contrast, many of the partner agencies that ARES serves have mandated and structured training programs where all participants receive the same training and, when deployed, would be qualified to assume any position they were assigned to.

Therefore, changes have been made to resolve this issue identified by our partners about the inconsistent training required of ARES participants. Under this policy, a national standard for qualification in ARES is instituted to address the needs of our partners. Training is expected to be phased in over time and will be required for all ARES participants. Such training will be measurable and recognized across a broad spectrum of the country by served partners.

Three levels of training will allow ARES participants to enter the program and migrate to higher levels of qualification and service.

- **Level 1** — This is the entry level for those new to Amateur Radio or emergency communications. This introductory training is conducted by the local ARES group to meet their needs and those of their served agency or partners. This training could be formal or informal, and would introduce the ARES participant to the fundamentals of emergency communications and provide instruction on how participants are to conduct themselves while deployed.
- **Level 2** — To qualify for this level, participants shall have completed the following courses: ARRL's EC-001 *Introduction to Amateur Radio Emergency Communications* (or current equivalent) and FEMA IS-100, IS-200, IS 700, and IS-800. Participants are also encouraged to take advantage of training opportunities available through partners to enhance their knowledge and skill set.
- **Level 3** — This level of training prepares ARES participants to take on leadership positions such as EC, ADEC, DEC, ASEC, and SEC, and other designated positions in the ARES program. Participants are required to complete ARRL's *EC-016, Emergency Communications for Management*, along with FEMA courses IS-300, and IS-400. Participants are strongly encouraged to complete the FEMA Leadership Development series of courses IS-120, IS-230, IS-240, IS-241, IS-242, IS-244, and IS-288.

Completion of all training programs will be verified by the participant's Emergency Coordinator (EC) before the participant advances to the higher level. Those individuals holding leadership positions as the new program is introduced will be allowed one (1) year to complete the necessary training to meet qualifications for Level 3. Training requirements for ECs, DEC, and their assistants will be verified by their SEC or the SEC's designated individual. In the case where the local community may have limited classroom study programs for IS-300 and IS-400, the **SM** may grant additional completion time to accommodate a community's extended training schedule or authorize the seven FEMA Leadership Developments Courses as an alternate study program.

Qualifying, Certifying, and Credentialing ARES Personnel

Adapted from FEMA NIMS 2017 Guidelines

Qualifying, certifying, and credentialing are the essential steps, led by an Authority Having Jurisdiction (AHJ) — in our specific case, ARES® — that helps ensure that personnel deploying have the knowledge, experience, training, and capability to perform the duties of their assigned roles. These steps help to ensure that personnel across the nation are prepared to perform their incident responsibilities based on criteria that are standard nationwide. ARES participants serving other partner agencies will likely be required to work within the criteria established by those other AHJs.

Qualification is the process through which personnel meet the minimum established criteria — training, experience, physical and medical fitness, and capability — to fill specific positions. Within ARES, specific qualification standards are established for three different levels of ARES participation.

Certification/Recertification is the recognition that ARES partnership requires third-party certification in the form of a valid Amateur Radio license granted by the Federal Communications Commission, stating that an individual has met and continues to meet established criteria and is qualified for a specific position. Other certification may be required as determined by the AHJ.

Credentialing occurs when ARES, an AHJ, or third party provides documentation — typically an identification card or badge — that identifies personnel and authenticates and verifies their qualification for a particular position. While credentialing includes issuing credentials such as identification cards, it is separate from an incident-specific badging process, which includes identity verification, qualification, and deployment authorization.

Applying the Qualification, Certification, and Credentialing Process

The NIMS qualification, certification, and credentialing process (see Figure 1) uses a performance-based approach. This process enables communities to plan for, request, and have confidence in personnel assigned from other organizations through mutual aid agreements.



The NIMS qualification, certification, and credentialing process.

Nationally standardized criteria and minimum qualifications for positions provide a consistent baseline for qualifying and credentialing the incident workforce. Along with the job title and position qualifications, the position task book (PTB) is a basic tool that underpins the NIMS performance-based qualification process. PTBs describe the minimum competencies, behaviors, and tasks necessary to be qualified for a position. PTBs provide the basis for a qualification, certification, and credentialing process that is standard nationwide.

FEMA recommends minimum qualifications, but it is AHJs across the nation that establish, communicate, and administer the qualification and credentialing process for individuals seeking qualification for positions under that AHJ's purview. AHJs have the authority and responsibility to develop, implement, maintain, and oversee the qualification, certification, and credentialing process within their organization or jurisdiction. AHJs may impose additional requirements outside of NIMS for local needs. In some cases, the AHJ may support multiple disciplines that collaborate as a part of a team (e.g., an Incident Management Team [IMT]).

