

ARES Manual

ARES/RACES of Delaware County Pennsylvania

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1 What is ARES

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5 Messaging

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9 Memorandum of Understanding

- REACT International, Inc.(see page 49)
- Salvation Army in the United States of America(see page 50)
- The American National Red Cross(see page 51)
- The Association of Public-Safety Communications Officials-International, Inc,(see page 52)
- The Department of Homeland Security/Federal Emergency Management Agency(see page 53)
- The National Weather Service(see page 54)

10 What is ARES

The Amateur Radio Emergency Service® (ARES®) consists of Amateur Radio licensees who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. The local ARES Emergency Coordinator can provide specifics. Because ARES is an Amateur Radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

10.1 ARES Organization: National Level

There are four levels of ARES organization — national, section, district, and local. National emergency coordination at ARRL Headquarters is under the supervision of the ARRL Field Services and Radiosport Manager or his/her designee, who is responsible for advising all ARES officials regarding their problems, maintaining contact with federal government and other national officials concerned with amateur emergency communications potential, and in general with carrying out the ARRL's policies regarding emergency communications. These functions are carried out through the ARRL field organization supervisor and the emergency preparedness program.

10.2 Section Level

The Section Emergency Coordinator (SEC) is the assistant to the Section Manager (SM) for emergency preparedness. The SEC is appointed by the SM to take care of all matters pertaining to emergency communications and the Amateur Radio Emergency Service (ARES) on a section-wide basis. The SEC post is one of top importance in the section and the individual appointed to it should devote all possible energy and effort to this one challenging organizational program for Amateur Radio. There is only one SEC appointed in each section of the ARRL Field Organization.

10.2.1 Responsibilities

- Encourage all groups of community amateurs to establish a local emergency organization.
- 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 so that emergency nets and traffic nets in the section present a united public service front, particularly in the proper routing of Welfare traffic in emergency situations. Cooperation and coordination should also be maintained with other section leadership officials as appropriate, particularly with the State Government Liaison and Public Information Coordinator.
- 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. At the SM's discretion, the SEC may be directly in charge of making (and canceling) such appointments. In the same way, the SEC can handle the Official Emergency Station appointments.
- Promote ARES membership drives, meetings, activities, tests, procedures, etc., at the section level.
- Collect and consolidate Emergency Coordinator (or District Emergency Coordinator) monthly reports and submit monthly progress summaries to the SM and ARRL Headquarters. This includes the timely reporting of emergency and public safety communications rendered in the section for inclusion in QST.
- 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 and local government, civil preparedness, Federal Emergency Management Agency, American Red Cross, Salvation Army, the National Weather Service, and so on. Such contact is maintained in cooperation with the State Government Liaison.

- Section Emergency Coordinators are encouraged to complete ARRL Emergency Communications training Introduction to Emergency Communications (EC-001) and Public Service and Emergency Communications Management for Radio Amateurs.

10.3 District Level

In the large sections, the local groups could proliferate to the point where simply keeping track of them would be more than a full-time chore, not to mention trying to coordinate them in an actual emergency. To this end, SECs have the option of grouping their Emergency Coordinators (EC) jurisdictions into logical units or “Districts” and appointing a District EC to coordinate the activities of the local ECs in the district. In some cases, the districts may conform to the boundaries of governmental planning or emergency operations districts, while in others they are simply based on repeater coverage or geographical boundaries. Figure 1 depicts the typical section ARES program leadership structure within the section.

The ARRL District Emergency Coordinator is appointed by the SEC to supervise the efforts of local Emergency Coordinators in the defined district.

10.3.1 Responsibilities

- Coordinate the training, organization, and emergency participation of Emergency Coordinators in your district of jurisdiction.
Make local decisions in the absence of the SEC or through coordination with the SEC, concerning the allotment of available amateurs and equipment during an emergency.
- Coordinate the interrelationship between local emergency plans and between communications networks within your area of jurisdiction.
- Act as backup for local areas without an Emergency Coordinator and assist in maintaining contact with governmental and other agencies within your 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 EC appointments to the SEC.
- Coordinate the reporting and documenting of ARES activities in your district of jurisdiction.
- Act as a model emergency communicator as evidenced by dedication to purpose, reliability, and understanding of emergency communications.
- Be fully conversant in National Traffic System 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.
- Encouraged to earn certification in Levels 1 and 2 of the ARRL Emergency Communications Course.

10.4 Local Level

The local ARES program is coordinated through the local Emergency Coordinator.

The ARRL Emergency Coordinator is a key team player in ARES on the local emergency scene. Working with the Section Emergency Coordinator, the DEC, and Official Emergency Stations, the EC prepares for and engages in management of communications needs in disasters. To be appointed as an EC requires a Technician Class or higher Amateur Radio license and ARRL membership.

10.4.1 The key responsibilities of the EC are

- 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/Section Manager.
- Establish viable working relationships with federal, state, county, city governmental and private agencies in the ARES jurisdictional area which need the services of ARES in emergencies. Determine what agencies are active in your area, evaluate each of their needs, and which ones you are capable of meeting, and then prioritize these agencies and needs. Discuss your planning with your Section Emergency Coordinator and then with your counterparts in each of the agencies. Ensure they are all aware of your ARES group's capabilities and, perhaps more importantly, your limitations.
- Develop detailed local operational plans with served agencies and partners in your jurisdiction that set forth precisely what each of your expectations are during a disaster operation. Work jointly to establish protocols for mutual trust and respect. All matters involving recruitment and utilization of ARES volunteers are directed by you, 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 your detailed local operations plans.
- Establish local communications networks run on a regular basis and periodically test those networks by conducting realistic drills.
- Establish an emergency traffic plan, with Welfare traffic, utilizing the National Traffic System 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.
- In times of disaster, evaluate the communications needs of the jurisdiction and respond quickly to those needs. The EC will assume authority and responsibility for coordinating emergency response and performance by ARES personnel under his or her jurisdiction.
- Work with other non-ARES amateur providers of Amateur Radio emergency communications to establish mutual respect and understanding, 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 your ARES program, making it a stronger, more valuable resource and hence able to meet more of the agencies' local needs. There are thousands of new Technicians coming into the Amateur Service that would make ideal additions to your ARES roster. A stronger ARES means a better ability to serve your communities in times of need and a greater sense of pride for Amateur Radio by both amateurs and the public.
- Report regularly to the SEC, as required.
- ECs are encouraged to complete the ARRL EC-001, Introduction to Emergency Communications training course.

10.5 Assistant ECs

Assistants can be appointed at the Section (Assistant SEC), District (Assistant DEC), or local (Assistant EC) levels. At the Section and District levels, the appointment is made by the SEC. At the local level, the appointment is made by the EC and ARRL membership is not required. Assistants may serve to oversee a particular function such as reporting, training, or exercises. Assistants may also be appointed to work with specific partner agencies and organizations.

10.6 Official Emergency Stations

Amateur operators may be appointed as an Official Emergency Station (OES) by their Section Emergency Coordinator (SEC) or Section Manager (SM) at the recommendation of the EC, or DEC (if no EC) of that jurisdiction. The OES appointee must be an ARRL member and set high standards of emergency preparedness and operating. The OES appointee makes a deeper commitment to the ARES program in terms of functionality than does the rank-and-file ARES registrant.

The OES appointee is appointed to carry out specific functions and assignments designated by the appropriate EC or DEC. The OES appointee and the presiding EC or DEC, at the time of the OES appointment, will mutually develop a detailed, operational function/assignment and commitment for the new appointee. Together, they will develop a responsibility plan for the individual OES appointee that makes the best use of the individual's skills and abilities. During drills and actual emergency situations, the OES appointee will be expected to implement his/her function with professionalism and minimal supervision.

To be appointed as an OES an amateur must: be a full member of the ARRL; have experience as an ARES registrant; exhibit regular participation in the local ARES organization, including drills and tests; participate in emergency nets and actual emergency situations; engage in regular reporting of activities; and is encouraged to complete the ARRL EC-001, Introduction to Emergency Communications course.

10.6.1 OES responsibilities include

- Operations — responsible for specific, pre-determined operational assignments during drills or actual emergency situations. Examples include: Net Control Station or Net Liaison for a specific ARES net; manage operation of a specified ARES VHF or HF digital BBS or MBO, or point-to-point link; operate station at a specified emergency management office, American Red Cross shelter, or other served agency operations point.
- Administration — responsible for specific, pre-determined administrative tasks as assigned in the initial appointment commitment by the presiding ARES official. Examples include: recruitment of ARES members; liaison with Public Information Officer to coordinate public information for the media; ARES registration database management; survivor database management; equipment inventory; training; reporting, and post-event analysis.
- Liaison — responsible for specific, pre-determined liaison responsibilities as assigned by the presiding EC or DEC. Examples include: maintaining contact with assigned served agencies; maintaining liaison with specified NTS nets; maintaining liaison with ARES officials in adjacent jurisdictions, and liaison with mutual assistance or "jump" teams.
- Logistics — responsible for specific, pre-determined logistical functions as assigned. Examples include: transportation; supplies management and procurement (food, fuel, water, etc.); equipment maintenance and procurement —radios, computers, generators, batteries, and antennas.
- Management Assistant — responsible for serving as an assistant manager to the EC, DEC, or SEC based on specific functional assignments or geographic areas of responsibility.
- Consulting — responsible for consulting with ARES officials in specific areas of expertise.
- OES appointees may be assigned to pre-disaster, post-disaster, and recovery functions. These functions must be specified in the OES's appointment commitment plan.
- The OES appointee is expected to participate in planning meetings, and post-event evaluations. Following each drill or actual event, the EC/DEC and the OES appointee should review and update the OES assignment as required. The OES appointee must keep a detailed log of events during drills and actual events in his/her area of responsibility to facilitate this review.
- Continuation of the appointment is at the discretion of the appointing official, based upon the OES appointee's fulfillment of the tasks he/she has agreed to perform.

