

NH-ARES Exercise and Training Ideas

General training goals for all exercises: Regardless of the scenario, these goals should be set for every drill:

1. Use of tactical call signs and legal FCC identification
2. Plain language (no jargon)
3. Use of proper ITU phonetics
4. Tight and professional sounding net

Don't forget to say "This is a drill" often.

Field Exercises

Repeater and simplex coverage mapping: Check primary and backup repeater coverage at all known agency locations and other critical sites. Simulate total repeater outage and test simplex paths between all locations. Identify any problem paths and consider work-arounds, including hilltop relays. Try various power levels and antenna combinations. Keep records of all findings and readings for later incorporation into specific plans and equipment goals for each location.

HF Winlink field operations: Set up several field stations on HF and attempt to send messages to each other. **Variations:** Try using Airmail to send point to point messages without going through the Winlink servers. Try it on VHF-FM or SSB or through a repeater.

SAR Exercise: Put stations in vehicles, and on foot and ATVs using FM simplex and APRS. Search for a missing person. Log and track all activity on the net. Team up with CAP, a local CERT or other SAR group for even more realism.

Alternate Power Test: Stations set up outdoors or at home using only their usually available alternate power sources. A training net is set up and uses the NCS Drill (see net training ideas below) to put a load on the power sources. Each station will thus have a chance to identify their powering limitations.

River Flooding Exercise: Net is convened on a repeater and/or simplex frequency and mobile stations are deployed to predetermined key river spotting locations. Reports are solicited from each location following a format established by the served agency. (If no agency format is available, use water height relative to the banks, debris, water color, flow characteristics, etc.) Notes are kept regarding accessibility and ability to communicate from each location.

Variations: RRTs can be sent out initially, followed later by regular members. Reports can be sent via packet, D-Star data, or Winlink.

Image Transmission: Several stations set up at various river observation or simulated disaster damage sites and send still images via FM or HF to a central point (EOC).

Hospital Linking: Hospitals present their own set of challenges. Set up a drill scenario with the hospital's emergency coordinator to simulate a loss of communications between local hospitals, with multiple patients who must be transferred to other facilities, external staging areas for casualties need to be routed to appropriate hospitals and the receiving facility notified.

Variation: This same drill at the Section level could simulate a massive disaster in which normal communications are disrupted statewide.

Agency-Linked Exercise: Piggy-back on a served agency's exercise instead of creating your own. Have all messages sent by both regular means and via Amateur Radio, or ask them to build a communications failure element into their exercise plan.

Agency Site Tour: Hold a meeting at a served agency's facility and/or tour the facility. Look for opportunities and challenges related to providing emergency communications and meeting the agency's needs.

Ice Storm Drill: A simulated ice storm has wrecked all permanently installed antennas at agency locations. Members must find a way to erect temporary antennas at each site. Requires some pre-arrangements to be made with agencies. **Variation:** Do it after sunset.

Agency Site Equipment Test: A team can meet at an agency's site to test permanently installed equipment and familiarize everyone with its operation. At least one mobile or home station should be available for remote reception testing.

Response Drill: Use the call tree to activate members and keep track of the time required to respond to key agency and incident locations and get on the air. **Variation:** simulate road closures so that members will have to work out alternative routes.

Logistics and Support Drill: Create a list of required station locations. Set up a logistics net and dispatch operators to each.

Short On-Air Net Training Ideas

Formal message origination: Have one station send out a bulletin in radiogram format to be copied by all other stations. Conduct a critique on the message's formatting and the sending technique.

NCS Drill: The goal is to teach NCS message management skills. Each station on the net will have several pieces of simulated traffic (message number and address only) ready. They can be made up on the fly. When the net is initially opened each station can list at least one piece of traffic. The NCS will then try to route each piece of traffic to another net member, and ask them to move off to another frequency to pass the message. Instead of leaving the net, the two stations will just listen for three minutes and then check back into the net. Stations that have received a message will then generate a simulated reply message. Each member can introduce a second or third message into the system if there is time. The net will continue until all messages and replies have been handled, or the end of the planned session is reached.

Plan Discussions: Present one section of the local or Section communications plan, and take questions for discussion. This format is best for FM nets and simple material.

Weather Observations: Can be used for all or part of the net. Each station reports current conditions at their location. If you plan to do this daily, notify the local NWS office and they may try to listen to the net. This offers practice in operating in a net environment and passing short tactical messages. The training goal should be a tight, efficient and professional sounding net. Rotate NCS duties.

Standard Phonetics: Have each station practice sending a sentence, spelling out each word phonetically, using standard ITU phonetics.

Pro-Signs: Present and discuss the proper use of verbal pro-signs as used in message handling. (See FSD218 and ARECC Level I - Learning Units 5 and 7)

Black-Out Drill: Simulate a wide-area power failure and have all stations operate from alternative power sources. Great add-on scenario to combine with other ideas.

Meeting Training Ideas

Digital Saturday: Gather at a large meeting room and conduct familiarization workshops on the digital modes listed in your local or Section communications plans. (Winlink/Airmail, packet, APRS) Participants can bring own equipment for troubleshooting and setup. Bring plenty of dummy loads.

Skywarn Weather Spotter Training: Contact NWS to set up weather spotter training.
Alternative: Have a NWS-trained spotter give a mini-course to members. Also include general damage reporting criteria and techniques. Discuss tactical nets and disaster intelligence reporting protocols, referencing local and Section plans.

Alternate Power Sources: Discuss various battery types, chargers and charging times, Powergates, conductor sizes, connectors, lighting, inverters, generators, generator safety, extension cords, grounding. Talk about the voltage and current requirements of various common radios and accessories. Use ARECC Level I course book as source material.

Go-Kit Show and Tell night: Several members can open up their go-kits and tell members what they carry and why. Kits can be critiqued with suggestions for improvement. Hand out go-kit check lists to those needing them.

Communication Plan Discussions: Present one section of the local or Section communications plan, and take questions for discussion. Hand out copies of that section or put up on screen in large type. The goal is to make sure everyone understands the goals and methods, and the reasons for them.

Table-Top Exercise: Set up a simple scenario and talk through the response to see if the written plan works. Create what if situations to see if the plan can deal with problems that might creep in.

Agency-Specific Discussion: Pick one agency and talk about their specific needs and challenges. Look at the communications plans to see if they adequately address them. The goal is to familiarize members with the agency's needs and get them thinking about ways to help when the time comes.

Portable Antenna Night: Show and Tell with portable antenna rigs, both HF and VHF/UHF. Don't forget support systems and ideas, wire launchers, etc.