ARES Staff Positions

An ARES group, which is the local operational component of the ARES program, is guided under the direction of the Emergency Coordinator (EC). It is the EC who is most familiar with the needs of his or her community, familiar with the local hazards and threats, topography, weather expectations, natural resources, and available community resources. It is the EC who maintains contact with the public safety leaders, as well as partners and their leadership.

For these reasons, the Emergency Coordinator will henceforth serve as the leader of his or her group. Other ARES field organization appointees at the section and district level serve as resource providers for the local EC in fulfilling his or her mission.

The following job descriptions detail how these ARES positions work together for an effective organization.

Emergency Coordinator (EC)

The ARRL Emergency Coordinator is the person responsible for the [ARES](#) group at the local level. Working with local community officials, the [Section Emergency Coordinator \(SEC\)](#), and other field appointees, the EC leads his or her local ARES group through the planning, preparedness, and response phases.

Requirements

Technician-class license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Must, within the period of 1 year, from the issuance of this document or appointment as EC, whichever comes later, complete all of the requirements for Level 3 qualification).

Responsibilities

- Promote and enhance the activities of the Amateur Radio Emergency Service (ARES) for the benefit of the public as a voluntary, non-commercial communications service.
- Manage and coordinate the training, organization, and emergency participation of interested amateurs working in support of the communities, agencies, or functions designated by the [Section Emergency Coordinator \(SEC\)/Section Manager \(SM\)](#).
- Establish viable working partnerships with federal, state, county, city governmental and/or private agencies in the ARES jurisdictional area that needs the services of ARES in emergencies.
- Identify and work collaboratively with local partners to assess how ARES can assist them with their mission, ensuring partners are aware of the limitations and capabilities of ARES.
- Develop detailed local operational plans, with partner agency officials in the jurisdiction, that set forth precisely what expectations are during an ARES activation. Work jointly with partners to establish relationships based on mutual trust and respect. All matters involving recruitment and utilization of ARES participants are directed by the EC, in response to the needs assessed by the agency officials. Technical issues involving message format, security of message transmission, disaster welfare inquiry policies, and others, should be reviewed and expounded upon in the ARES detailed local operations plans.
- Establish local communications networks that run on a regular basis, and periodically test those networks by conducting realistic drills.

- Work with the SEC and District Emergency Coordinators (DECs) to identify potential local shortcomings and define resources that may need to be drawn from adjacent ARES groups in support of a local emergency or disaster.
- Establish an emergency traffic plan, with welfare traffic inclusive, utilizing the [National Traffic System \(NTS\)](#) as one active component for traffic handling. Establish an operational liaison with local and section nets, particularly for handling welfare traffic in an emergency situation.
- Work with other Amateur Radio public service groups, organizations or programs to establish relationships of mutual trust and respect, and a coordination mechanism for the good of the public and Amateur Radio. The goal is to foster an efficient and effective Amateur Radio response overall.
- Work for growth in the local ARES program, making it a stronger, more valuable resource and hence able to meet more of the agencies' local needs.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities.

District Emergency Coordinator (DEC)

The ARRL District Emergency Coordinator (DEC) is appointed by the [Section Emergency Coordinator \(SEC\)](#) to support the efforts of local Emergency Coordinators (ECs) in the defined district. DEC Districts may be defined as geographical regions, areas of specialty, or similar organizational structures.

Requirements

Technician-class license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Must, within the period of 1 year, from the issuance of this document or appointment as DEC, whichever comes later, complete all of the requirements for Level 3 qualification).

Responsibilities

- Coordinate the training, organization, and emergency participation of Emergency Coordinators in the district of jurisdiction as may be defined by the Section Emergency Coordinator.
- Coordinate response efforts between local ARES groups and Amateur Radio networks within the area of jurisdiction.
- Act as backup for local areas without an Emergency Coordinator and assist in maintaining contact with governmental and other agencies within the area of jurisdiction.
- Provide direction in the routing and handling of emergency communications of either a formal or tactical nature, with specific emphasis being placed on welfare traffic.
- Recommend candidates for EC appointments to the SEC.
- Be fully conversant in National Traffic System (NTS) routing and procedures, and have a thorough understanding of the locale and role of all vital governmental and volunteer agencies that could be involved in an emergency.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities.

