

Amateur Radio Emergency Service



March 2015

Amateur Radio Emergency Service



March 2015

Copyright © 2015 by The American Radio Relay League

Copyright secured under the Pan-American Convention. International Copyright secured.

All rights reserved. No part of this work may be reproduced in any form except by written permission of the publisher. All rights of translation reserved.

Printed in USA.

First Edition – 2015 ISBN: 978-1-62595-029-1

Acknowledgments

The Amateur Radio Emergency Service Manual Working Group and Contributors

Monte Simpson, W7MLS, Western Washington Section Manager

Wayne Gronlund, N1CLV, Connecticut Section Emergency Coordinator

David Greenhut, N6HD, Los Angeles Section Manager

Mark Conklin, N7XYO, Oklahoma Section Emergency Coordinator

Dan O'Donovan, W4DOD, Tennessee Section Emergency Coordinator

Ross Merlin, WA2WDT, United States Department of Homeland Security

John McDonough, WB8RCR, Michigan Section Emergency Coordinator

Mike Corey, KI1U, ARRL Emergency Preparedness Manager

Ron Hashiro, AH6RH, Hawaii Emergency Management Agency RACES Coordinator and EC

Keith Miller, N9DGK, Tennessee Section Manager

Table of Contents

Chapter 1: The Amateur Radio Emergency Service, An Overview	1
Chapter 2: ARES and the Radio Amateur Civil Emergency Service	9
Chapter 3: ARES Training	17
Chapter 4: ARES Mutual Assistance Teams	22
Chapter 5: ARES Messaging	26
Chapter 6: The Simulated Emergency Test	32
Chapter 7: Emergency and Disaster Capabilities.....	35
Chapter 8: Working with Partners, Served Agencies, and the Public	38
Memoranda of Understanding	
Memorandum of Understanding between The American National Red Cross and ARRL, the national association for Amateur Radio	46
Memorandum of Understanding between The Association of Public-Safety Communications Officials-International, Inc, and the American Radio Relay League, Inc.	58
Memorandum of Agreement between The Department of Homeland Security/Federal Emergency Management Agency and The American Radio Relay League, Inc.....	61
Memorandum of Understanding between The National Weather Service and the American Radio Relay League, Inc.	71
Memorandum of Understanding between REACT International, Inc., and The American Radio Relay League, Inc.	74
Memorandum of Understanding between The American Radio Relay League, Inc, and the Salvation Army in the United States of America	76
Incident Command System Forms	
ISC 205 – Incident Radio Communications Plan	80
ICS 213 – General Message.....	83
ICS 214 – Activity Log.....	85

Chapter 1: The Amateur Radio Emergency Service: An Overview

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.

1.1 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.

1.2 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.

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

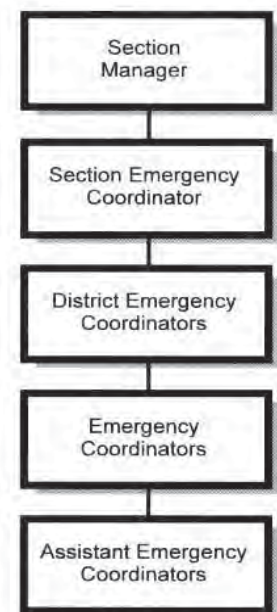
section leadership officials as appropriate, particularly with the State Government Liaison and Public Information Coordinator.

- 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.

1.3 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.



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.

1.4 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.

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.

1.5 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.

1.6 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.

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.

1.7 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.

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.).
- Becomes 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.

1.8 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.

1.9 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.

Chapter 2: ARES and the Radio Amateur Civil Emergency Service (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”*

2.1 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):

(1) Amateur operator. A person named in an amateur operator/primary license station grant on the ULS consolidated licensee database to be the control operator of an amateur station.

(2) Amateur radio services. The amateur service, the amateur-satellite service and the radio amateur civil emergency service.

(4) Amateur service. A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

(5) Amateur station. A station in an amateur radio service consisting of the apparatus necessary for carrying on radiocommunications.

(38) RACES (radio amateur civil emergency service). A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.

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.

2.2 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.

2.3 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.”

§97.403 Safety of life and protection of property.

No provision of these rules prevents the use by an amateur station of any means of radiocommunication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

§97.405 Station in distress.

(a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.

(b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a) of this section, of any means of radiocommunications at its disposal to assist a 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.”

2.4 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.

Chapter 3: ARES Training

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.

3.1 General Categories

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.

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.

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.

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.

3.2 Training Topics

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.

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.

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.

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.

3.4 Sources of Training

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.

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, DECAs, 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.

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.

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.

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.

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.

3.5 Required Training

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

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.

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 knowledgably and responsibly, hence the requirement for partner agency-specific training.

Chapter 4: ARES Mutual Assistance Teams

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:

4.1 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, WIAW 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.

4.2 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.

4.3 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.

4.4 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.

4.5 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.

4.6 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.

4.7 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.

Chapter 5: ARES Messaging

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.

5.1 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.

5.2 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:

- **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
- **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.

5.3 ICS 214 Activity Log

The radio team should maintain an ICS 214 Activity Log 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.

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.

5.4 ICS 213 General Message Form

The standard ICS Form ICS 213 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.

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.

5.5 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.

5.6 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
- 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.

Chapter 6: The 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*.

6.1 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.

6.2 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.

6.3 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.

6.4 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.

6.5 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.

6.6 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@arrrl.org**.

6.7 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.

Chapter 7: Emergency and Disaster Communications Capabilities

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.

General Operating Guidelines

- 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. Each operating mode has certain advantages:

Voice Mode

- 1) More practical for portable and mobile work.
- 2) More widespread availability of operators.
- 3) Faster communication for tactical or “command” purposes.
- 4) More readily appreciated and understood by the public.
- 5) Allows direct official-to-official and phone-patch communication.

Code (CW) Mode

- 1) Less interference in most amateur bands.
- 2) Simpler transmitting equipment.
- 3) Potential for greater accuracy in record communications.
- 4) Longer range for a given amount of power.

Digital Modes

- 1) Greater overall speed in record communication than some of the other modes.
- 2) Many data modes use error detection/correction protocols to improve accuracy.
- 3) 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.
- 4) Less interference in most amateur bands.

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.

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

Chapter 8: Working with Partners, Served Agencies, and the Public

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.

Working with the Public

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.

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.

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.

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.

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.

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.

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.

Memoranda of Understanding

Memorandum of Understanding

between

The American National Red Cross

and

ARRL, the national association for Amateur Radio



American Red Cross

I. Purpose

The purpose of the Memorandum of Understanding (MOU) is to document the relationship between the American National Red Cross (the “Red Cross”) and the ARRL, the national association for Amateur Radio (the “ARRL”). This MOU provides a broad framework for cooperation between the two organizations in preparing for and responding to disaster relief situations at all levels in rendering assistance and service to victims of disaster, as well as other services for which cooperation may be mutually beneficial.

II. Independence of Operations

Each party to this MOU will maintain its own identity in providing services. Each organization is separately responsible for establishing its own policies and financing its own activities.

III. Organization Descriptions

The American Red Cross is a humanitarian organization led by volunteers and guided by its Congressional Charter and the Fundamental Principles of the International Red Cross and Red Crescent Movement. The Red Cross provides relief to victims of disasters and helps people prevent, prepare for and respond to emergencies. The Red Cross provides services to those in need regardless of citizenship, race, religion, age, sex, national origin, disability, sexual orientation, veteran status or political affiliation.

The ARRL is the national membership association for Amateur Radio operators. The ARRL is a not-for-profit organization that engages in the promotion of interest in Amateur Radio communication and experimentation; the establishment of Amateur Radio networks to provide electronic communications in the event of disasters or other emergencies; the furtherance of the public welfare; the advancement of the radio art; the fostering and promotion of noncommercial intercommunication by electronic means throughout the world; the fostering of education in the field of electronic communication; the promotion and conduct of research and development to further the development of electronic communication; the dissemination of technical, educational and scientific information relating to electronic communication; and the printing and publishing of documents, books, magazines, newspapers and pamphlets necessary or incidental to any of the above purposes.

IV. Methods of Cooperation

The Red Cross and ARRL desire to expand their mutually-beneficial relationship to enhance community disaster preparedness and coordinate disaster planning and response activities as follows:

Relationship building

- **Open Communications:** Each organization will share current appropriate data regarding disasters, disaster declarations, and changes in regulations, technology and legislation related to communications. The same interaction and liaison will be encouraged at all levels of both organizations, to include all Red Cross chapters, ARRL sections and subordinate levels.
- **Local partnerships:** Each organization will encourage its local units to communicate with the other organization's corresponding local unit to explore opportunities for collaboration. These units may perform cooperative efforts such as disaster planning and preparedness, first aid, cardiopulmonary resuscitation (CPR), health courses, communications training and licensing, and community disaster education. Cooperative efforts could include participation in predisaster planning or any other of the methods of cooperation listed here or as listed in the sample local agreement found in *Attachment C, Sample Statement of Cooperation for local organizational units*. *Attachment C* may be modified or updated by joint agreement of each organization's points of contact (listed in *Attachment A, Organization Contact Information*) without requiring a resigning of this MOU.
- **Shared members:** Each organization will encourage interested volunteers to become members and participate in the activities of the other organization. Such volunteers shall meet the standards, have the responsibilities and be entitled to the privileges of each organization.
- **ARRL volunteers supporting the Red Cross:** The ARRL may provide volunteers to assist the American Red Cross with communications in support of disaster relief roles as may be mutually agreed upon at the local and national levels.
The Red Cross requires the completion of a criminal background check to participate in Red Cross activities. A criminal background check may be performed through the Red Cross process at no cost to the volunteer, or by State or local law enforcement agency at the volunteer's own initiative and expense. The Red Cross is only responsible for the costs of background checks conducted through their processes.
The ARRL accepts the requirement of a criminal background check for volunteers but prefers that such checks be performed by law-enforcement entities. The Red Cross agrees that ARRL volunteers shall not be asked or required to consent to credit checks, mode of living investigations, or investigative consumer reports in order to provide a communications function.
- **Red Cross members supporting the ARRL:** Red Cross volunteers affiliated with a local Chapter that hold a valid Federal Communications Commission (FCC) Amateur Radio License are encouraged to participate in the Amateur Radio Emergency Service (ARES®) program to develop emergency communications skills, cross-train in local disaster drills and exercises, and integrate Chapter communications resources into the local emergency management structure.

Assumptions

- **Radio station operations:** It is understood and agreed that amateur radio operators, being licensed and regulated by the Federal Communications Commission (FCC), shall at all times exercise sole and exclusive control over the operation of their radio stations. Such control cannot be surrendered or delegated, in accordance with Federal law.
- **Radio operators:** It is understood and agreed that radio operators have skills that extend beyond amateur radio frequencies and equipment. These skills may be applied to operate on Red Cross frequencies and equipment.
- **FCC Licenses:** The Red Cross is responsible for any licensing arrangements necessary for Red Cross operations that occur outside amateur radio licenses, or any amateur radio licenses established by American Red Cross Amateur Radio Club Stations. Individual amateur radio operators are responsible for the maintenance and renewal of their personal licenses.

Activities

- **Training:** The Red Cross recognizes the leadership and expertise of the ARRL in the area of amateur radio communications. Where appropriate, the Red Cross will rely on materials created by the ARRL to train radio communicators. Additionally, the ARRL offers training in Amateur Radio emergency communications that is mutually beneficial to the ARRL and to the American Red Cross. Volunteers holding valid ARRL Emergency Communications certificates of completion will be recognized for this knowledge.
- **Joint exercises:** Chapters, Sections and subordinate units of each organization will be encouraged to engage in joint training exercises.
- **ARRL Field Day:** The Red Cross will encourage all chapters to participate in ARRL Field Day, the Simulated Emergency Test (SET) and other emergency exercises. Participation may take many forms, including Red Cross officials visiting and touring sites to better understand the capabilities of local ARRL volunteers and ARES® units, or the joint use of Red Cross equipment such as vehicles or trailers.
- **Planning:** Planning needs will be identified, tasked and completed to address issues beneficial to both organizations in responding to events. Such issues can be, but are not limited to pre-staging communications equipment, coordination of Mass Care and Damage Assessment support activities, and catastrophic disaster plans for high risk areas of the United States.

During disasters

- **On-scene cooperation:** Both ARRL volunteers and American Red Cross workers will work cooperatively at the scene of a disaster and in the disaster recovery, within the scope of their respective roles and duties as recommended in *Attachment D, ARRL Roles on Red Cross Disaster Relief Operations*.
- **National HQ coordination:** Operational coordination between Red Cross HQ and ARRL HQ will occur through the primary points of contact as shown in *Attachment A, Organization Contact Information* or other officially designated staff. Reports and data that are mutually beneficial to each organization's operations and mission assignments

will be exchanged.

- **Communications:** Whenever there is a disaster requiring the use of amateur radio communications resources and/or facilities, the local Red Cross Chapter may request the assistance of the local ARES organization responsible for the jurisdiction of the scene of the disaster. This assistance may include: alert and mobilization of ARRL ARES® personnel in accordance with a prearranged plan; establishment and maintenance of fixed, mobile, and portable station emergency communication facilities for local radio coverage; point-to-point contact between Red Cross personnel and locations; and the maintenance of the continuity of communications for the duration of the emergency period until normal communications channels are substantially restored, or until radio communications are no longer necessary in support of the response to the disaster.
- **Equipment sharing:** Each organization may request equipment for temporary use to support operations. The specifics of responsibility and liability of the loaned equipment will be developed as part of plans and procedures, in writing, and are separate from this agreement.
- **Health and Welfare Messages:** The Red Cross processes general welfare messages through the Red Cross Safe & Well web site. ARRL volunteers are encouraged to assist in registering people on the Safe & Well website by passing the required information from a point in the disaster area to someone outside the disaster area who can enter the information on the Safe & Well website. No special training or pre-defined agreements are necessary for ARRL volunteers to do this. [The Safe and Well](http://www.redcross.org) website is located on www.redcross.org.

V. General

- a. The Red Cross and ARRL will use or display the name, emblem, or trademarks of the other organization only in the case of defined projects and only with the prior, express, written consent of the other organization.
- b. The Red Cross and ARRL will keep the public informed of their cooperative efforts through their public information offices during the time of disaster.
- c. The Red Cross and ARRL will widely distribute this MOU within the respective departments, administrative offices and subordinate levels of each organization and urge full cooperation.
- d. The Red Cross and ARRL will allocate responsibility for any shared expenses in writing in advance of any commitment.
- e. Local units of the Red Cross and subordinate levels in the ARRL Field Organization that desire a localized MOU to meet specific needs and conditions will utilize a format as shown in *Attachment C, Sample Statement of Cooperation for local organizational units*.
- f. ARRL agrees to adhere to *Attachment B - the Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief* as it applies to disaster-caused situations in the USA. Attachment B will not be changed without a resigning of the MOU by both parties.

VI. Periodic Review and Analysis

Representatives of the Red Cross and ARRL will, on an annual basis on or around the anniversary date of this MOU, jointly evaluate their progress in implementing this MOU and revise and develop new plans or goals as appropriate.

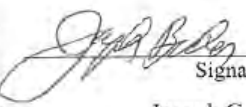

VII. Term and Termination

This MOU is effective as of the date of the last signature below and expires on March 24, 2015, five years from the signature date. The parties may extend this MOU for an additional period not exceeding five years, and if so shall confirm this in a signed writing. It may be terminated by written notice from either party to the other at any time.

VIII. Miscellaneous

Neither party to this MOU has the authority to act on behalf of the other party or bind the other party to any obligation. This MOU is not intended to be enforceable in any court of law or dispute resolution forum. The sole remedy for non-performance under this MOU shall be termination, with no damages or penalty.

IX. Signatures

American Red Cross		ARRL	
By:	 Signature	By:	 Signature
Name:	Joseph C. Becker Print Name	Name:	Kay Craigie Print Name
Title:	Senior Vice President, Disaster Services Print Title	Title:	President, ARRL Print Title
Date:	March 25, 2010	Date:	March 25, 2010

ATTACHMENT A – Organization Contact Information**Primary Points of Contact**

The primary points of contact in each organization will be responsible for the implementation of the MOU in their respective organizations, coordinating activities between organizations, and responding to questions regarding this MOU. In the event that the primary point of contact is no longer able to serve, a new contact will be designated and the other organization informed of the change. Contact changes do not require any renegotiation of this MOU.

Relationship Manager* and Operational Contact**

American Red Cross		ARRL	
Contact	Keith Roberatory	Contact	Michael P. Corey
Title	Manager, Disaster Technology	Title	Manager, Emergency Preparedness and Response
Office phone	202-303-8628	Office phone	860-594-0222
24x7 Contact	202-303-4126	Mobile	860-597-8643
e-mail	robertoryk@usa.redcross.org or dst@usa.redcross.org	e-mail	W5mpc@arrl.org

*The Relationship Manager is the person that works with the partner organization in developing and executing the MOU.

**The Operational Contact is the person each organization will call to initiate the disaster response activities as defined in the MOU.

Organization Information

American Red Cross		ARRL	
Department	Disaster Services Technology	Department	ARRL
Address	2025 E Street, NW Washington, DC 20006	Address	225 Main Street Newington, CT 06111-1494
e-mail	dst@usa.redcross.org	e-mail	info@arrl.org
Website	http://www.redcross.org/	Website	www.arrl.org

ATTACHMENT B

**Code of Conduct for
The International Red Cross and Red Crescent Movement
and
NGOs in Disaster Relief**

Principle Commitments:

1. The Humanitarian imperative comes first.
2. Aid is given regardless of the race, creed or nationality of the recipients and without adverse distinction of any kind. Aid priorities are calculated on the basis of need alone.
3. Aid will not be used to further a particular political or religious standpoint.
4. We shall endeavor not to act as instruments of government foreign policy.
5. We shall respect culture and custom.
6. We shall attempt to build disaster response on local capacities.
7. Ways shall be found to involve program beneficiaries in the management of relief aid.
8. Relief aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs.
9. We hold ourselves accountable to both those we seek to assist and those from whom we accept resources.
10. In our information, publicity and advertising activities, we shall recognize disaster victims as dignified human beings, not hopeless objects.

More information about the code of conduct can be found at <http://www.ifrc.org/publicat/conduct/>

The Code Register

The International Federation is keeping a public record of all those NGOs who register their commitment to the Code. The full text of the Code including a [registration form](#) is published by the International Federation and is available upon request. (Telephone +41 22 7304222, Fax +41 22 7330395).

Non-governmental Organizations who would like to register their support for this Code and their willingness to incorporate its principles into their work should fill in and return the [registration form](#).

ATTACHMENT C – Sample Statement of Cooperation for local organizational units**American Red Cross XXX Chapter and <<XXX>> Cooperative Agreement**

The purpose of this Statement of Cooperation is to document the relationship between the American Red Cross XXXXX Chapter and the <<XXX (insert ARRL Section, ARES® unit or local radio club)>> for the purposes of disaster planning and response. This Statement of Cooperation provides the methods of cooperation between the two organizations in rendering assistance and service to victims of disaster, as well as other services for which cooperation may be mutually beneficial. This Statement of Cooperation incorporates by reference the details and limitations contained in the national MOU between the American Red Cross and the ARRL, the national association for Amateur Radio (the “ARRL”). Each organization retains its own identity in providing services, and each is responsible for establishing its own policies and financing its own activities.

Concept of Cooperation

The American Red Cross XXXXX Chapter and <<XXXX>> agree to the methods of cooperation listed in the American Red Cross and ARRL national MOU. In addition, they agree to the following specific local methods of cooperation.

The American Red Cross XXXXX Chapter will:

- Incorporate <<XXX>> in its response plans (EXAMPLE)
- Provide preparedness training opportunities (EXAMPLE)
- Provide shelter training (EXAMPLE)

<<XXX>> will:

- Provide personnel to assist with communications in support of disaster relief roles as agreed upon (EXAMPLE)
- Expand their communications support to other activities within the disaster response system (Disaster Assessment, ERV driving)
- Add another action as needed (EXAMPLE)

This Statement of Cooperation is effective as of the date of the last signature below and expires on _____. It may be terminated by written notice from either party to the other at any time.

Neither party to this Statement of Cooperation has the authority to act on behalf of the other party or bind the other party to any obligation. This Statement of Cooperation is not intended to be enforceable in any court of law or dispute resolution forum. The sole remedy for non-performance under this Statement of Cooperation shall be termination, with no damages or penalty.

The primary points of contact are:

American Red Cross XXXXXX Chapter	<<XXX>>
Contact:	Contact:
e-mail:	e-mail:
Office:	Office:
Mobile:	Mobile:

Signature American Red Cross **XXXXXX** Signature **<<XXX>>**

Print Name: _____ Print Name: _____

Date: _____ Date: _____

Review Date (after one year): _____

ATTACHMENT D – ARRL Roles on Red Cross Disaster Relief Operations

During a Red Cross Disaster Relief Operation (DRO), ARRL volunteers may perform in any of the following roles. These are examples of actual roles; they may or may not actually be included in all operations depending on the needs of the operation. It is possible that one person can support multiple roles or one role may require support from several people. This is not an exhaustive list and ARRL volunteers who have taken Red Cross Disaster Services training can participate in other roles. ARRL volunteers who are assigned roles by the Red Cross during a DRO will be provided with Red Cross credentials as required by the role, consistent with Red Cross policy.

Amateur Radio Liaison: This role is for a person who is familiar with both Red Cross and local amateur radio operations. This role would establish contact with the local ARES unit, amateur radio club and repeater owners to provide a single technical-level point of contact for the DRO. If local agreements already exist, this role could be pre-designated. It would be expected that this role would be linked to a similar role in the partner organization.

Communication Equipment Operator: This is a standard radio operator role for someone who would operate a two-way radio or other communication device at a fixed facility or mobile/portable location to support the DRO. They would pass messages from point to point either directly or through a message relay. Operators may use DRO-issued equipment or personally-owned equipment, and they may be on amateur radio frequencies or frequencies coordinated or licensed by the Red Cross.

Communication Equipment Installation / Repair: This is a more technically hands-on role than the Operator. In this role, the person would be asked to temporarily install two-way radio equipment into a facility or vehicle that is under Red Cross authority through ownership, lease or rental. The equipment could include base-station radios, mobile radios and appropriate antennas. Equipment may also require field repairs, such as the radios installed into Red Cross ERVs.

Disaster Assessment: Individuals who have taken the necessary training with the Red Cross can assess the damage caused by a disaster, and use their radio skills to relay that information back to a central point that will use the information to develop a complete picture of the event.

MINOR DOCUMENT REVISIONS

November 1, 2010

- Corrected sentence structure in Section IV, *During Disasters, Communication* to read properly
- Updated ARRL Contact Information

FOREWORD

The Association of Public-Safety Communications Officials-International, Inc., and the American Radio Relay League, Inc. (ARRL) share the common bond of communications in the public interest. APCO International is made up of Emergency Medical, Law Enforcement, Fire and other Public Safety Communications personnel whose primary responsibility is the management, design, maintenance and operation of communications facilities in the public domain.

The ARRL is a non-commercial association of radio amateurs bonded together for the promotion of interest in Amateur Radio communication and experimentation, for the relaying of messages by radio, for the advancement of the radio art and of the public welfare, for the representation of the radio amateur in legislative matters and for the maintenance of fraternalism and a high standard of conduct.

While the members of APCO International are charged with responsibility of communications in the public interest as professional members of the public safety community, a primary responsibility of the Amateur Radio Service, as established by Part 97 of the Federal Communications Commission's regulations, is the rendering of public service communication for the general public, particularly in times of emergency, when normal communications are not available.

APCO International has, since its inception, taken the lead in establishing International standards for public safety communications. Through International Headquarters and Affiliates, APCO International strives for professionalism and continuity of communications through education, standardization and the exchange of information.

Organizing and coordinating Amateur Radio operators in the amateur frequency bands, the ARRL has been serving the general public directly and government and relief agencies for more than 75 years. To that end, in 1935 the league organized the Amateur Radio Emergency Corps (now called the Amateur Radio Emergency Service--ARES). In 1949 the League created the National Traffic System (NTS). Together, ARES and NTS comprise the League's public service Field Organization of volunteer radio amateurs. As leaders and representatives of radio amateurs, the ARRL has responsibilities in motivation, education, policy and leadership in promoting Amateur Radio functions in the public service, especially in times of emergency when the resources of radio amateurs may be most survivable communications available.

I. Purpose

The purpose of this document is to state the terms of a mutual agreement between the ARRL and APCO International that will serve as a broad framework within which volunteer personnel of the ARRL may coordinate their facilities and equipment with APCO International members and their agencies for disaster communications

II. Definition of Disaster

A disaster is either a natural or man-made occurrence that causes human suffering or human needs that the victims cannot alleviate without assistance and which rapidly depletes the resources of the responding agencies involved.

It will be understood and agreed that members of the Amateur Radio Emergency Service will neither seek nor accept any duties other than that of Amateur Radio communications.

III. Method of Cooperation

In order that the emergency communications facilities of the ARES and NTS may be coordinated and utilized to the fullest advantage during disasters, APCO International and ARRL agree to the following:

A. Through its national headquarters in Newington, Connecticut, the ARRL will establish regular liaison with the APCO International headquarters in South Daytona, Florida, through a standing committee of each organization. This liaison will provide the closest possible cooperation and direct operational assistance by the ARRL in emergency communications planning, and in the coordination of amateur radio communications facilities for disaster operations.

B. APCO International welcomes the cooperation and assistance of the American Radio Relay League, through its headquarters and its field organizations, to extend Amateur Radio emergency communications planning into the jurisdictions of APCO International chapters. APCO International chapters will be urged to further the cooperative effort by requesting that local ARRL ARES, and NTS personnel serve as disaster volunteers for emergency communications, with such personnel reporting to the ARES Emergency Coordinator of jurisdiction. ARRL ARES, and NTS volunteers, will be encouraged to take part in pre-disaster training and planning and to work with APCO International chapters to provide amateur radio communications equipment and volunteers, and to meet the needs of their disaster communications plans.

C. When a disaster occurs requiring the use of amateur radio communications facilities, APCO International, through an individual chapter and with the understanding of the agency (agencies) to be served, may recommend the assistance of the ARRL ARES, and NTS nearest the scene of the disaster. This assistance may include, but is not limited to the following:

2. The establishment and maintenance of fixed, mobile, and portable station emergency communication facilities for local radio coverage and point-to-point contact between public safety officials and locations, as required.

3. Maintenance of the continuity of communications for the duration of the emergency period or until normal communications channels are substantially restored.

D. ARRL agrees to supply APCO International with lists of emergency coordinators on an annual basis. APCO International agrees to supply ARRL with pertinent information and points of contact from the various chapters on an annual basis.

E. Detailed operating plans for the utilization of the communications facilities of the Amateur Radio service should be developed with APCO International chapters in cooperation with local ARRL ARES, and NTS personnel.

F. APCO International will recommend to its chapters that membership on disaster preparedness and relief committees include representation from the ARRL through its local ARES and NTS organizations.

G. APCO International will recommend to its membership that standing committees be appointed within the chapters as a means of maintaining liaison with local ARRL officials. APCO International will recommend to its chapters that local ARRL officials be admitted to appropriate APCO International training classes.

H. Each organization will distribute copies of this MOU through its field structure, and make copies available to other Organizations, both public and private, which may have an active interest in disaster operations.

This agreement is in force as of the date indicated below, and shall remain in effect unless terminated by written notification from either party to the other.

Signed unto this day, the twenty-fourth of October in the year 1996.



FEMA



MEMORANDUM OF AGREEMENT

BETWEEN

**THE DEPARTMENT OF HOMELAND SECURITY /
FEDERAL EMERGENCY MANAGEMENT AGENCY
("DHS/FEMA")**

AND

**AMERICAN RADIO RELAY LEAGUE, INCORPORATED
("ARRL")**



FEMA



I. PARTIES

The parties to this Agreement are the Department of Homeland Security / Federal Emergency Management Agency (“DHS/FEMA”) and American Radio Relay League (“ARRL”). Both parties are responsible for the goals and activities contained in this Agreement, and shall equally contribute to its success.

A. DHS/FEMA

1. PRIMARY MISSION

The primary mission of DHS/FEMA is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

2. SPECIFIC ACTIVITIES

In support of the primary mission of DHS/FEMA, the Administrator shall:

- a. Lead the Nation’s efforts to prepare for, protect against, respond to, recover from, and mitigate against the risk of natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents; and
- b. Partner with State, local, and tribal governments and emergency response providers, with other Federal agencies, with the private sector, and with nongovernmental organizations to build a national system of emergency management that can effectively and efficiently utilize the full measure of the Nation’s resources to respond to natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents.

B. American Radio Relay League, Incorporated (ARRL)

1. PRIMARY MISSION

The ARRL’s mission is based on five core areas, or “pillars”: Public Service, Advocacy, Education, Technology, and Membership.

- a. ARRL is Public Service: Amateur Radio is a valuable volunteer emergency communications service and public resource.



FEMA



- b. ARRL is Advocacy: The ARRL is Amateur Radio's proactive advocate and representative voice in achieving regulatory and legislative success.
- c. ARRL is Education: The ARRL is its members' primary resource for lifetime learning, certification, and personal achievement in Amateur Radio.
- d. ARRL is Technology: For over 100 years, Amateur Radio operators have contributed to the advancement of the radio art.
- e. ARRL is Membership: The ARRL advances and advocates Amateur Radio through a strong membership base.

Founded in 1914, the American Radio Relay League is the national association for amateur radio in the USA. Today, with more than 160,000 members, the ARRL is the largest organization of radio amateurs in the world. In support of the American Radio Relay League, the Amateur Radio Emergency Service® (“ARES”) consists of licensed amateurs who have voluntarily registered their qualifications and equipment with their local ARES leadership, for communications duty in the public service when disaster strikes.

2. SPECIFIC ACTIVITIES

In support of the primary mission as it relates to emergency management, ARRL will:

- a. Disseminate timely disaster-related information and updates to the Amateur Radio Community through multiple communications channels to ensure that Americans are informed, updated, and prepared in the event of a disaster.
- b. Provide expertise and support related to amateur radio operations and emergency communications.

II. AUTHORITY

This Agreement is authorized under the provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended (“the Stafford Act”), 42 U.S.C. §§ 5195-5195a, 5196, 5196f, 5197, and 5201b; the Homeland Security Act of 2002 (“Homeland Security Act”), Public Law 107-296, as amended, 6 U.S.C. §§ 313 and 314; Executive Order 12148, Federal Emergency Management; and DHS Delegation 9001.1.



FEMA



III. PURPOSE

This Agreement outlines the ways in which DHS/FEMA and ARRL will cooperate to carry out their respective responsibilities, with respect to disaster mitigation, preparedness, response, and recovery operations in the event of a natural or man-made disaster. The Agreement sets forth the terms by which DHS/FEMA and ARRL will provide resources, services, and personnel, as available, in order to strengthen capacity in areas of emergency communications, mass care and emergency assistance, and disaster preparedness, response, and recovery.

IV. RESPONSIBILITIES

A. Both DHS/FEMA and ARRL will, as resources and information are available, and as is appropriate:

1. Plan and support joint initiatives related to preparedness, protection, response, recovery, and mitigation, including but not limited to activities such as:
 - a. Meet as necessary to develop and review ARRL/FEMA MOA milestones.
 - b. Work together to maximize use of common terminology and definitions.
 - c. Engage in joint preparedness and mitigation activities to support community resilience consistent with Presidential Policy Directive 8 (National Preparedness).
 - d. Ensure that all such joint initiatives are at all times compliant with the Communications Act of 1934, 47 U.S.C. § 154 et seq.; Federal Regulations governing the Amateur Radio Service, Title 47 C.F.R. Part 97; and with both parties' mutual priorities.
 - e. Encourage the development of operating plans within FEMA regions such that communication services, equipment, and facilities of the Amateur Radio Service may be suitably utilized.
 - f. Support Amateur Radio training delivery nationally and regionally as able and resources allow.
 - g. Engage in projects that promote efficient and effective public service in emergency management including the Amateur Radio Emergency Service led by American Radio Relay League. This includes, but is not limited to, promoting awareness through web portals and platforms, promoting volunteer



FEMA



engagement for preparedness projects and preparedness events, and informational webinars.

2. Share relevant information, consistent with Section V, Subsection D of this Agreement, in a timely manner before, during, and after disasters:
 - a. Distribute copies of this Agreement to relevant internal stakeholders (such as regional staff or other ARRL entities) and external parties including but not limited to partners, other federal agencies/departments, and Amateur Radio Emergency Service® (“ARES”) affiliates with an interest in disaster declarations, preparedness, response, and recovery.
 - b. Share emergency management information and reports, such as daily operations information, Geographic Information System (“GIS”) disaster products, community demographics, community resources, and other information that both parties agree to share in order to carry out their respective missions.
 - c. Share information regarding organizational programs and initiatives, when possible, including but not limited to public outreach, training opportunities, and career and student internship opportunities.
 - d. Regularly share reports, policies, guidance manuals, brochures, videos, lessons learned, best practices and training resources as permitted.
 - e. Share information with internal offices and regions regarding collaborative efforts between DHS/FEMA and ARRL as appropriate.

B. DHS/FEMA will, as resources and information are available, and as is appropriate:

1. Work with ARRL, through DHS/FEMA Individual Assistance, to coordinate information about and access to other DHS/FEMA Directorates/Offices and other federal agencies/departments, to ensure open communication and cooperation with ARRL.
2. Inform ARRL of Presidentially declared major disaster and emergency declarations through the distribution of the daily DHS/FEMA National Situation Report and other operation reports. Information provided to ARRL should include detailed information, as required and allowable under the Freedom of Information Act, as amended (5 U.S.C. § 552) (“FOIA”), the Privacy Act of 1974, as amended



FEMA



(5 U.S.C. § 552a) ("Privacy Act"), and other laws and executive orders on information disclosure.

3. Notify ARRL of changes in DHS/FEMA Individual Assistance and Public Assistance regulations and procedures.
4. Assist the ARRL when it is engaged in providing relief during and after a major disaster or emergency, such as facilitating temporary access to DHS/FEMA facilities, in the event of a compelling operational need to support DHS/FEMA's disaster response and recovery activities and insofar as governmental regulations, resources and priorities allow.
5. Consider ARRL resources and capabilities as it relates to ESF #6 catastrophic planning and ESF #15 External Affairs, which includes all sectors of the whole community, and to emphasize realistic planning and communications for the potential for complex disaster scenarios.
6. Encourage interaction with the ARRL Section Managers and other appropriate ARRL Field Organizations Officials, in an effort to establish cooperative relationships and closer ties with ARRL Field Organization volunteers.
7. Encourage use of Amateur Radio resources in the development, exercise, and execution of emergency operating plans and exercises.
8. Coordinate with ARRL staff and participate in ARRL emergency management working groups, public policy forums, presentations, and other events at ARRL as resources allow and as appropriate and in compliance with the Federal Advisory Committee Act, Pub. L. No. 92-462 (codified at 5 U.S.C. App.).

C. ARRL will, as resources and information are available, and as is appropriate:

1. Share operational reports with DHS/FEMA personnel including, but not limited to, the Voluntary Agency Liaisons.
2. Work with DHS/FEMA to disseminate disaster program information and public messaging, including, but not limited to, the availability of DHS/FEMA assistance in connection with Presidentially-declared major disasters and emergencies.
3. Encourage partnership with DHS/FEMA, Ready.gov, Citizen Corps Councils and Citizen Corps partner programs and affiliates to support community disaster awareness and preparedness campaigns and programs where affiliates exist and are able to participate.



FEMA



4. Share awareness of any opportunities for emergency management planning, preparedness, mitigation, response, or recovery training or education.
5. Identify, develop, strengthen, and support capabilities for ESF #6 (including, but not limited to, volunteer mobilization) and ESF #15 (including, but not limited to, disseminating preparedness and disaster information to the public) through planning, training, exercises, and operations.
6. Make reasonable efforts to respond in an organizational capacity with on-the-ground site leadership, in disaster areas with local ARRL employees and mobilized volunteers, where local affiliates are able and resources allow, and when deemed necessary by DHS/FEMA.

V. OTHER PROVISIONS

- A. Nothing in this Agreement is intended to conflict with current law or regulation or the directives of DHS/FEMA or ARRL. If a term of this agreement is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.
- B. Nothing in this Agreement is intended to restrict the authority of either party to act as provided by statute or regulation.
- C. Nothing in this Agreement shall be interpreted as affording DHS/FEMA or ARRL any role in the content or programming decisions of either DHS/FEMA or ARRL, respectively.
- D. Any information shared under this Agreement will comply with the Privacy Act of 1974, as amended (5 U.S.C. § 552a) ("Privacy Act"), and to the extent required and allowable, the Freedom of Information Act, as amended (5 U.S.C. § 552) ("FOIA"), and any other applicable statute, Executive Order, or regulation pertaining to information disclosure.
- E. The use of Federal facilities, supplies and services undertaken under this Agreement will be in compliance with regulations promulgated by DHS/FEMA under the Stafford Act guaranteeing non-discrimination. (See 44 C.F.R. § 206.11.)
- F. This Agreement is between DHS/FEMA and ARRL and does not confer or create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by any third person or party (public or private) against the United



FEMA



States, its agencies its officers, or any person; or against ARRL, their officers or employees or any other person.

- G. This Agreement creates neither a partnership nor a joint venture, and neither party has the authority to bind the other. This agreement is not intended to be enforceable in any court of law or dispute resolution forum.
- H. The parties will use or display each other's name, emblem, or trademarks only in the case of particular projects and only with the prior written consent of the other party. The Department of Homeland Security ("DHS") seal is protected by 18 U.S.C. §§ 506, 701, and 1017, among other laws, and use of the seal is controlled by the DHS Office of Public Affairs through DHS Management Directive No. 0030 (MD 0030). Written permission is required to use the DHS Seal.
- I. This Agreement is not a fiscal or funds obligation document. Any services, equipment or personnel provided to DHS/FEMA to accomplish the goals anticipated under this agreement are done so without expectation of reimbursement or the payment of fees related to the provision of such services, equipment or personnel.

VI. POINTS OF CONTACT

DHS/FEMA and ARRL will designate key people within their respective organizations to implement the Agreement. The points of contacts will direct and coordinate partnership activities to ensure that mutual benefits and interests are served. The respective offices responsible for spearheading the implementation are:

A. DHS / FEMA

Ted Okada
Chief Technology Officer
Federal Emergency Management Agency
500 C Street SW, Room 425J
Washington, DC 20472
Office: (202) 212-2176
Ted.Okada@fema.dhs.gov



FEMA



Zachary Usher

Section Chief, Individual Assistance
Voluntary Agency/Donations Coordination and Disaster Recovery Center Section
Federal Emergency Management Agency
500 C Street SW
Washington, DC 20472
Office: 202-646-3673
Fax: 540-504-2768
Zachary.Usher@fema.dhs.gov

Gwen Camp

Director
Individual and Community Preparedness Division
Federal Emergency Management Agency
800 K Street NW
Washington, DC 20472
Office: 202-786-9550
Fax: 202-786-9920
Gwen.Camp@fema.dhs.gov

Alexandria Travis

Director, Strategic Communications, Office of External Affairs
Federal Emergency Management Agency
500 C Street SW
Washington, DC 20472
Office: 202-646-4526
Alexandra.Travis@fema.dhs.gov

B. ARRL

Mike Corey, KI1U

Emergency Preparedness Manager
ARRL – The National Association for Amateur Radio™
225 Main Street
Newington, CT 06111
Office: 860 594 0222
KI1U@arrl.org



FEMA



VII. EFFECTIVE DATE

The terms of this Agreement will become effective upon the signature of both parties.

VIII. MODIFICATION

This Agreement may be modified upon the mutual, written consent of the parties.

IX. TERMINATION

The terms of this Agreement, as modified with the consent of both parties, will remain in effect until September 30, 2018, or until terminated by either or both parties. The Agreement may be extended by mutual, written Agreement of the parties. Either party upon sixty (60) days written notice to the other party may terminate this Agreement.

APPROVED BY:

W. Craig Fugate
W. Craig Fugate

W. Craig Fugate
Administrator
Federal Emergency Management Agency

Date: 7/18/2014

Kay C. Craigie
Kay C. Craigie

Kay C. Craigie
President
American Radio Relay League

Date: July 18, 2014

MEMORANDUM OF UNDERSTANDING BETWEEN THE NATIONAL WEATHER SERVICE AND THE AMERICAN RADIO RELAY LEAGUE, INC.

I. PURPOSE

The purpose of this document is to state the terms of a mutual agreement (Memorandum of Understanding) between National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) and the American Radio Relay League, Inc. (ARRL), that will serve as a framework within which volunteers of the ARRL may coordinate their services, facilities, and equipment with NWS in support of nationwide, state, and local early weather warning and emergency communications functions. It is intended, through joint coordination and exercise of the resources of ARRL, NWS, and Federal, State and local governments, to enhance the nationwide posture of early weather warning and readiness for any conceivable weather emergency.

II. RECOGNITION

The National Weather Service recognizes that the ARRL is the principal organization representing the interests of more than 690,000 U.S. radio amateurs. Because of its field organization of trained and experienced communications experts, Amateur Radio Service volunteers can be of valuable assistance in early severe weather warning and tornado spotting.

ARRL recognizes the National Weather Service's statutory responsibility to provide the following meteorological services for the people of the United States:

1. NOAA's National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy; and,
2. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

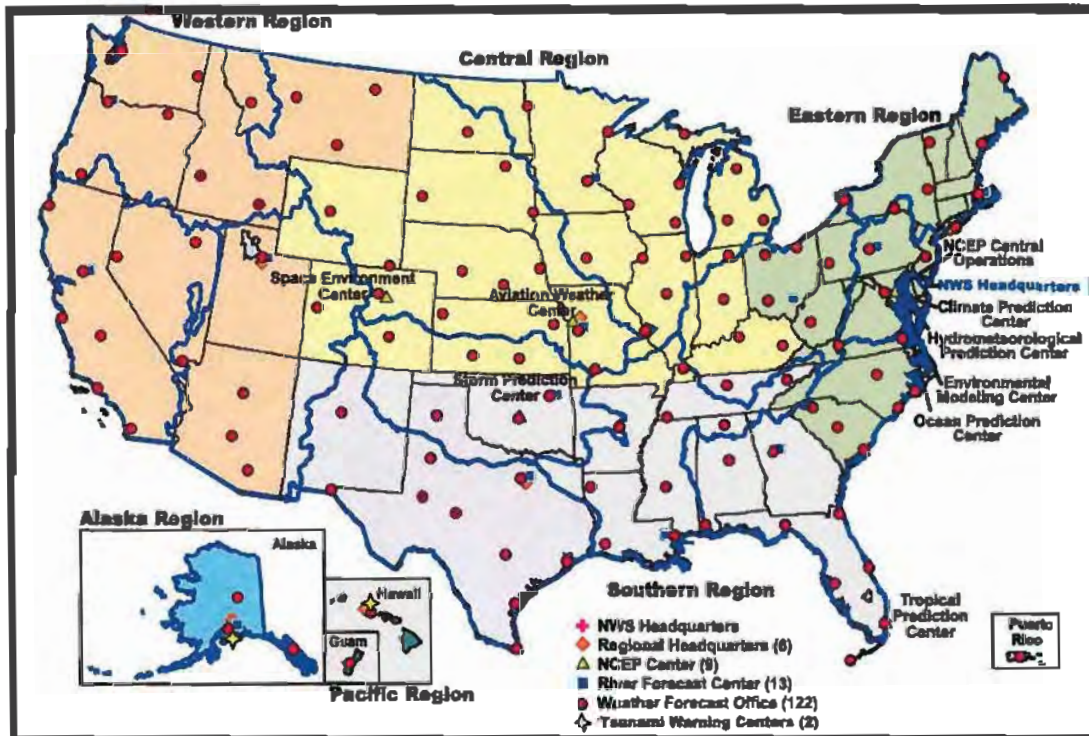
III. ORGANIZATION OF THE AMERICAN RADIO RELAY LEAGUE

ARRL is a noncommercial membership organization of radio amateurs, organized for the promotion of interest in Amateur Radio communication and experimentation, for the establishment of networks to provide communications in the event of disasters or other emergencies, for the advancement of the radio art and of the public welfare, for the representation of the radio amateur in legislative matters, and the maintenance of fraternalism and a high standard of conduct. A primary responsibility of the Amateur Radio Service, as established by the Federal Communications Commission, is the rendering of public service communications for the general public, particularly in times of emergency. Using Amateur Radio operators in the amateur frequency bands, the ARRL has been serving the public, both directly and through government and relief agencies, for more than ninety years. To that end, the League created the Amateur Radio

Emergency Service ® (ARES) ® and the National Traffic System (NTS). The League's Field Organization consists of seventy-one administrative sections managed by elected Section Managers. A Section is a League-created political boundary roughly equivalent to states (or portions thereof). The Section Manager appoints expert assistants to administer the various emergency communications and public service programs in the section. Each section has a vast cadre of volunteer appointees to perform the work of Amateur Radio at the local level, under the supervision of the Section Manager and his/her assistants.

IV. ORGANIZATION OF THE NATIONAL WEATHER SERVICE

National Oceanic and Atmospheric Administration's (NOAA) National Weather Service consists of 122 weather forecast offices, 13 river forecast centers, 9 national centers, and other support offices. NWS scientists provide weather, water, and climate forecasts and warnings for the United States for the protection of life and property, and the enhancement of the national economy. The NWS' national headquarters is located in Washington, D.C., and there are six regional headquarters: Eastern, Southern, Central, Western, Alaska, and Pacific.



Skywarn® is the National Weather Service's severe weather spotting program. Radio amateurs have assisted as communicators and spotters since the program's inception in the late 1960s. In areas where tornadoes and other severe weather have been known to threaten, NWS recruits volunteers, and trains them in proper weather spotting procedures. These dedicated citizens help keep their local community safe by conveying severe weather reports to their local NWS Forecast Office. Skywarn spotters are integral to the success of our Nation's severe weather warning system.

Warning Coordination Meteorologists (WCMs) serve as the NWS' principal liaison with its customers and partners in the evaluation and improvement of its products and services. WCMs are responsible for maintaining the working partnership with the local ARRL Skywarn organizations. There are 132 NWS Warning Coordination Meteorologists (WCMs) located throughout the country: 122 Weather Forecast Offices, 6 Regional Headquarters, National Headquarters, the Storm Prediction Center, the National Hurricane Center, and the National Aviation Weather Center.

V. PRINCIPLES OF COOPERATION

A. ARRL agrees to encourage its volunteer Field Organization appointees, especially the Amateur Radio Emergency Service, to contact and cooperate with National Weather Service Warning Coordination Meteorologists for the purpose of establishing organized Skywarn networks with radio amateurs serving as communicators and spotters, consistent with rules and regulations of the Federal Communications Commission.

B. ARRL further agrees to encourage its Section management teams to provide specialized communications and observation support on an as-needed basis for NWS offices in other weather emergencies such as hurricanes, snow and heavy rain storms, and other severe weather situations.

C. The National Weather Service agrees to work with ARRL Section Amateur Radio Emergency Service volunteers to establish Skywarn networks, and/or other weather emergency alert and relief systems. The principal point of contact between the ARRL Section and local NWS offices are the Warning Coordination Meteorologists. Local Warning Coordination Meteorologist contact information is available at: www.stormready.noaa.gov/contact.htm. Contact information for ARRL Section volunteer leaders is available at www.arrl.org/sections. The national contact for ARRL is the Emergency Preparedness Manager at [ARRL](http://www.arrl.org) Headquarters, Newington, CT 06111. The national contact for NWS Warning Coordination Meteorologists is the [Office of Climate, Weather and Water Services](#), WCM Program, 1325 East-West Highway, Silver Spring, MD 20910.

Kay Craigie, N3KN
Kay Craigie, N3KN
President, American Radio Relay League, inc.

Date May 12, 2011

David B. Caldwell

Date 6/9/2011

Printed Name, David B. Caldwell
Title OCWWS Director

NOAA National Weather Service

**Between
REACT International, Inc.,
And
American Radio Relay League, Inc.**

PURPOSE

1. This purpose of this document is to state the terms of a mutual agreement (Memorandum of Understanding) between the American Radio Relay League, Incorporated (ARRL), and REACT International, Inc. (Radio Emergency Associated Communication Teams), that will serve as a framework within which both organizations may coordinate the development of protocols and procedures for communication in emergency and disaster situations. Each organization comprises volunteers and professional staff in support of their respective educational and technical programs and efforts. It is intended that this agreement will promote joint coordination and exercise of the resources of both ARRL and REACT to recognize the potential and capability of individual members of both organizations to facilitate the flow of information to and from the public during disaster and emergency situations.

RECOGNITION

2. ARRL recognizes REACT as a public service organization of private radio operators, which provides radio communications to local communities during emergencies. REACT coordinates efforts with other emergency organizations including the police, FEMA, NOAA, RACES, ARES, NVOAD, the Salvation Army, and the American Red Cross. REACT's other activities include participation in safety radio assistance for community events, hosting "Safety Wake Breaks" on holiday weekends along highways, and developing the use of radio services as additional sources of communications in emergencies. REACT accomplishes these goals through REACT Teams located through the United States and the world. Members of these Teams also have oversight authority over different Committees. The committees are responsible for establishing and maintaining the orderly flow of business within their specialties. REACT's primary mission is to improve their communities through the provision of voluntary, two-way communications that serve the interests of public safety.

3. REACT recognizes ARRL as a noncommercial membership association of radio amateurs, organized for the promotion of interest in amateur radio communication and experimentation. It is the principal representative of the Amateur Service and Amateur Satellite Services in the United States, and is the Secretariat for the International Amateur Radio Union, the worldwide association of national amateur radio societies. ARRL coordinates efforts with other emergency organizations including the police, FEMA, NOAA, RACES, ARES, NVOAD, the Salvation Army, and the American Red Cross. ARRL was organized for the establishment of networks to provide communications in the event of disasters or other emergencies; for the advancement of the radio art and of the public welfare; the fostering of education in the field of electronic

communications; the promotion and conduct of research and development to further the development of electronic communication; the dissemination of technical, education, and scientific information relating to electronic communication; the printing and publishing of documents, books, electronic media, and publications necessary or incidental to any of the above purposes; for the representation of the radio amateur in regulatory matters; and to promote fraternalism and high standards of conduct among radio amateurs. It serves its members by protecting and enhancing spectrum access and providing a national resource to the public.

PRINCIPLES OF COOPERATION

4. In order that the parties may cooperate and utilize their resources from time to time to optimum mutual benefit to both parties, the following principles and methods are agreed upon:

4.1 The parties will correspond with each other and exchange certain materials and engage in certain activities in order to encourage and broaden interest, understanding, and appreciation of radio telecommunications technology and its value to the public in emergency situation.

4.2 The parties will work to establish protocols and procedures that foster safe and efficient radio services communication to help the public during emergencies and disaster relief. The parties, through these protocols and procedures, will try to eliminate duplicative or technically inferior service to the community in emergencies.

4.3 The parties will work with each other in times of emergency or disaster to meet the communications needs of the public.

4.4 The parties will generally encourage ongoing liaison with each other and urge members of both organization to develop increasingly effective communications and cooperation.

5. This memorandum shall take effect upon its signing by authorized representatives of each organization. It may be amended by mutual agreement of the parties and will remain in effect until terminated by either party, upon ninety (90) days advance written notice to the other. REACT and ARRL will periodically review this agreement and coordinate such revisions as may be necessary. Nothing herein will create any joint venture, partnership, or other business association, nor shall either party enter into any obligation or commitment on behalf of the other.

Date _____

Date _____

Jim D. Haynie, President

Charles A. Thompson, President

The American Radio Relay League, Incorporated

REACT International, Inc.

225 Main Street

5210 Auth Road

Newington, Connecticut 06111-1494

Suitland, Maryland 20746-4330

Purpose

The purpose of the agreement between the American Radio Relay League, Incorporated and The Salvation Army in the United States of America is to establish a framework for cooperation between the two organizations for relief of disaster victims. It is intended that coordination of facilities, equipment and personnel of the two organizations may provide better service of victims of natural or man-made disasters.

Responsibilities

The American Radio Relay League, since its inception in 1914 up to the present, has observed a self-imposed responsibility for the welfare and conduct of the Amateur Radio Service as regulated by Part 97 of FCC's Rules and Regulations. Principal in that responsibility has been the rendition of public service and communication through the handling of third party communications for the general public, and communications in time of emergency when normal communications are not available. Using amateur radio operators in the amateur bands, the American Radio Relay League has been in the forefront of this activity in serving the general public directly and through government and welfare agencies, and continues to do so. To that end, in 1935, the Amateur Radio Emergency Corps was organized; and in 1949, the National Traffic System was established.

The Salvation Army has, for many years, provided emergency services to individuals and groups in time of disaster. This service has received public recognition. The Congress of the United States of America enacted the Disaster Relief Act of 1970, which, as amended by the Disaster Relief Act of 1974, Public Law 93-288, officially recognized the capabilities of The Salvation Army.

Since that time, The Salvation Army has entered into specific agreements with other agencies concerned with emergency and disaster relief services both public and private.

Recognition

The Salvation Army recognizes that the American Radio Relay League, because of its organized emergency communications facilities, can be of invaluable assistance in providing communications during emergencies and disasters when normal lines of communication are disrupted.

The American Radio Relay League, Incorporated, recognizes The Salvation Army as an agency whose corporate charter merits sanction by the Federal government to provide community aid in times of disaster. It further recognizes The Salvation Army as a channel for voluntary service during such time.

Organizations of the American Radio Relay League and The Salvation Army

The American Radio Relay League (ARRL) is the principal organization representing the interests of U.S. Radio Amateurs. It is governed by a Board of fifteen directors elected by the membership. For more than 80 years, ARRL has been the standard-bearer in amateur radio affairs throughout the U.S.

For emergency communications, ARRL sponsors the Amateur Radio Emergency Service (ARES), a division of its over-all public service organization. The ARES is organized under local emergency coordinators, with local plans coordinated through section (usually state) emergency coordinators and a public service coordinator located at ARRL's Newington, Connecticut international headquarters. The National Traffic System (NTS) functions daily in handling medium and long haul message traffic, and is ready at all times to function in an emergency situation.

The Salvation Army in the United States of America has its national headquarters in Alexandria, Virginia, and is incorporated under the laws of New Jersey. For administrative purposes, the United States is divided into four territories, each having its own headquarters and corporate structure. These territories and headquarters are:

Reporting to each territorial office are from nine (9) to eleven (11) divisional administrative centers, strategically located in the territories. Salvation Army personnel in these centers direct activities in from one (1) to four (4) states. Reporting to divisional centers are local corps community centers (churches) and social service institutions of other types; also reporting to divisional centers are numerous local volunteer committees operating in smaller communities.

Principles of Cooperation

In order that dependable communications might be maintained and that relief operations might be quickly expedited, the American Radio Relay League, Incorporated and The Salvation Army agree that:

- A. Each organization will, through channels to its local units, encourage ongoing liaison with the other, urging both staff and volunteers to create and maintain adequate communication and effective relationships at all levels.
- B. Each organization will participate in cooperative pre-disaster planning and training programs at local, regional and national levels.

C. Each organization will, in times of disaster, cooperate to meet the needs of disaster victims, and of the agencies and organizations attempting to serve them. Each will make its facilities, resources, and capabilities accessible to the other, in accordance with established plans and procedures for cooperative service.

D. Each organization will work through its own lines of authority and respect the lines of authority of the other.

E. Each organization will distribute copies of this agreement through channels to its own field units, and to other organizations, both public and private, which may have an active interest in emergency and disaster relief.

revised January 1996

Incident Command System Forms

ICS 205 Incident Radio Communications Plan

Purpose. The Incident Radio Communications Plan (ICS 205) provides information on all radio frequency or trunked radio system talkgroup assignments for each operational period. The plan is a summary of information obtained about available radio frequencies or talkgroups and the assignments of those resources by the Communications Unit Leader for use by incident responders. Information from the Incident Radio Communications Plan on frequency or talkgroup assignments is normally placed on the Assignment List (ICS 204).