10.7 Public Information Officer

ARRL Public Information Officers (PIOs) are appointed by their Section Manager and report to their ARRL section Public Information Coordinator (PIC). The Section Manager may, at his/her discretion, delegate this appointment authority to the section PIC. PIOs are generally recommended by an affiliated club for appointment consideration and must be full ARRL members. Training for PIOs should be provided regularly on a sectional or regional basis by the PIC and/or other qualified people.

10.7.1 Responsibilities

- Establish and maintain a list of media contacts in the local area; strive to establish and maintain personal contacts with appropriate representatives of those media (e.g., editors, news directors, science reporters, etc.).
- Become a contact for the local media and assures that editors/reporters who need information about Amateur Radio know where to find it.
- Works with local government liaisons to establish personal contacts with local government officials where possible and explain to them, briefly and non-technically, about Amateur Radio and how it can help their communities.
- Keep informed of activities by local hams and identify and publicize those that are newsworthy or carry human interest appeal. (This is usually done through news releases or suggestions for interviews or feature stories).
- Attempt to deal with and minimize any negative publicity about Amateur Radio and to correct any negative stories which are incorrectly attributed to Amateur Radio operators.
- Generate advance publicity through the local media of scheduled activities of interest to the general public, including licensing classes, hamfests, club meetings, Field Day operations, etc.
- Publicizes ARRL-related stories of local news interest, including election and appointment of local hams to leadership positions, QST articles by local authors, or local achievements noted or featured in QST.
- Maintain contact with the Emergency Coordinator and/or District Emergency Coordinator. Help prepare an emergency response public relations kit.
- Assist the section PIC in recruiting hams for the section's Speakers Bureau; promote interest among community and service organizations in finding out more about Amateur Radio through the bureau and relay requests to the PIC.
- Help individual hams and radio clubs to develop and promote good ideas for community projects and special events to display Amateur Radio to the public in a positive light.
- Attend regional training sessions sponsored by section PICs.
- Become familiar with ARRL Public Service Announcements (PSAs), brochures, and audiovisual materials; contact local radio and TV stations to arrange airing of Amateur Radio PSAs; secure appropriate brochures and audiovisual materials for use in conjunction with planned activities.
- Keep the section PIC fully informed on activities and places PIC on news release mailing list.

10.8 ARES Member

The amateur who serves as a member of his or her local ARES group is in the front line of service to their community. The two requirements for ARES membership are a valid Amateur Radio license and a willingness to serve. ARES participation at the local level may require specific training. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible to apply for membership in ARES. Once the application for ARES membership has been completed it should go to the local ARES EC for approval.

Full membership in the local ARES program may require additional training. Initial training and regular refresher courses, are important when working with served agencies. Check with your local EC on training requirements.

10.9 Planning Committee

The ARES Planning Committee serves at the local level and is chaired by the local EC. The committee membership should also include assistant ECs. Additionally ARES members, partner agency and organization representatives, and delegates from area Amateur Radio clubs may also serve on the committee. The committee serves to discuss and resolve problems encountered by the local ARES group, training activities, on-air activities, and ARES events and deployments. The planning committee also plays a key role during the after-action report process following an emergency or disaster where ARES is utilized in the community.

11 What is RACES

After World War II, it became evident that the international situation was destined to be tense and the need for some civil-defense measures became apparent. Successive government agencies designated to head up such a program called on amateur representatives to participate.

In the discussions that followed, amateurs were interested in getting two points across: First, that Amateur Radio had a potential for, and capability of, playing a major role in this program. And second, that our participation should be in our own name, as an Amateur Radio Service, even if and after war should break out. These principles were included in the planning by the formulation of regulations creating a new branch of the amateur service, the Radio Amateur Civil Emergency Service, or RACES.

Recognition of the role of Amateur Radio as a public service means responsibility. Every amateur should have access to a current version of the FCC rules and regulations for Amateur Radio (Part 97), which includes the Amateur Service, the Amateur-Satellite Service, and the Radio Amateur Civil Emergency Service. RACES could be the only part of Amateur Radio allowed to operate if the President invokes the “war powers” granted him by the Communications Act. “Upon proclamation by the President that there exists war or a threat of war, or a state of public peril or disaster or other national emergency, or in order to preserve the neutrality of the United States, the President, if he deems it necessary in the interest of national security or defense, may suspend or amend, for such time as he may see fit, the rules and regulations applicable to any or all stations or devices capable of emitting electromagnetic radiations within the jurisdiction of the United States as prescribed by the Commission, and may cause the closing of any station for radio communication”

11.1 What is RACES?

The FCC rules define RACES (Radio Amateur Civil Emergency Service) as “A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.” For this discussion, we’ll use the terms “civil defense,” “emergency preparedness,” and “emergency management” interchangeably.

RACES is a radio service available to government emergency management organizations at all times, for official government emergency communications as specified in 47 CFR 97.407 and 97.111(a)(4). There is no specific declaration or emergency event that activates RACES. The “activation” is the direction of the emergency management official to properly qualified individuals to engage in the permitted types of communications in the Radio Amateur Civil Emergency Service. Except for two specific cases, any communications that could be conducted under the RACES rules can also be conducted under the Amateur Service (non-RACES) rules. Those two exceptions are: communications with US Government radio stations for RACES communications, and communications in RACES when the Amateur Service has been ordered off the air by the President’s war emergency powers under Title 47 of the United States Code, Section 606 (47 USC 606).

To understand what RACES is and what it isn’t, it may help to look at some of the other definitions in the FCC rules, § 97.3(a).

So, what is a “radio service?” A radio service is a categorization of users of the radio spectrum that have a common specific radiocommunication purpose. Examples include the Broadcasting Service, the Aeronautical Mobile Service, the Land Mobile Service, the Maritime Mobile Service, and, of course, the Amateur Service.

The word “Service” in ARES’ name has a different meaning than “Service” in RACES. The meaning of “Service” as used in ARES is consistent with the meaning of public service — actions carried out with the aim of providing a public good. RACES is an FCC-regulated radio service. ARES is an organization of individuals who apply specialized telecommunications skills for a public good.

The Amateur Radio Services comprise the Amateur Service, the Amateur-Satellite Service, and the Radio Amateur Civil Emergency Service.

Most amateur activity is conducted in the Amateur Service. A person doesn’t join the Amateur Service, they get a license and operate in that service in accordance with the applicable rules. When an amateur communicates via

one of the many amateur satellites, they don't join the Amateur-Satellite service; they operate in that service according to the applicable rules. When an Amateur operates in the Radio Amateur Civil Emergency Service, they don't join the Radio Amateur Civil Emergency Service; they operate in that service according to the applicable rules.

RACES is a radio service with specific operating criteria. It is not an organization. The rules for operating in RACES require the operator to enroll in ("join") the civil defense ("emergency management") organization for the jurisdiction in which they will serve, and to register their station with that organization. When there was a local or state government civil defense organization, the communications volunteers of that organization could be expected to utilize various radio services as directed by a civil defense (emergency management) official, in accordance with the rules for each radio service. This included the Local Government Radio Service, the Police Radio Service, the Fire Radio Service, the Emergency Medical Radio Service, etc.; the Disaster Communications Service, and the Radio Amateur Civil Emergency Service. The volunteers didn't join any of these other radio services; they joined the civil defense organization and operated in the radio service appropriate to the situation.

There is no RACES organization, hence there is no RACES to join. What amateurs "join" is the volunteer program of the emergency management organization; or, as the FCC rules put it, the Amateur Radio operator must be enrolled in the civil defense (CD) organization and the station to be used in RACES must be registered with that organization.

In the Cold War era, citizens voluntarily joined the CD program to provide one of several specific services: air raid wardens, shelter, fire suppression, first aid, auxiliary police, communications, etc. Many amateurs volunteered to help with communications, which included operating in RACES. They reported to the Radio Officer (not "RACES Officer" or "RACES Radio Officer"), who was responsible for all Civil Defense radio communications, not just RACES. Over time, public interest in the CD program waned, with the RACES part of the program being (in many cases) the last surviving vestige.

Civil Defense evolved into Emergency Management, and the volunteer program evolved into the Community Emergency Response Team (CERT) program. CERT is the reincarnation of CD, with one major difference: CD volunteers were specialists, CERT volunteers are generalists. Every CERT member is trained in all areas of the program. In those jurisdictions where RACES exists as an organization, it carries on as the communications specialty of the civil defense program — sometimes as a government volunteer organization, sometimes as an autonomous or semi-autonomous organization. RACES was never intended to be an organization unto itself — it is the radio component of emergency management, to be used to achieve the mission of the civil defense program.

11.2 When is RACES Operational?

An amateur station operates in RACES only when such operations cannot be conducted under the normal Amateur Service rules:

1. When it is necessary to communicate between an emergency management agency and Federal Government stations for official government emergency communications.
2. When it is necessary to communicate for an emergency management agency official government emergency communications while the Amateur service is ordered off the air in accordance with the President's War Emergency Powers.

Anything else done by amateurs who consider themselves RACES "members" is not RACES. Participating in the weekly RACES net on the 2 meter repeater is not RACES, since communications in that net are not specifically authorized by the civil defense organization for the area served (97.407(c) and (d)). RACES "members" sharing information by radio in anticipation of being asked to help, or self-deploying (i.e., not at the direction of an emergency management official), are operating in the Amateur Service, not in the Radio Amateur Civil Emergency Service, regardless of their enrollment status with an emergency management organization.

ARES operates in the Amateur Service, where these specific operations are not permitted. ARES members who want to be able to help in these situations, and to help their emergency management agency in other ways, can do so on the same basis as other citizens — by joining the emergency management agency's volunteer program, which in many cases is the Community Emergency Response Team, CERT. Enrolling in CERT, or whatever the emergency management volunteer program is called, satisfies the enrollment clause of FCC rule 97.407(a). The registration

clause of that rule is met by providing information about the station — at the minimum, that should be the call sign, station location, and what bands and modes that station can operate. Emergency managers may require other information to register a station as they see fit; for example, information about availability of emergency power for that station. Enrolling the licensed Amateur Radio operator and registering the station is all that the FCC rules require to establish eligibility to operate in RACES. To be authorized to operate in RACES, the operator must be directed by an emergency management official to engage in specific official government emergency communications (97.407(d)) with an authorized station (97.407(c)).

There does not need to be any group or program specifically called RACES for there to be communications in RACES. ARES members can provide communications in the radio service RACES — if they meet the enrollment and registration requirement of the emergency management organization. It is not enough for ARES to affiliate with the emergency management organization — the individual operators must personally enroll themselves and register their stations. Why is the individual connection required? It goes back to one of the basic principles of the Incident Command System — Unity of Command — which says that anyone working under ICS has one, and only one, boss. If you are working for the emergency management organization you can't also be taking orders at the same time from the ARES Emergency Coordinator, the Section Emergency Coordinator, and the Section Manager. The emergency management organization has to know what resources are available to it. It can't be in a position where it has to compete for a pool of volunteers who are available one minute but committed to some other agency the next. The level of commitment expected by an emergency management organization is a matter to be worked out between that organization and the volunteers.

ARES leadership positions include the Emergency Coordinator (EC), the District Emergency Coordinator (DEC), and the Section Emergency Coordinator (SEC). These positions are all “Coordinators,” not “Managers.” The served agency emergency manager and the ARES Emergency Coordinator should establish a clear understanding of the EC's role in the activation and utilization of ARES volunteers. ARES volunteers should expect to have the same relationship with the served agency as other volunteer groups.

Suppose an ARES Emergency Coordinator says to the Emergency Manager, “I have a roster of my ARES volunteers and I know what their capabilities are. If you need emergency communications, please call me and I'll assign my ARES volunteers. I'm not going to give you my roster, but we want to be your RACES capability.” If the emergency manager does call, can these volunteers operate in RACES? No, because the operators are not enrolled in the government agency's civil defense (emergency management) program, nor have they registered their equipment; nor is the emergency management organization specifically authorizing the communications to be transmitted in RACES, since the EC has imposed himself/herself between the emergency management organization and the volunteers.

Let's assume that a CERT program is the civil defense (emergency management) program for a jurisdiction, so joining CERT meets the enrollment requirement for an Amateur Radio operator to be eligible to operate in RACES. A typical CERT training program has 30 hours of instruction — about the same length of time as for an Amateur Radio licensing class. ARES members who become members of CERT get access to a group of dedicated citizens willing to invest 30 hours of their time to be able to help their fellow citizens — exactly the kind of people who get Amateur Radio licenses and join ARES. It is hard to imagine a better ARES recruitment opportunity than CERT, and it is hard to imagine a better recruitment opportunity for CERT than ARES. If ARES members expect CERT volunteers to invest 30 hours to get an Amateur Radio license, isn't it fair to expect ARES members to invest 30 hours to be certified in the CERT program?

RACES is operational only when it needs to be (to communicate with Federal Government stations, or when the Amateur Service has been ordered off the air) and when the emergency management official has directed participating stations to engage in official government emergency communications.

11.3 ARES and RACES

RACES was never intended to be an organization unto itself. RACES is not an autonomous entity affiliated with an emergency management agency. It is a capability available to emergency management officials to utilize their volunteers who have Amateur Radio licenses to engage in official government emergency communications. RACES

is a Radio Service, not an organization. With this understanding, it is clear that the one-hour per week and 72-hours twice per year RACES exercise rules (97.407(d)(4)) do not apply to amateur activities which are otherwise permitted under non- RACES Part 97 rules. If the emergency management official directs that an exercise be conducted in the Radio Amateur Civil Emergency Service, then the RACES rules including the exercise restrictions apply; but if amateurs (ARES or others) are merely participating in an exercise that involves the emergency management agency, then they are operating in the Amateur Service and the RACES exercise restrictions do not apply.

Consider that several amateurs are enrolled in an emergency management program so they can communicate in RACES when requested by an emergency management organization. If these amateurs, who might call themselves RACES members, operate in the ARRL's annual Simulated Emergency Test (SET), does 97.407(d)(4) apply? No, because their participation in the SET is not done under the authority of a RACES rule, as evidenced by the fact that many ARES members who are not enrolled in a civil defense program can engage in the exact same communications under their license authority in the Amateur Service. Amateurs do not lose operating privileges as a result of enrolling in a civil defense program and registering their station.

It also becomes clear that the restrictions on with whom RACES stations may communicate (FCC rule 97.407(c)) apply only to RACES operation when the Amateur Service is ordered off the air, since these restrictions do not apply to the Amateur Service or the Amateur-Satellite Service. If the Amateur Service is not off the air, an amateur operator may communicate with non-RACES amateurs in the Amateur Service during the same operating period in which they communicate in RACES.

For example, at the direction of emergency management an amateur operating in RACES communicates by radio with a neighboring town's emergency operations center. After completing that communication, a non-RACES amateur calls to ask about traffic directions. Can the RACES amateur communicate with the non-RACES amateur? It depends — not on the FCC rules, but on the RACES amateur's instructions from the emergency management official to whom they have volunteered. If the emergency management official said that while on duty the volunteer is to use the radio only for official government emergency communications, then the volunteer must do what they agreed to do; otherwise they might be dismissed from the emergency management program. That is a matter of their agreement as a volunteer, not an FCC rule. If the emergency management official allows such communications, but is not directing that it be done as official emergency government communications, then the amateur may communicate in the Amateur Service (not the Radio Amateur Civil Emergency Service) any non-official communications. There is no need to "switch hats" — there is no announcement that needs to be made when switching between the RACES and the Amateur Service. ARES communications are conducted in the Amateur Service, RACES communications are conducted in the Radio Amateur Civil Emergency Service; both services share the same frequencies.

There is no "when RACES is activated" — either one is operating in the Radio Amateur Civil Emergency Service because they are communicating official government emergency communications with a Federal Government radio station, which is not permitted in the Amateur Service, or because the Amateur Service and the Amateur-Satellite Service have been ordered off the air; otherwise they are operating in the Amateur Service or Amateur-Satellite Service. If you are not allowed to do something in one service but you are allowed to do it in the other service, then you must be operating in the service where it is allowed. Many amateurs believe "In an emergency, anything goes." This is not true. There are specific rules that specify what a station may do in certain emergency circumstances, not whatever someone might consider to be an emergency. These rules are 97.403, "Safety of life and protection of property," and 97.405, "Station in distress."

"Immediate safety of human life and immediate protection of property" means actually happening or about to happen, not just the mere possibility that something could happen; "when normal communication systems are not available" — inaccessible or inoperative; "any means of radiocommunication at its disposal to provide essential communication needs" — essential communication needs directly related to the "immediate" situation, not routine communications that happen to occur during an emergency situation. A station in distress or assisting a station in distress may use "any means at its disposal to attract attention, make known its condition and location, and obtain assistance." If you think about the meaning of the key terms in these rules, you will see that they are a long way from "anything goes."

The leeway afforded an amateur by 97.403 and 97.405 applies only to the immediate situation that is specifically life-threatening or property-threatening, not the broader situation in which it occurs. For example, communications to request a med-evac helicopter to a multi-vehicle collision could come under 97.403, but not communications to request tow-trucks to clear the roadway after the med-evac flight has departed.

Emergency communications always has priority — it says so in rule 97.101(c): “At all times and on all frequencies, each control operator must give priority to stations providing emergency communications, except to stations transmitting communications for training drills and tests in RACES.”

11.4 Other Amateur Emergency Communications Capabilities

There are a number of other Amateur Radio facilities, not sponsored or directly affiliated with the League, which are nevertheless an integral part of our public service effort. Some of these organizations are the monitoring services, MARS, local and state programs such as ACS/DCS, independent nets — both international and domestic — and other similar activities. While naturally we want you to participate in organizations sponsored by your League, it's better to participate in a non-League sponsored public service organization than not to participate at all. In this manual we cannot give details of the operation of these other organizations because there are too many of them, and their operations change too rapidly.

12 Importance of Training

When ARES members participate in a response to an emergency or disaster, they will be doing things they do not normally do. Often they will need to make on-the-fly decisions, and those decisions are best made when they have adequate information available and are at least a little accustomed to being placed into that situation.

It is often said that you perform how you train. An operator asked to be net control in an incident will probably be nervous, forget things, and be quite inefficient if he or she has little or no experience. On the other hand, when an operator has been net control a hundred times, even in an emergency it becomes natural and he/ or she is less stressed and more efficient.

Training and skill improvement are key features of the Amateur Radio Service. Amateurs frequently enjoy training, especially when it is relevant. A well thought out program of training and exercises helps keep members interested and engaged.

12.1 Training¹

12.2 General Categories

12.2.1 In Meetings

The first and perhaps most obvious place to deliver training is in ARES meetings. Most ARES groups hold meetings regularly, and training topics are an obvious subject for the meeting. These will generally require significant preparation by the EC or his AEC, OES or other delegate, but can serve to help make meetings interesting and make members eager to attend.

If your ARES team has regular nets, these can provide an opportunity for members to learn net discipline, traffic handling, and especially the need to keep communications concise. The opportunity for members to learn to be net control should not be overlooked, as this is a skill in high demand should an incident expand beyond a few hours.

12.2.2 Classes

When one thinks of training, the classroom setting immediately comes to mind. But today much training is held online, either individually or in a group, class-like setting. Each has advantages. In a group setting, interaction between students, especially when some of those students come from partner agencies with different backgrounds, can help make the classes interesting. Online training allows for more flexible scheduling and lets each student proceed at his/her own pace.

12.2.3 Tabletop Exercises

A tabletop exercise is a drill in which a scenario is presented and participants discuss potential responses. Tabletops encourage thought and can usually be executed at lower cost than full-scale exercises. However, they can be just as difficult to set up.

¹ <https://confluence.quakersoftware.com/display/DelcoARES/Training>

12.2.4 Exercises/Drills

Exercises and drills present a scenario and the participants act out their responses in the field. These are an excellent way to understand your response and identify areas of improvement. While most exercises are government sponsored, participation in public service events like races, runs, walks and the like can give the team an opportunity to operate in the field with the other members of the team, and can be almost as valuable as formal exercises.

12.3 Training Topics

12.3.1 Safety

The safety of ARES members is a prime concern. Training on safety topics is likely to be very specific to the particular hazards in your local jurisdiction. Many parts of the country experience severe weather, and SKYWARN training often includes components on staying safe during these events. In some locales, training on hazardous materials or radiological hazards could be important. Additional training in land navigation and wilderness safety may be necessary for ARES groups that assist search and rescue teams.

ECs should consider the potential hazards of their area; of course make plans to avoid them, but also a plan of appropriate training for the ARES members.

12.3.2 Operating

To operate efficiently, it is important that all members understand on the air discipline and operating procedures. Programs should frequently practice operation, whether in regular nets, drills, SKYWARN nets, or public service events such as runs and walks. Depending on the skills of the operators, some classroom training might be in order.

On the air training nets can be especially useful, but it is important to avoid the appearance of singling out specific individuals on the air.

12.3.3 Technical Topics

Flexibility is one of the main assets we bring to our partner agencies, and we gain that flexibility through our technical knowledge. In most cases this isn't highly technical knowledge, but rather a broad understanding of the available capabilities.

Sessions on specific operating modes, especially data modes, can make good topics for ARES meetings. Members should be exposed to issues like setting up go-kits, field antennas, and the like. The possibility of reaching out to partner agencies to get an introduction to their communications capabilities should not be overlooked.

12.3.4 Partner Agencies

Often, partner agencies have training requirements. Government agencies frequently require training in the incident command structure so that volunteers understand the environment in which they are working. Agencies such as the American Red Cross, Salvation Army, and others frequently have similar needs.

Attempting to follow the training needs of all the partner agencies along with some of the obvious training specific to the local ARES program can become overwhelming. As volunteers, we need to strike the proper balance between what is reasonable and what is asked of us.

12.4 Sources of Training

12.4.1 EC-Developed

The primary source of training for ARES groups is the EC or his or her delegate. Only they are in a position to understand the unique needs of the local jurisdiction and membership. Locally developed training need not be extensive or especially polished, but should be well thought out and part of a program to give the members the background they need for their specific environment.

Locally developed training should not replace training available from other sources, but rather should augment it. There are many external training resources available and programs should seek out opportunities to use materials already developed.

12.4.2 ARRL

The ARRL provides training for public service communications through two courses that may be taken online or through field instruction. EC-001, Introduction to Emergency Communications, covers the basics of the role of Amateur Radio during times of emergency or disaster and is suitable for all ARES members. EC-016, Public Service and Emergency Communications Management for Radio Amateurs, is suited for those who hold ARES leadership positions such as SECs, DECs, and ECs. The ARRL also offers basic training for public information officers with the EC-015, PR-101: ARRL Public Relations course. This is suitable for those appointed to the PIC or PIO position in the ARRL field organization.

12.4.3 FEMA

FEMA offers a wide range of independent study courses, as well as classroom courses. Many jurisdictions require volunteers as well as employees to take some basic incident command courses, but FEMA also offers courses that are valuable to leadership, such as courses on influence and working with volunteers. In addition, FEMA offers a number of role-specific courses that may be especially useful for leaders.

12.4.4 NWS

In areas of the country that frequently experience severe weather, most ARES members take SKYWARN courses offered by the National Weather Service. Some NWS offices have well developed spotter programs that rely heavily on Amateur Radio. Depending on local conditions, NWS often offers spring and winter weather courses, frequently sending trainers out to each county in their coverage area. Check with your local emergency management officials to see when these courses are available.

12.4.5 State/Local

Most states have fairly extensive training available, as do many local jurisdictions. Sometimes this training is available at no cost, and sometimes local governments can support the cost. While much of this training tends to be focused on specific public safety professionals, training in hazards that might be encountered can be valuable for ARES participants.

While sometimes it may take some convincing for government officials to be willing to make this training available to amateurs, once available, the willingness of ARES members to work to improve their effectiveness gives officials additional respect for their ARES partners.

12.4.6 Other Agencies

Agencies such as the American Red Cross, the Salvation Army, and others often have training programs which may be of interest to ARES groups. These resources should not be overlooked when planning to improve the capabilities of the ARES group.

12.5 Required Training

Partner agencies sometimes require certain training before allowing volunteers to participate at certain sensitive sites.

12.5.1 Government

Government jurisdictions frequently ask volunteers to take a number of courses, most commonly the “basic” independent study courses offered through FEMA. These include IS-700, which sets the stage for other incident command courses, IS-100 and IS-200, which describe the incident command structure, and IS-800, which outlines the Federal response. More and more jurisdictions are asking leaders to take ICS-300 and ICS-400 for more advanced incident command training. These are multiple-day, in-classroom courses and frequently have an associated cost. Local emergency management coordinators typically make some arrangement for volunteers to be able to take these courses if they are asked.

In some cases, government agencies will ask volunteers to take some training in specific hazards, such as hazardous materials or radiological hazards. These may be online FEMA courses or government-produced courses specific to the jurisdiction.

In states that rely heavily on a computer-based critical incident management system (CIMS), leaders may be asked to take training in that system before being issued logon credentials.

12.5.2 Other Partners

Other partners, too, may have some specific requirements. In a disaster, these agencies often provide services to vulnerable populations, and it is important to them that anyone who might be perceived as their representative behave knowledgeably and responsibly, hence the requirement for partner agency-specific training.

13 ARES Mutual Assistance Team

The ARES Mutual Assistance Team (ARESMAT) concept recognizes that a section's ARES resources can be quickly overwhelmed in a large-scale disaster. ARES members in the affected areas may be preoccupied with mitigation of their own personal situations and therefore not be able to respond in local ARES operations.

Accordingly, communications support must come from ARES personnel outside the affected areas. This is when help may be requested from neighboring sections' ARES teams.

To affect inter-sectional support mechanisms, each Section Emergency Coordinator (SEC) should consider adopting the following principles in their ARES planning:

- Pre-disaster planning with other sections in the Division, and adjoining Sections outside the Division. Planning should be conducted through written memoranda, and in-person at conventions and director-called cabinet meetings. An ARESMAT inter-sectional emergency response plan should be drafted.
- Development of a roster of ARES members able, willing, and trained to travel to neighboring sections to provide communication support inside the disaster area.
- Inter-sectional communication/coordination during and immediately following the onslaught of the disaster.
- Post-event evaluation and subsequent revision/updating of the inter-sectional emergency response plan.

When developing ARESMAT plans, ARES leadership should include the following basic action elements:

13.1 Pre-Departure Functions

Team leaders should provide ARESMAT members with notification of activation/assignment. Credentials should be provided for recognition by local authorities. They should provide a general and technical briefing on information drawn principally from the requesting authority, supplemented by reports from Amateur Radio, commercial radio, W1AW bulletins, and ARRL officials. The briefing should include an overview of equipment and communication needs, ARES leadership contacts, and conditions in the disaster area.

The host SEC's invitation, transportation (including routes in disaster area), and accommodations considerations, and expected length of deployment should all also be reviewed with the team members.

13.2 In-Travel Functions

Before and while in travel to the affected areas, team leaders should review the situation's status with the team: job assignments, checklists, affected area profile, mission disaster relief plan, strengths and weaknesses of previous and current responses, maps, technical documents, contact lists, tactical operation procedures, and response team requirements.

13.3 Arrival Functions

Upon arrival, team leaders should check with host ARES officials and obtain information about frequencies in use, current actions, available personnel, communication and computer equipment, and support facilities that could be used by the team to support the relief effort. The host's ARES plan in effect for the disaster should be obtained. A priority upon arrival should be the establishment of an initial intra-team communication network and an HF or VHF channel back to the home Section for morale traffic.

Team leaders should meet with local response officials, Amateur Radio clubs' communications staff, local ARRL field organization officials, and others as needed to obtain information and coordinate the use of frequencies. Communication site selections should take into account team requirements and local constraints.

If the incident response is organized as an Incident Command System (ICS) structure, the team could be directed to report to a staging area or the Incident Command Post. After all personnel go through the check-in process, the team leader would meet with the Communications Unit Leader (COML) to advise the COML of the ARESMAT capabilities, and to receive an assignment from the COML. Once the ARESMAT checks in as a resource to the COML, the team takes direction only from the COML — ARES leaders such as the Emergency Coordinator or Section Emergency Coordinator provide coordination, not command and control. Do not violate the ICS principle of “unity of command” — each person working under the ICS has one, and only one, boss.

13.4 On-Site Functions

Team leaders should make an initial assessment of functioning communication facilities (ICS: receive this information from the COML) and monitor host ARES officials’ communications, and other response team relief efforts to coordinate operations and reduce duplication of effort. Team members should be monitored and their capabilities to perform their duties evaluated. Proper safety practices and procedures must be followed. A daily critique of communication effectiveness with served units and communication personnel should be conducted.

13.5 Pre-Demobilization and Demobilization Functions

An extraction procedure for ham communicators should be negotiated with served agencies and host ARES officials before it is needed (ICS: demobilization will be covered during the check-in process, and updated with each revision of the Incident Action Plan). To get volunteers’ commitment to travel and participate, they must be assured that there will be an end to their commitment. Open-ended commitments of volunteers are undesirable, partly because they make potential volunteers hesitate to become involved.

Leaders must coordinate with the host ARES officials and served agencies, and other functions to determine when equipment and personnel are no longer needed. A demobilization plan should be in effect.

A team critique, begun on the trip home, should be conducted. Individual performance evaluations on team members should be prepared. Copies of critiques should be sent to both the home SEC and in-disaster SEC. Problems stemming from personality conflicts should be addressed and/or resolved outside of formal reports, as they only provide distractions to the reports. Equipment should be accounted for.

A post-event evaluation meeting should always be conducted, and a final report prepared so that an update to the inter-sectional ARESMAT plan can be made.

13.6 ARESMAT Member Qualifications

The individual filling the role of ARESMAT member must have high performance standards, qualifications, experience, and the ability to work with a diverse group of team members that will be required to provide relief to the affected areas. He or she must be able to work efficiently in a disaster relief operation under the most adverse conditions.

Additionally, a member should have demonstrated ability to be an effective team player, in crisis situations, a strong personal desire, and strong interpersonal communication skills. Knowledge of how ARRL, American Red Cross, and other agencies function at both the national and local levels is helpful. A working knowledge of the Incident Command System is useful as many events are managed under this system.

Members should be respected and recognized by officials and peers as competent communicators and should understand a broad range of disaster response organizations’ capabilities and communication requirements.

Important: Members must be available, with the consent of their employer, to participate!

They should be physically fit to perform arduous work under adverse environmental conditions. Availability of refrigeration for temperature-sensitive medications cannot be assumed.

13.7 Summary

It should be noted that there is a fine balance of authority over a deployed ARESMAT. The in-disaster SEC (or delegated authority) should be able to make decisions as to use and deployment of an incoming team (ICS: the team serves at the direction of the COML, and is not available to the SEC until released by the COML). Therefore, an incoming team should be prepared to submit themselves to such authority; this is evidenced by the fact that any team, internal or external, has only a limited view of the overall operation. The supervising authorities will have a better overview of the whole situation.

In turn, however, the in-disaster authority should be discouraged from abusing the resources of incoming teams. Should a team no longer be required, or a situation de-escalate, the team should be released at the earliest possible time, so that they may return home to their own lives.

The ARESMAT tool should be one of last resort. Whenever possible, amateurs from the affected section should be used for support. It is a lot to ask of a volunteer to travel far from home, family, and job for extended periods of arduous and potentially dangerous work.

14 Messaging

14.1 Introduction

An important skill for radio operators providing emergency communications is the ability to concurrently receive, send, and log messages so that information is readily accessible to the radio operator, the supporting team of radio operators, and members of the served agencies.

Messaging has long been our primary activity as amateur operators. In an emergency condition, certain specialized types of messaging are needed to support the operational capabilities of our agency partners. For that reason, the types of messages that are sent and received by ARES volunteers, the forms, and the records that are used to record those activities are important and necessary for our success. There are three key NIMS documents that capture information and organize the work effort so that each member of the radio team can handle the flow of radio messages systematically.

This chapter outlines the documents and the workflow. It assumes that the messages are handled in an EOC/ Incident Communications Center setting – which is the most challenging of the four scenarios below.

14.2 Message Scenarios and Methods

For amateur and served agency partners during an emergency or a declared disaster, moving pertinent and precise information from one point to another is of the utmost importance.

Typical scenarios for the operators handling the messages include:

- Operators at an Emergency Operating Center (EOC) working with representatives of responding agencies.
- Operators supporting a large field operation, such as an evacuation shelter.
- Operators supporting a small field operation, such as a neighborhood incident or mobile in a vehicle.
- Operators located at home.

Messages can be handled in many ways. Here are a few:

- By phone – cellular service or by landline.
- By fax.
- By Internet.
- By local UHF/VHF voice transmission.
- By HF voice transmission – medium and long-range communications.
- By digital communications – UHF/VHF, HF.
- By satellite communications.

Though many of these modes of communication and others not mentioned here may or may not be accessible or available, it is the job of the ARES communicator to move messages to specified parties on request by any combination of means available.

14.3 Messaging and Logging Documents

There are several types of messaging documents that have been developed around the country and the world that have been useful for certain emergency issues or operational capabilities. However, for the purposes of ARES messaging and unit operations, we endorse the standard use of Incident Command System (ICS) forms for both exercise as well as operational use. The reason is that our served agency partners already use these documents as part of their standard protocol. If we are working with the same documentation as our partners in exercises as well as our own practice scenarios, it will be much easier to work our team members and agency partners in an actual incident.

During an emergency, the operators need to maintain good awareness of an evolving situation. The operators must have information about the incident ready for briefing team members at the local site as well as exchange messages in an accurate and timely fashion.

After an hour of intense radio communications, operators can easily forget or be confused on the details of what happened and when. Accurate logging of information helps the operator maintain situational awareness by shifting the operator's reliance from personal memory to transcribing information real-time onto log documents that can be reviewed by the operators and others.

The operator or other team member can quickly scan through the logs to locate the time and key details of an event or message. The key documents are the ICS 214 Activity Log and the ICS 213 Message Form.

Radio messages fall into two broad categories:

14.3.1 Tactical or informal radio messages

Tactical messages are unstructured messages originated by the radio operator and typically convey status, progress, or situational information. Examples are road closures or obstruction, current location of a vehicle responding to a situation, or a short message from a third party to be relayed to another person. For tactical messages, key elements of the message are implied and usually not stated such as time of the message, and the position of authority of the message originator and recipient.

These types of messages are used to facilitate many things. Here are some examples:

- Command communications
- Weather status
- Resource needs
- Logistics needs
- Search and rescue operations
- Damage assessment
- ARESMAT coordination
- Security

14.3.2 Formal radio messages

Formal messages are structured messages containing a prescribed sequence of key message elements. Radio operators expect the elements to be exchanged in a certain sequence and will receive and write the information onto message forms. The NIMS ICS 213 is the message form common to emergency management agencies. Each agency in turn may implement specialized message forms to report and exchange operational information important to that agency.

14.4 ICS 214 Activity Log

The radio team should maintain an [ICS 214 Activity Log](#)² at their operator position. When an operator arrives at the EOC and is ready to start a shift, that information should be logged in the ICS 214 log. Similarly, when an operator ends their shift, that information is also logged in the ICS 214.

² <https://confluence.quakersoftware.com/download/attachments/70254674/ICS%20Form%20214%2C%20Activity%20Log%20%28v3%29.pdf?api=v2&modificationDate=1547157244446&version=1>



ICS Form 214, Activity Log (v3).pdf

Major internal events, such as the start of the incident, start of the radio operations, or key changes in the readiness or capabilities of the radio team should be logged into the ICS 214. Major external events, such as a key milestone, improvement or worsening of the incident, and availability or loss of electrical power should also be logged.

The updates to the ICS 214 log tend to be occasional during the incident. Attaching the current copy to a clipboard will keep it readily locatable and accessible for the team.

The ICS 214 form's primary purpose is to capture the record of significant activity during an operational period other than message traffic. If there is no other recording form available, the ICS 214 Activity Log could serve as a means to capture the necessary information concerning the transmittal of point-to-point messaging. This form will list the supervisor as well as the operators of the communication group as assigned for that period and the pertinent information of the operation and will provide a chronological record, by time, of that period's activities.

14.5 ICS 213 General Message Form

The standard [ICS Form ICS 213](#)³ has been used for a number of years for general messaging and is used to exchange most formal radio messages. This form is not restricted in the number of words that can be used in the message.

The ICS 213 is described as a general message form. It serves both as a sending document as well as a response document. When used operationally for either exercises or actual emergencies, the document becomes part of the permanent record of the operation.

³ <https://confluence.quakersoftware.com/download/attachments/153158686/ics%20form%20213%2C%20general%20message%20%28v3%29.pdf?api=v2&modificationDate=1580314003031&version=1>



ics form 213, general message (v3).pdf

The ICS 213 can be used as a transmittal document for other pertinent documentation, such as:

- Health and Welfare information
- General supplies requests
- Transfer facilities statuses
- Shelters available
- Shelter capacities
- Road and other infrastructure statuses
- Hospital availability reports and patient capacities
- Personal injury status and transport reports, etc.

As messages are received, the radio operator:

- Logs the incoming message activity in the ICS-214 activity log.
- Writes the incoming message activity onto the top half of the ICS 213 form.
- Records the communications event information in the bottom margin of the ICS 213 form.
- Retains a copy of the message at the communications position.
- Handles and delivers the message to the intended recipient according to the established procedures of the EOC.

The intended recipient composes a reply to the message and completes the signature block of the reply. The reply message is handled according to the established procedures of the EOC and delivered to the radio communications position for transmission.

The radio operator:

- Logs the outgoing message request in the ICS-214 activity log.
- Establishes contact with the receiving station.
- Exchanges the message with the receiving station.
- Records the communications event information in the bottom margin of the ICS 213 form.

- Retains a copy of the message at the communications position.
- Completes the handling and filing of the message according to established procedures within the EOC.

The radio operator should expect occasional inquiries about the messages that were received and sent. It is important that the message events be logged in the ICS 214 and the ICS 213 forms so that the flow of messages can be tracked and the status of a particular series of exchanged messages is known. It is also important that the operator position retains a copy of the message forms. For this reason, experienced radio operators know to expect occasional pauses with other stations as they process and update information in these logs and forms.

14.6 Modification of ICS Forms Including ICS-213

One of the reasons that ICS is successful is the use of common terminology. The use of common terminology allows personnel from different organizations to communicate with each other without being misunderstood.



“ICS-213” is the name of the ICS General Message Form. The official ICS forms are published by the National Wildfire Coordinating Group (NWCG) for wildfire ICS and by the Federal Emergency Management Agency (FEMA) for all-hazards ICS. ICS-213 doesn’t refer to just any general message form; it refers to the official form. When amateurs modify the official ICS-213 and publish it with the same name, they violate the common terminology principle of ICS — now there are two or more things that have the same name but are not the same.

Naming the form in the style of ICS forms, such as ICS-213AR, implies that it is an ICS form approved by the same authority that approves all ICS forms. Sometimes modified forms will carry other designations that compound the confusion, implying endorsement where none exists. For example, there exists a modified ICS-213 form that bears the designations “ICS-213” and “NFES 1336.” NFES 1336 is the ordering code in the National Fire Equipment System for the NWCG ICS-213 General Message Form. Someone could order printed forms from NWCG and not get what they thought they were ordering.

To avoid creating confusion about which form is which:

1. Whenever modifying an existing official form, it is important to remove all agency names and form number designations, etc., that are unique to the original forms, unless the form contains a specific prohibition on making changes. Forms created by the US Government are usually in the public domain (17 U.S.C. 105) and changes can usually be made to them. For example, if changes are made to form ICS 213, remove “ICS 213” and “NFES 1336” if they appear on the original General Message Form, to make users aware that the form has been modified.
2. Do not make up a designation that resembles any other widely-accepted designation style. For example, do not label your Amateur Radio General Message Form as ICS-213AR. Instead use plain language (another ICS principle) — label it something like “Amateur Radio General Message Form,” or if necessary to have a code, something like AR-MSG, or something that won’t imply it is an official ICS form.
3. Consider giving credit to the source in a line at the bottom, such as “Based on FEMA Form ICS 213” — doing so makes it clear that this form is not the official ICS 213.

Those who designed the official ICS forms established a system to periodically review and update their forms. If blocks to track message transmission need to be added to the official ICS forms, the case can be made to the forms review committee; it is for them to decide on the final design and to publish the new official version. Until then, amateurs can write the message tracking information they desire by hand in the top or bottom margin of the official ICS 213 form; or they can create their own version, as long as they take care to avoid confusion between their message form and the official form.

14.7 NTS Messaging Forms

During an operation, messages may be received into the communications group from a representative of the National Traffic System on one of two forms.

- [ARRL Radiogram](#)⁴ ([Instructions](#)⁵)
- FSD-244 Amateur Radio Disaster Welfare Message

Though both documents are very similar in format and content, the FSD-244 is more specifically dedicated to relating information specifically related to an incident or disaster. If the operator receives a message in either of these formats it should be forwarded on to its intended recipient in the same format it is received unless the operator is instructed otherwise.

⁴ <https://confluence.quakersoftware.com/download/attachments/153158686/ARRL%20Radiogram%20Fillable.pdf?api=v2&modificationDate=1581441200985&version=1>

⁵ <https://confluence.quakersoftware.com/download/attachments/146997422/ARRL%20Radiogram%20Dissected.pdf?api=v2&modificationDate=1609097983517&version=1>

15 Simulated Emergency Test

The ARRL Simulated Emergency Test is a nationwide exercise in emergency communications, administered by ARRL Emergency Coordinators and Net Managers. Both ARES and the National Traffic System (NTS) are involved. The SET weekend gives communicators the opportunity to focus on the emergency communications capability within their community while interacting with NTS nets. SET weekend is usually held in October, and is announced in QST.

15.1 Purpose of SET

- To determine strengths and weaknesses, in an exercise environment, of ARES groups at local and section levels.
- To provide a public demonstration of Amateur Radio Service capabilities to partner organizations and agencies during times of emergency or disaster.
- To help radio amateurs gain experience in communications using standard procedures and a variety of modes under simulated emergency conditions.

15.2 SET Format

The SET can be organized at any level within the ARES organization structure. It can be organized by an ARES group or as part of a larger exercise designed by a partner organization or agency. The exercise should have a defined timeframe and follow standard exercise protocols and practices. The exercise may focus on any event that would potentially require an Amateur Radio response, e.g. hurricane, 911 outage, flood, etc. Participating groups should focus on testing/utilizing a variety of Amateur Radio modes and bands, accurate handling of disaster-related messages (tactical as well as health and welfare), and utilizing the public information officer function of ARES.

15.3 SET Date

The official SET weekend is the first full weekend of October; however, ARES groups are free to conduct their SET any time during the calendar year. The activity period should not exceed 48 hours. The deadline for receipt of all reports is early February of the following year, i.e. 2014 SET reports are due February 3, 2015. All SET reporting forms will be available on the ARRL website.

15.4 Preparing for SET

Specific skills are required to design an exercise properly. It is not something that everyone knows how to do instinctively. Your SET should be designed by someone who has exercise design training, such as Independent Study course IS-139: Exercise Design, available online at no charge from FEMA's Emergency Management Institute (EMI). Employees of your local or state emergency management agency may have this or more extensive exercise design training and can be a valuable resource.

- Emergency Coordinators sign up all available amateurs in their area and incorporate them into the SET plans. They should make sure to include newly-licensed radio amateurs as well as veteran amateurs. Well in advance of the SET, the Emergency Coordinator (or a person he/she has designated) should:
- Determine whether there is a district or section scenario relevant to the local jurisdiction.
- Identify skills, techniques, and modes that are important to the local jurisdiction that ought to be exercised or tested.
- Consider which partner agencies or organizations might be interested in participating.
- Develop a scenario that will use those skills and make the event interesting for the participants.
- Identify a set of specific activities to be performed during SET, as well as those activities listed on the SET scorecard.

- Prepare a briefing that can be used to solicit participation of ARES members and prospective members.
- Prepare another briefing for the EC and Assistant ECs to use when explaining the goals and objectives of the SET to partner agencies and organization representatives. This briefing should have absolutely no jargon.

Publicity is arranged, in consultation with an ARRL Public Information Officer, in local online, print, and broadcast media. Appropriate use of social media outlets is also encouraged. Be sensitive to the concerns of any served agency partners regarding publicity. Coordinate with their public information officers — don't make your ARES group look good by making your served agency partner look bad.

15.5 During the SET

The “emergency” situation is announced and the emergency net is activated. Stations are dispatched to partner agencies and organizations. Designated stations originate messages on behalf of served agencies. Test messages may be sent simulating requests for supplies. Simulated emergency messages (just like real emergency messages) should be signed by an authorized official. Tactical communications for served agencies is emphasized.

15.6 After the SET

An important post-SET activity is an after-action review to discuss what occurred. All Amateur Radio participants should be invited to the meeting to review good points and weaknesses apparent in the drill. Prepare an after-action report indicating areas needing improvement, areas of strength, and lessons learned. This can serve as input to the next year's SET or to other events the jurisdiction might run.

The EC, or his/her designate, should complete the SET report forms and submit them to ARRL headquarters in a timely manner. The after action report should also be submitted with the report form. Submissions can be made via email to SET@arrl.org⁶.

15.7 Summary

One of the first steps on the way to a successful SET is to try to get as many people involved as possible, especially new hams. In a real emergency or disaster a local EC, like their counterparts in other organizations, may be inundated with spontaneous unrequested volunteers. It is important to have a plan on how to deal with these volunteers. Simply telling them to go away is not acceptable. Get them involved in SET so they will know more about how emergency communications should be handled. Promote SET on nets and repeaters, and sign up new, enthusiastic Technicians.

⁶ <mailto:SET@arrl.org>

16 Emergency Communications

An important capability of Amateur Radio that makes it particularly effective in disaster communications is the inherent flexibility of having available multiple operating modes that can utilize a wide range of frequencies. Perhaps even more important is the fact that ARES operators are trained to exercise good operating discipline while conducting communications during an emergency or disaster. And most Amateur Radio operators are resourceful in overcoming the loss of commercial power; erecting temporary antennas to replace those damaged by ice or high winds, and dealing with other communications infrastructure losses that are likely to occur during a disaster.

The Amateur Radio operator faced with a disaster situation may benefit greatly from operating guidelines that outline the best practices learned from previous incidents. These guidelines should be part of their ARES training and utilized during preparation exercises like the annual Simulated Emergency Test (SET). A list of 10 general operating guidelines are presented here that should be familiar to all Amateur Radio operators, not just those who are active ARES volunteers.

1. **Minimize interference.** In a disaster, many of the most crucial stations will be weak in signal strength. It is essential that all other stations remain silent unless they are called upon. If you're not sure you should transmit, don't. Our amateur bands (particularly HF) tend to be very congested. If you want to help, study the situation by listening. Don't transmit unless you are sure you can help by doing so. Don't break into a disaster net just to inform the control station you are there if needed.
2. **Monitor established disaster frequencies.** Many localities and some geographical areas have established disaster frequencies that operators monitor for possible calls. If there is an ARES Emergency Operations Plan (EOP) applicable to the area, these are likely to be listed in it. When you are not otherwise engaged, it is helpful simply to sit and listen on such frequencies. "SOS" sent using Morse code is universally recognized, but has some legal aspects that should be considered where the need is not truly crucial. On voice, one can use "Mayday" (universal, the phone equivalent of SOS). In an emergency, it may be appropriate to break into a net or conversation with the word "emergency."
3. **Avoid spreading rumors.** During and after a disaster situation you may hear almost anything on the air. Unfortunately, well-intentioned but poorly informed operators might transmit misinformation. Rumors are started by expansion, deletion, amplification, or modification of words, exaggeration, or interpretation. All addressed transmissions should be officially authenticated as to their source. These transmissions should be repeated word for word and only when specifically authorized. In a disaster or emergency situation, be sure you are part of the solution and not part of the problem.
4. **Authenticate all messages.** Every message that purports to be of an official nature should be written and signed by the appropriate agency official. Whenever possible, amateurs should avoid initiating disaster or emergency traffic themselves. We do the communicating; the agency officials we serve supply the content of the communications.
5. **Strive for efficiency.** Whatever happens in an emergency, you will find hysteria and some amateurs who are motivated by the thought that they must be "sleepless heroes." Instead of operating your own station full-time at the expense of your health and efficiency, it might be better to serve a shift at one of the best-located and best-equipped stations. This station will be suitable for the work at hand and staffed by relief shifts of the best-qualified operators.
6. **Select the operating mode and frequency band to suit the need.** The merits of a particular band or mode in a communications emergency should be evaluated impartially with a view to the appropriate use. There is, of course, no alternative to using what happens to be available, but there are ways to optimize available communications.

The well-balanced disaster organization will have phone, code, and data mode capabilities available in order to utilize all of the advantages. Of course, one must make the best use of whatever is available, but a great deal of efficiency is lost when there is lack of coordination between the different types of operation in

an emergency. Absolute impartiality and a willingness to let performance speak for itself are prime requisites if we are to realize the best possible results.

Each operating mode has certain advantages:

a. Voice Mode

- i. More practical for portable and mobile work.
- ii. More widespread availability of operators.
- iii. Faster communication for tactical or “command” purposes.
- iv. More readily appreciated and understood by the public.
- v. Allows direct official-to-official and phone-patch communication.

b. Code (CW) Mode

- i. Less interference in most amateur bands.
- ii. Simpler transmitting equipment.
- iii. Potential for greater accuracy in record communications.
- iv. Longer range for a given amount of power.

c. Digital Modes

- i. Greater overall speed in record communication than some of the other modes.
- ii. Many data modes use error detection/correction protocols to improve accuracy.
- iii. Data modes offer the potential for message store-and-forward capability to move messages from point A to point Z via numerous automatically controlled relay points.
- iv. Less interference in most amateur bands.

7. **Use all communications channels intelligently.** While the prime objective of emergency communications is to save and protect lives and property, Amateur Radio is a secondary or backup communications means; normal public safety channels are primary and should be used if available. Emergency channels other than amateur frequencies should be utilized without fear of favoritism in the interest of getting the message through.
8. **Don’t broadcast.** Some amateur stations in an emergency situation have a tendency to emulate broadcast techniques. While it is true that the general public may be listening, our transmissions are not and should not be made for that purpose. Broadcast stations are well equipped to perform any such service. Our job is to communicate on behalf of, not with, the general public.
9. **Communication support.** Within the disaster area itself, ARES is primarily responsible for communications support to our served agencies. For timely and effective response, ARES Emergency Coordinators (ECs) need to establish working relationships with key officials in their Served Agencies before an emergency or disaster happens. The assigned ARES operators will then know how to best respond to meet the needs of the Served Agencies.
10. **Limitations of Amateur Radio in Disaster Communications.** During a disaster or emergency the need may arise for patient information to be sent via Amateur Radio. Patient privacy is a serious concern of health care and public health professionals and is protected through the Health Insurance Portability and Accountability Act (HIPAA). In the rare case that patient information is requested to be sent via Amateur Radio, while it is not the role of the radio operator to determine what is and is not permitted under HIPAA, it may be appropriate for the operator to remind their immediate supervisor or the originator of the message that there can be no expectation of privacy because encryption of information sent via Amateur Radio is not permitted under Part 97 rules.

17 Working with Partners

The Amateur Radio Emergency Service (ARES) works with governmental agencies such as our local or state Emergency Management agency, public safety agencies such as law enforcement or fire service, street, road and highway maintenance departments, etc. They also work Non-Governmental Organizations (NGO), often referred to as Volunteer Organizations Active in Disaster (VOAD) that include the American Red Cross, Catholic Relief Services, Adventist Disaster Response, Presbyterian Disaster Assistance, Salvation Army, etc. Whether an ARES member serves a governmental or non- governmental agency he/she must be prepared to give the best communications support possible.

Meeting the communications needs of our partners is a challenging, and often daunting, proposition in today's complex disaster/emergency relief arena. With the proliferation of relief organizations, increasingly sophisticated needs, all competing for that scarce resource — the volunteer — coupled with the emergence of other non-ARES amateur providers, it's enough to make an ARES member's head spin. As more of the population moves to disaster-prone areas, and less government funding is available, more pressure is consequently placed on agencies to appropriately use the volunteer sector for support of their missions in disaster mitigation.

Make sure that the leadership in partner agencies are aware of ARES capabilities and, perhaps most importantly, resource limitations. Let them know that ARES may have other obligations to fulfill. Operational issues involving message format, security of message transmission, disaster welfare inquiries, and other items should be reviewed and covered in the detailed local operations plans.

Public service communications performed by ARES members is based on a number of requirements. Specifically, continued open communications and cooperation. Our ability to contribute in times of disaster is based on the efficiency and effectiveness of our performance. Local radio amateurs also must demonstrate that they are organized, disciplined, and reliable and have a sincere interest in public service. The ARES leader must determine what our partner(s) need in the way of communications support. Based on their need you can decide, demonstrate/practice, and deploy the method that best meets those needs. This might entail voice communications short and long distance, data communications that provide the partner with a written record of communications transactions, and some partners may have need for video links if your team has the equipment and expertise. If the partner agency is requesting communications support that your team can't provide or is prohibited by 47 CFR Part 97, be sure to explain that in a manner that follows the premise of "tell me what you can do, as opposed to what you can't do."

For an ARES team to be efficient and effective, the Emergency Coordinator needs to be competent and knowledgeable. The EC needs to understand and practice cooperation and collaboration with their partners. Being an effective communicator in writing and orally will go a long way towards gaining and maintaining meaningful relationships with the team's partners. They must have regular contact with their partners in the disaster/emergency response organizations. By staying in contact the EC can effectively coordinate their team's efforts to meet the needs of their partners.

During the first meeting with agency leadership, the EC needs to be well prepared and give a concise presentation on Amateur Radio's capabilities. Illustrate accomplishments with:

- Newspaper clippings.
- QST articles, etc., highlighting Amateur Radio public service.
- Discuss the ARES group's existing structure, emphasizing that a certain number of qualified operators will be able to respond to the agency/organization's needs.
- Express your group's willingness to meet the needs of the partner you are dealing with.
- Show a willingness to provide training to your membership.
- Offer leadership from the partner organization the opportunity to have their own representatives appear before your group and provide orientation and training they feel is essential.

Demonstrate the reliability and clarity of amateur equipment.

- Demonstrate that your team has good communications in the agency's area of responsibility.

- Suggest specific ways in which amateurs can be of assistance and offer to demonstrate what you are capable of doing by supplying a demonstration of your communications capabilities.
- Demonstrate how easily amateurs and their equipment can interface with agency/organizational efforts. A perfect way to do this is to demonstrate equipment that can be made operational quickly inside the main office building, in a mobile command post, or in field units.
- It is important that you emphasize that the services supplied by your group may free their employees for other duties. It is also a cost-effective way to meet the needs of agency and the public it serves.

It is imperative that a detailed local ARES Communications Plan be developed with agency managers that:

- Define what each organization's expectations are during a disaster operation.
- ARES and agency officials must work jointly to establish protocols.
- Make sure they know who the primary and secondary ARES leaders are in the geographical area.
- Matters involving recruitment, training and assignment of ARES volunteers are directed by him/her, in response to the needs assessed by the agency involved.

The purpose of developing a Communications Plan is very similar to having a meeting or travel itinerary. It allows us to see our progress; it shows if we have met our goal or arrived at the correct destination.

Be realistic and objective in terms of what your group promises to provide. Be fully prepared to keep all promises you make. An ARES leader should tell their partner(s) what they can do for them as well as services that ARES cannot provide. The leader and their team will look much better if they under promise and over deliver as opposed to over promising and under delivering.

Grass-roots action is the name of the game when it comes to achieving effective liaison. With the proper groundwork accomplished in advance, recognition among our partners having communications needs can be dramatically increased. Now that all the necessary introductions have been made, we need to continually stay in touch with our partners and insure that our ARES team members know what the expectations are and are given training to meet them.