Assistant District Emergency Coordinator (ADEC)

The ARRL Assistant District Emergency Coordinator (ADEC) is appointed at the option of the Section Emergency Coordinator (SEC), to assist in the support of local District Emergency Coordinators (DECs) in a defined district. The ADEC is appointed to work closely with the DEC in all matters pertaining to emergency communications and the Amateur Radio Emergency Service (ARES®) on a Section-wide basis. There may be one or more ADECs in each Section of the ARRL Field Organization.

Requirements

Technician-class license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Must, within the period of 1 year, from the issuance of this document or appointment as ADEC, whichever comes later, complete all of the requirements for Level 3 qualification).

Responsibilities

- The Assistant District Emergency Coordinator may serve as a general assistant to the [District Emergency Coordinator](#) or as a specialist. That is, the ADEC may assist the District Emergency Coordinator with general leadership matters as the District Emergency Coordinator's alternate, or the ADEC may be assigned to handle a specific important function that does not fall within the scope of the duties of the District Emergency Coordinator's other assistants. The designated ADEC will act as the DEC in his or her absence or in emergency response operations to maintain continuity of leadership when 24-hour activity requires multiple shifts.
- The ADEC should be familiar with the [Official Appointment Description for the ARRL District Emergency Coordinator](#), which contains the fundamental responsibilities of the DEC.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities.

Section Emergency Coordinator

The Section Emergency Coordinator (SEC) is the assistant to the Section Manager ([SM](#)) for emergency preparedness. The SEC is appointed by the SM to administer all matters pertaining to emergency communications and the [Amateur Radio Emergency Service](#) (ARES®) on a Section-wide basis. There is only one SEC appointed in each Section of the ARRL Field Organization.

Requirements

Technician-class license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Must, within the period of 1 year, from the issuance of this document or appointment as SEC, whichever comes later, complete all of the requirements for Level 3 qualification).

Responsibilities

- Promote and encourage the development of local ARES groups.
- Advise the SM on all Section emergency policy and planning, including the development of a Section emergency communications plan.
- Cooperate and coordinate with the [Section Traffic Manager](#) (STM) so that emergency nets and traffic nets properly route welfare traffic in disasters and emergencies. Cooperate and coordinate with other Section leadership officials.
- Recommend candidates for Emergency Coordinator and [District Emergency Coordinator](#) appointments (and cancellations) to the Section Manager and determine areas of jurisdiction of each amateur so appointed. Verify that candidates meet training requirements. At the SM's discretion, the SEC may be directly in charge of making (and cancelling) such appointments.
- Promote ARES membership drives, meetings, activities, tests, procedures, etc., at the Section level.
- Serve in support of local ECs during a communications emergency; to ensure the local ECs have the necessary resources to sustain their mission.
- Maintain contact with other communication services and serve as liaison at the Section level with all agencies served in the public interest, particularly in connection with state government, emergency management officials, state and regional Volunteer Organizations Active in Disaster (VOAD) organizations, and similar agencies. In states with multiple ARRL Sections, the SECs shall work as a team to develop and maintain an appropriate ARES Emergency Communications Plan in conjunction with state officials. Maintain cooperation with the State Government Liaison.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Approve ARES Connect admins at the local level (usually an EC or DEC). Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities.

Assistant Section Emergency Coordinator (ASEC)

The Assistant Section Emergency Coordinator (ASEC) is the assistant to the Section Emergency Coordinator (SEC). He or she is appointed by the Section Manager (SM), usually at the suggestion of the SEC. The ASEC assists the SEC in matters pertaining to emergency communications and the Amateur Radio Emergency Service (ARES®) on a Section-wide basis. There may be one or more ASECs appointed in each Section of the ARRL Field Organization.

Requirements

Technician-class license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Must, within the period of 1 year, from the issuance of this document or appointment as ASEC, whichever comes later, complete all of the requirements for Level 3 qualification).

Responsibilities

- May serve as a general assistant to the [Section Emergency Coordinator](#), or as a specialist. That is, the ASEC may assist the Section Emergency Coordinator with general leadership matters as the Section Emergency Coordinator's alternate, or the ASEC may be assigned to handle a specific important function that does not fall within the scope of the duties of the Section Emergency Coordinator's other assistants. The ASEC will act as the SEC in his or her absence, or in emergency response operations to maintain continuity of leadership when 24-hour activity requires multiple shifts.
- At the Section Manager's discretion, the ASEC may be designated as the recommended successor to the incumbent Section Emergency Coordinator in case the Section Emergency Coordinator resigns or is otherwise unable to finish the term of office.
- Should be familiar with the [Official Appointment Description for the ARRL Section Emergency Coordinator](#), which contains the fundamental responsibilities of the SEC.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Approve ARES Connect admins at the local level (usually an EC or DEC). Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities.