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# Training and Certifications for ARES<sup>®</sup> Operators

If you don't know what you should know, you'll want to know about this Emcomm curriculum.

In the landmark report of the ARRL National Emergency Response Planning Committee filed with the League's Board of Directors in 2007, Chairman Kay Craigie, N3KN (now ARRL President) wrote for the panelists when she summed up the issue of training and certification for ARES<sup>®</sup> volunteers:

For many years, Amateur Radio has longed to be taken seriously by governmental authorities as a professional-quality resource in disaster response. Although there are areas of the country where achieving and maintaining emergency management agencies' respect is still a struggle, Amateur Radio's service during 9/11 and the major hurricane disasters of the 21<sup>st</sup> century has brought us a new level of respect and new opportunities at the national level.

Being taken seriously as a resource comes with a price, however. It is a price that must be paid by individual volunteers, not in dollars but in precious personal time. When the federal government instituted the National Incident Management System (NIMS), it imposed a set of requirements on state and local emergency management agencies and their personnel. Affected personnel included not only paid employees of emergency management and related agencies but also volunteers such as those in volunteer fire companies, ARES<sup>®</sup>, and RACES. If the emergency management agencies are to continue receiving federal funds, personnel must complete a number of FEMA training courses having to do with the Incident Command System (ICS) and NIMS. Individuals who do not complete the training will not be allowed to participate, even as volunteers.

These FEMA courses are free of charge, available online or sometimes in person at emergency management offices, and not particularly difficult. The courses are useful in familiarizing volunteers with the specialized vocabulary and principles of the Incident

Command System and showing where communications fits into the ICS structure. This is valuable knowledge, because if radio amateurs — particularly those in leadership positions — cannot "talk the talk," then authorities may well assume that we cannot "walk the walk."

These formal requirements are here to stay and more may follow. At the national level, Amateur Radio has earned the respect we always wanted, bringing us closer to the emergency management establishment. The challenge now is persuading both casual ARES<sup>®</sup> volunteers and experienced volunteers to meet the requirements that follow from being part of the system. The national-level ARRL must be aware of that and develop ways to help local and section ARES<sup>®</sup> officials bring their volunteers, both old-timers and newcomers, into the new era.

## Current Trends

Since the time of the report, the ARRL — along with the amateur community at large — has started to meet President Craigie's challenges and further embrace emergency communications and ARES<sup>®</sup>. This trend started with 9/11 and continued through Hurricane Katrina. There has been a concomitant rise in interest in the ARRL and FEMA courses by Emcomm operators, both serious and casual. Conversation on ICS/NIMS topics is now common on nets and in club meetings. The training scene has evolved rapidly in the past few years. ARRL HQ has ramped up its training resources and added a dedicated staff member for support.

In a recent survey by the ARRL Emergency Communications Advisory Committee (ECAC) of the ARRL Field Organization on ARES<sup>®</sup> topics, 55% of the ARRL sections require minimum training for active members. Of those sections requiring training, 38% require the ARRL EC-001, *Introduction to Emergency Communications* course; 75% require the FEMA IS-100, *Introduction to the Incident Command System*; 71% require IS-200, *ICS for Single Resources and Initial Action Incidents*; 67% require IS-700, *Introduction to the National*

*Incident Management System* (NIMS), and 51% require IS-800, *National Response Framework* (NRF).

Of served agencies, it was reported that 78% require specific training of their volunteers. Seventy-five percent reported that most ARES<sup>®</sup> members are ICS trained.

## Recommended Courses

I've run numerous recommendations in the ARES<sup>®</sup> E-Letter and have subsequently received more recommendations, which were then published, to enhance the value of our program and operators. In an effort to summarize these recommendations and give the ARES<sup>®</sup> operator some idea of useful courses to take, let's offer the following:

- The ARRL EC-001 — This online course is designed to provide basic knowledge and tools for any emergency communications volunteer. Prerequisites include IS-100 and IS-700. The ARRL also recommends IS-250, *Emergency Support Function 15* and IS-288, *The Role of Voluntary Agencies in Emergency Management*.
- American Red Cross or American Heart Association CPR and Automatic External Defibrillator (AED) courses — These courses are available at hospitals, colleges, and Red Cross offices and centers. Providing emergency communications in an actual emergency increases the likelihood of an ARES<sup>®</sup> volunteer having to assist someone needing CPR.
- IS-100 — This course is a must-have not only because it is a requirement of most agencies, but because it imparts an understanding of the contemporary emergency management landscape. How can you function as a viable emergency communicator without a basic idea of what is going on around you on a disaster scene? Government agencies manage emergencies and disasters using the ICS as a standard playbook. You need to know how it works.
- IS-700 — This course introduces NIMS, which serves as a "consistent nationwide



template to enable all government, private-sector and nongovernmental organizations to work together during domestic incidents." The NIMS course is the other shoe for the government's emergency response framework and as such should be near the top of any ARES® volunteer's course list.

■ IS-200 — According to FEMA, this course is "designed to enable personnel to operate efficiently during an incident or event within the ICS. IS-200 provides training and resources for ICS supervisory procedures."

■ IS-230, *Fundamentals of Emergency Management* — Garth Kennedy, W9KJ, the emergency manager for the Naperville, Illinois EMA, recommends this course: "I manage a large emergency management agency. Most of our volunteers do not understand what constitutes 'Emergency Management.' As a result, we require IS-230 for any certification level in all of our specialties. I recommend adding this course to your list so ARES® operators will more fully understand the environment in which they work."

Mike Corey, K11U, ARRL HQ's Emcomm planner and response manager, recommends the following core courses. For the rank-and-file ARES® field operator: ARRL EC-001, a basic SKYWARN class, IS-100, IS-200 and CPR/First Aid/AED.

For ARES® leaders including Emergency Coordinators, District ECs and Section Emergency Coordinators, ARRL HQ recommends ARRL EC-016, *Public Service and Emergency Communications Management for Radio Amateurs*, designed to train Amateur Radio operators for leadership and managerial roles organizing other volunteers. HQ also recommends an advanced SKYWARN class, IS-700, IS-800 and IS-802, *Emergency Support Function #2 – Communications*. And finally, Red Cross Disaster Services training is recommended, even if you do not work directly with the Red Cross. You should know how the Red Cross conducts field operations, an issue that was raised during the Hurricane Katrina mega-response.

#### Bottom Line

I recently toured a local EOC that is probably typical of most EOCs in size and functioning. The emergency manager turned on his projector to show me his database of volunteer resources: a large matrix of volunteers typed by their function, training in FEMA courses and others. It seemed to me, for the future of ARES®, the writing was, literally, on the wall.

## OREGON ARES SHAKE EX 2011: AN EARTHQUAKE DISASTER SET

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In the future a major earthquake will strike the Pacific Northwest. Within half an hour, a tsunami similar to the one that devastated Japan on March 11, 2011, will occur along the Oregon Coast.

On April 9, 2011, 1 month after the disastrous Japanese earthquake and tsunamis, Oregon ARES volunteers conducted a statewide simulated emergency test (SET) to determine their readiness to respond to just such a disaster. Although the SET was planned well before the events in Japan, the reality that similar events could happen in Oregon added to the realism of the exercise.

Geologists tell us that, historically, earthquakes in our region occur at 300 year intervals. Should Oregon be struck there would likely be catastrophic, widespread damage and an immediate need for ARES support.

The SHAKE EX 2011 SET was designed to test ARES ability to exchange very high volumes of written messages between the county Emergency Managers and the Oregon Emergency Management (OEM) office. Much of the radio traffic exchange occurred over the Oregon ARES Digital Network (OADN), which uses Winlink HF and VHF radio systems funded by the State of Oregon.

In addition to statewide communications activities, many counties held their own local drills in coordination with their local Emergency Managers, medical facilities and Community Emergency Response Teams (CERT). The local drills typically included HF radio systems at remote locations using portable antennas. Local drills included the transmission of photographs by radio to county and state EOCs and relaying simulated damage reports between stations.

About 130 members of Oregon ARES participated throughout the state sending and receiving about 2000 messages within the 6 hour SET period. Most of the traffic was sent by HF and VHF using the Winlink OADN system. During the height of the SET activity, OEM operators were receiving about one message per minute from ARES

operators throughout Oregon.

The Oregon ARES Digital Network consists of HF radios equipped with Pactor 3 modems as well as V/UHF radios equipped with TNCs for local Winlink RMS gateways. Both radio systems are used with laptop computers loaded with Winlink *Airmail 3* software. With a few exceptions, each county EOC has an identical set of equipment. Training of ARES units receiving the equipment was completed in 2009 during installation. Since then, quarterly connectivity exercises and the twice-yearly statewide SETS have helped insure that the OADN system remains fully operational.

#### Lessons Learned

During a disaster of the scale anticipated during this SET, there will likely be an overwhelming volume of written and tactical traffic between emergency managers. At such times, it is essential that the flow of messages from ARES radio operators to and from these officials be accurate, efficient and timely. Although the technology used by ARES units to communicate worked well,



On the left, Don Kendall, N6VKW, Curry County (Oregon) Emergency Services Coordinator, is explaining to Bob Wilkinson, W7VN, ARES EC for Curry County the potential for transportation disruption from the probable collapse of the Patterson Bridge across the Rogue River in the predicted earthquake and tsunami.

[Lorraine Wilkinson W7RFG]

the flood of messages being received at many EOCs overwhelmed everyone's ability to log, manage and distribute them. Several options have been proposed to deal with this data management issue and they are discussed in the March issue of the *ARES E-Letter*.

The demonstrated ability of Oregon ARES volunteers to successfully support the large-volume written and tactical traffic demands of Oregon's emergency managers under the limited restrictions imposed during this SET were impressive. The tougher operating conditions imposed by a real disaster will prove to be the ultimate test, of course.