The ARRL's formal relationships with national partners are vitally important and valuable to radio amateurs. They provide us with the opportunity to contribute meaningfully to the relief of suffering among our fellow human beings. Another substantial benefit not to be overlooked is that the relationships lend credibility for Amateur Radio's public service capability, and that is important when it comes time to defend our frequencies and privileges before the FCC and Congress. Therefore, ARRL's relationships with the emergency/disaster relief organizations need to be nurtured.

As an ARES leader you should also be working for growth in your ARES program, making it a stronger, more valuable resource and hence able to meet more of the partner's needs. Leaders need to be innovative when looking for ways to build their team. Think of your ARES team as consisting of three parts:

1. ARES Members
2. Superstations, when needed. Hams at a superstation have excellent station equipment that allows them to pick up weak signals and during times there are multiple stations calling on the same frequency known as pileups. They are also used to a quick pace and keeping contacts brief and concise. The nearest DX club would be a good source for volunteers for this group.
3. Technical expertise. Your section's Technical Specialist Coordinator may have volunteers who are willing to help during emergencies/disasters.

Make sure you have a plan for dealing with emergent volunteers. These are the hams who haven't been involved with ARES, but step forward after an emergency or disaster occurs. Some may not meet your local Emergency Management Agency's requirements, but there are tasks they can do for ARES, such as serving as a Net Control Station, relaying traffic between stations that cannot hear each other, or they may serve as a liaison to the local NTS net. A stronger ARES means a better ability to serve your community in times of need and a greater sense of pride for Amateur Radio by amateurs, partners, and the public. That's good for all of us.

17.1 Working with the Public

17.1.1 Introduction

Many radio amateurs want to be of help when the need arises but are unable to commit the time or meet the schedule required for formal participation with an agency or ARES group. These hams can still make valuable contributions to their communities by getting involved at the local level and making their skills available to their neighbors. Becoming a resource in your community can also enhance the public's understanding of and appreciation for Amateur Radio and help reduce the potential for conflicts when a ham wants to erect an antenna on his property. The more we are recognized as neighborhood assets, the more likely it is that our antennas, which are essential for effective station performance, will be accepted.

17.1.2 How Do I Get Started?

Neighbors may band together in a variety of ways to help one another. Some have formal associations with a defined leadership structure. Law enforcement agencies often sponsor Neighborhood Watch programs, designed to deter local crime in residential areas. Many areas have implemented Community Emergency Response Team (“CERT”) programs, which teach basic skills — such as fire suppression, triage, first aid, and light search and rescue — needed to survive when a disaster swamps the resources of official first responders.

Find out what preparedness activities are going on in your area and join one or more local groups. Learn what plans are already in place and note the communication plan or absence thereof. Let the other participants know that you are a licensed Amateur Radio operator and want to help develop or improve the group's communication resources. Community groups are usually eager to learn from people with knowledge and experience in the areas of concern to them. It's also a good idea to take whatever local training is already offered in disaster preparedness so that your understanding will be at least equal to that of your neighbors and so that you can present your suggestions regarding communications in context with that understanding. Participation in local preparedness courses will also let you meet like-minded individuals with whom you can share ideas. If there is no preparedness group or program in your area, consider starting one using resources available from FEMA and other public sources.

17.1.3 Using FRS and GMRS Radios

The most popular and ubiquitous communication tools not dependent on the telephone system or the Internet are Family Radio Service (“FRS”) and General Mobile Radio Service (“GMRS”) radios.

FRS radios may be operated without a license. Transmitting with GMRS radios requires a license. The fee covers a 5-year term, and one license covers all the members of a family and as many separate radios as they may need. If you are going to use a GMRS radio, get the license!

Channel numbering can be a source of confusion for FRS and GMRS users because different manufacturers may assign a different number to a given frequency. Sometimes channel numbering will vary even among different models from the same manufacturer. If you are advising a neighborhood group on the use of FRS or GMRS radios, you can suggest one of the following:

1. When equipping a group for the first time, have everyone buy one make and model of radio (or buy the same model in bulk for additional cost savings). This will assure consistent channel numbering.
2. If different makes and models are already employed by group members, prepare a chart to go with each radio showing the channel number that goes with each frequency.

Every radio owner should be able to power his or her transceiver from standard alkaline batteries. Rechargeable NiCd, NiMH, or Li-Ion batteries are great for everyday use when AC power is available to recharge them, but

recharging batteries when the power is out or when heavy use drains the batteries quickly can be a problem. Alkaline cells are inexpensive, can be replaced quickly, have a relatively long shelf life, and are usually kept on hand already for use in flashlights and other devices. If an FRS or GMRS radio needs a separate shell to use these disposable batteries, get one. If the alkaline batteries fit directly into the radio, keep some packed near (not in) the radio, and refresh the supply when necessary.

17.1.4 Radio Coverage

The limited range of FRS and GMRS radios is both good and bad news. The good news: the distance from which users may receive interference from other users is relatively small. The bad news: there may be parts of a desired coverage area that cannot be reached from a given location. You can suggest or organize a coverage-mapping exercise in which your neighbors test their radios from different locations, indoors and out, to identify any hot spots and dead spots. Find the places you can transmit with the most complete coverage and prepare to use relays for hard-to-reach areas if necessary. Knowing this before a disaster strikes will be most helpful, and it will get people used to using their radios.

17.1.5 Radio Protocol

During a disaster, time and radio resources may both be in short supply. People will be occupied with caring for their own families or performing their assigned team tasks. It benefits everyone to keep transmissions short and to minimize confusion over who is calling whom. Radio amateurs are familiar with good radio protocol and can teach it to their neighbors to promote efficient use of whatever radios are in use. Here are some basic practices to consider:

- Fire, police, and military radio operators make use of tactical call signs, usually associated with a specific function or location, and civilian groups can do the same. First names may be fine for only a few users but can lead to confusion with many users on the same channel. Descriptive tactical call signs such as “Utility One,” “Farmington Command,” or “Elm St, Fire” can reduce confusion in case another team is using the same channel nearby. Your group’s communications plan should include any tactical call signs you decide to use.
- It is good practice to start each transmission by stating the party you’re trying to reach followed by your own call (“Supply, this is Triage”). Wait for an acknowledgement (“Triage, Supply, go ahead”) before sending your message. Keep messages short (“Supply, Triage, we need six blankets at Elm and 1st right away”) and sign off when the exchange is finished (“Triage clear,” plus any required call sign) so the other party knows you’re finished and can get back to other responsibilities. Any identification requirement is easily met using this method.
- It is also good practice to use the proword “Over” at the end of each transmission to another station. Since most FRS and GMRS is simplex, doubles could occur, resulting in lost message content when it’s unclear whose turn it is to transmit.
- Speak — don’t yell — somewhat more slowly and distinctly than you would in face-to-face conversation. Yelling into an FM transceiver usually produces distortion rather than making one louder, the very opposite of what the user is trying to achieve.
- Speaking across rather than into the microphone will help reduce the popping of “P”s and the hissing of “S”s, producing clearer speech on the receiving end. Have your group practice with their radios and encourage honest “signal reports” so each user can make the most effective use of his or her radio.
- Avoid noisy locations when possible. Background noise makes it harder for you to hear and harder for you to be heard.

When people not accustomed to using radios practice these techniques, they are more likely to find their radios to be useful communication tools rather than distractions from their other duties.

17.1.6 Linking To the Outside

In addition to helping with neighborhood communications plans, radio amateurs may be called upon or expected to provide a link to adjacent areas or to first responders. You should be aware of the other amateurs in your area who are active in the local ARES group and know the frequencies on which you can reach them. They will probably be your best access to first responders and aid organizations if there is any access to be had.

You should set realistic expectations as to what you can accomplish. Surrounding areas may be experiencing the same problems you have locally. Fire department and law-enforcement agency communications will be very busy and will give priority to those groups with which they are familiar. You can learn more by getting to know the formal ARES groups in your area. Even if you don't have time to participate with the local ARES group regularly, you need to find out where they are likely to be stationed and how you can contact them. For example, if you know which hospitals will have ham coverage and the best way to reach them, you may be able to determine whether a given facility is functioning in a disaster so that a seriously injured person can be transported there.

17.1.7 Community Emergency Response Teams (CERT)

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

The basic CERT trainings include: * IS-317: Introduction to CERTs and the CERT Basic Training Course:

“Introduction to Community Emergency Response Teams,” IS-317, is an independent study course that serves as an introduction to CERT for those wanting to complete training or as a refresher for current team members. It has topics that include an introduction to CERT, fire safety, hazardous material and terrorist incidents, disaster medical operations, and search and rescue. It takes between 6 and 8 hours to complete the course. Those who successfully finish it will receive a certificate of completion. IS-317 can be taken by anyone interested in CERT. However, to become a CERT volunteer, one must complete the classroom training offered by a local government agency such as the emergency management agency, fire, or police department. If your home area has the program, you can contact your local emergency manager to learn about the local education and training opportunities available to you. Let this person know about your interest in taking CERT training.

18 Memorandum of Understanding

18.1 REACT International, Inc.

18.2 Salvation Army in the United States of America

18.3 The American National Red Cross

18.4 The Association of Public-Safety Communications Officials-
International, Inc,

18.5 The Department of Homeland Security/Federal Emergency
Management Agency

18.6 The National Weather Service

18.7 REACT International, Inc.



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18.8 Salvation Army in the United States of America



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18.9 The American National Red Cross



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18.10 The Association of Public-Safety Communications Officials- International, Inc,



mou apco.doc

18.11 The Department of Homeland Security/Federal Emergency Management Agency



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18.12 The National Weather Service



national weather service mou.pdf