Preparation. The ICS 205 is prepared by the Communications Unit Leader and given to the Planning Section Chief for inclusion in the Incident Action Plan.

Distribution. The ICS 205 is duplicated and attached to the Incident Objectives (ICS 202) and given to all recipients as part of the Incident Action Plan (IAP). All completed original forms must be given to the Documentation Unit. Information from the ICS 205 is placed on Assignment Lists.

Notes:

- The ICS 205 is used to provide, in one location, information on all radio frequency assignments down to the Division/Group level for each operational period.
- The ICS 205 serves as part of the IAP.

Block Number	Block Title	Instructions
1	Incident Name	Enter the name assigned to the incident.
2	Date/Time Prepared	Enter date prepared (month/day/year) and time prepared (using the 24-hour clock).
3	Operational Period <ul style="list-style-type: none"> • Date and Time From • Date and Time To 	Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
4	Basic Radio Channel Use	Enter the following information about radio channel use:
	Zone Group	
	Channel Number	Use at the Communications Unit Leader's discretion. Channel Number (Ch #) may equate to the channel number for incident radios that are programmed or cloned for a specific Communications Plan, or it may be used just as a reference line number on the ICS 205 document.
	Function	Enter the Net function each channel or talkgroup will be used for (Command, Tactical, Ground-to-Air, Air-to-Air, Support, Dispatch).
	Channel Name/Trunked Radio System Talkgroup	Enter the nomenclature or commonly used name for the channel or talkgroup such as the National Interoperability Channels which follow DHS frequency Field Operations Guide (FOG).
	Assignment	Enter the name of the ICS Branch/Division/Group/Section to which this channel/talkgroup will be assigned.
	RX (Receive) Frequency (N or W)	Enter the Receive Frequency (RX Freq) as the mobile or portable subscriber would be programmed using xxx.xxxx out to four decimal places, followed by an "N" designating narrowband or a "W" designating wideband emissions. The name of the specific trunked radio system with which the talkgroup is associated may be entered across all fields on the ICS 205 normally used for conventional channel programming information.
	RX Tone/NAC	Enter the Receive Continuous Tone Coded Squelch System (CTCSS) subaudible tone (RX Tone) or Network Access Code (RX NAC) for the receive frequency as the mobile or portable subscriber would be programmed.

Block Number	Block Title	Instructions
4 (continued)	TX (Transmit) Frequency (N or W)	Enter the Transmit Frequency (TX Freq) as the mobile or portable subscriber would be programmed using xxx.xxxx out to four decimal places, followed by an "N" designating narrowband or a "W" designating wideband emissions.
	TX Tone/NAC	Enter the Transmit Continuous Tone Coded Squelch System (CTCSS) subaudible tone (TX Tone) or Network Access Code (TX NAC) for the transmit frequency as the mobile or portable subscriber would be programmed.
	Mode (A, D, or M)	Enter "A" for analog operation, "D" for digital operation, or "M" for mixed mode operation.
	Remarks	Enter miscellaneous information concerning repeater locations, information concerning patched channels or talkgroups using links or gateways, etc.
5	Special Instructions	Enter any special instructions (e.g., using cross-band repeaters, secure-voice, encoders, private line (PL) tones, etc.) or other emergency communications needs). If needed, also include any special instructions for handling an incident within an incident.
6	Prepared by (Communications Unit Leader) <ul style="list-style-type: none"> • Name • Signature • Date/Time 	Enter the name and signature of the person preparing the form, typically the Communications Unit Leader. Enter date (month/day/year) and time prepared (24-hour clock).

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional):		
2. To (Name and Position):		
3. From (Name and Position):		
4. Subject:	5. Date: Date	6. Time HHMM
7. Message:		
8. Approved by: Name: _____ Signature: _____ Position/Title: _____		
9. Reply:		
10. Replied by: Name: _____ Position/Title: _____ Signature: _____		
ICS 213	Date/Time: Date	

ICS 213 General Message

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

Preparation. The ICS 213 may be initiated by incident dispatchers and any other personnel on an incident.

Distribution. Upon completion, the ICS 213 may be delivered to the addressee and/or delivered to the Incident Communication Center for transmission.

Notes:

- The ICS 213 is a three-part form, typically using carbon paper. The sender will complete Part 1 of the form and send Parts 2 and 3 to the recipient. The recipient will complete Part 2 and return Part 3 to the sender.
- A copy of the ICS 213 should be sent to and maintained within the Documentation Unit.
- Contact information for the sender and receiver can be added for communications purposes to confirm resource orders. Refer to 213RR example (Appendix B)

Block Number	Block Title	Instructions
1	Incident Name (Optional)	Enter the name assigned to the incident. This block is optional.
2	To (Name and Position)	Enter the name and position the General Message is intended for. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
3	From (Name and Position)	Enter the name and position of the individual sending the General Message. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
4	Subject	Enter the subject of the message.
5	Date	Enter the date (month/day/year) of the message.
6	Time	Enter the time (using the 24-hour clock) of the message.
7	Message	Enter the content of the message. Try to be as concise as possible.
8	Approved by <ul style="list-style-type: none"> • Name • Signature • Position/Title 	Enter the name, signature, and ICS position/title of the person approving the message.
9	Reply	The intended recipient will enter a reply to the message and return it to the originator.
10	Replied by <ul style="list-style-type: none"> • Name • Position/Title • Signature • Date/Time 	Enter the name, ICS position/title, and signature of the person replying to the message. Enter date (month/day/year) and time prepared (24-hour clock).

ICS 214 Activity Log

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

Preparation. An ICS 214 can be initiated and maintained by personnel in various ICS positions as it is needed or appropriate. Personnel should document how relevant incident activities are occurring and progressing, or any notable events or communications.

Distribution. Completed ICS 214s are submitted to supervisors, who forward them to the Documentation Unit. All completed original forms must be given to the Documentation Unit, which maintains a file of all ICS 214s. It is recommended that individuals retain a copy for their own records.

Notes:

- The ICS 214 can be printed as a two-sided form.
- Use additional copies as continuation sheets as needed, and indicate pagination as used.

Block Number	Block Title	Instructions
1	Incident Name	Enter the name assigned to the incident.
2	Operational Period <ul style="list-style-type: none"> • Date and Time From • Date and Time To 	Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
3	Name	Enter the title of the organizational unit or resource designator (e.g., Facilities Unit, Safety Officer, Strike Team).
4	ICS Position	Enter the name and ICS position of the individual in charge of the Unit.
5	Home Agency (and Unit)	Enter the home agency of the individual completing the ICS 214. Enter a unit designator if utilized by the jurisdiction or discipline.
6	Resources Assigned	Enter the following information for resources assigned:
	<ul style="list-style-type: none"> • Name 	Use this section to enter the resource's name. For all individuals, use at least the first initial and last name. Cell phone number for the individual can be added as an option.
	<ul style="list-style-type: none"> • ICS Position 	Use this section to enter the resource's ICS position (e.g., Finance Section Chief).
	<ul style="list-style-type: none"> • Home Agency (and Unit) 	Use this section to enter the resource's home agency and/or unit (e.g., Des Moines Public Works Department, Water Management Unit).
7	Activity Log <ul style="list-style-type: none"> • Date/Time • Notable Activities 	<ul style="list-style-type: none"> • Enter the time (24-hour clock) and briefly describe individual notable activities. Note the date as well if the operational period covers more than one day. • Activities described may include notable occurrences or events such as task assignments, task completions, injuries, difficulties encountered, etc. • This block can also be used to track personal work habits by adding columns such as "Action Required," "Delegated To," "Status," etc.
8	Prepared by <ul style="list-style-type: none"> • Name • Position/Title • Signature • Date/Time 	Enter the name, ICS position/title, and signature of the person preparing the form. Enter date (month/day/year) and time prepared (24-hour clock).



ARRL The national association for
AMATEUR RADIO®

ISBN: 978-1-62595-029-1



9 781625 950291