Section 6: Alternatives and Opportunities

Topic 28

Other Training Opportunities

Objectives

Welcome to Topic 28.

This topic offers ways for you to develop new skills and enhance the skills you have learned in this course.

Student Preparation required:

None.

Introduction

Someone once asked a famous violinist how to get to Carnegie Hall in New York City. His answer was, "practice, practice, practice."

So, it is with emergency communication skills. If you want your performance in the next big disaster to be flawless, practice is essential. Fortunately, there are plenty of opportunities to do so if you take the time to seek them out.

Training Begins on the Air

What sets us apart as emergency and disaster volunteers is our access to a tremendous amount of radio spectrum. Using that spectrum on a regular basis provides us with valuable skills and competencies that we use to serve our partners and the public.

The wonderful thing about Amateur Radio is that there are so many aspects of it! DXing, contesting, satellites, operating portable — all of these allow us opportunities to get on the air and "practice, practice, practice." Getting a license and a radio "in case there's an emergency" is no different from buying a first aid kit and never looking to see what it is inside or taking a basic first aid course. If you want to help, you must prepare by getting on the air and practicing regularly.

There are many correlations between the variety of Amateur Radio disciplines and Amateur Radio public service communications.

- DXing — Disasters have no concept of geographic borders. In 2004, Hurricane Ivan impacted 11 different countries directly, and many others indirectly. Engaging in the Amateur Radio activity of DXing — contacting locations that are at a great distance from you — gives you a better understanding of how the HF bands behave, band plans, other operating activities, propagation, and mode characteristics. All of these will be helpful when participating in HF hurricane nets or traffic nets.

- Contesting — On-air contests provide an opportunity to put your station (whether at home or at the EOC) on the air, compete against others, and earn a score that can set a benchmark by which to measure your future performance. A contest will tell you more about your station than just about any other operating event will. Additionally, you will learn the importance of listening, accuracy, and endurance. You may also consider setting up Field Day-style for a contest or QSO party.

- Operating Portable — Grab your go-kit and get outside! Setting up under less-than-ideal conditions will teach you key skills needed for a wide range of emergency and disaster deployments. You will learn how to gauge battery life, address equipment failures, and document activities, as well as the capabilities of a less-than-ideal station. You can set up in a local park, go on a mini expedition to an island, summit, or lighthouse, or take equipment with you on vacation.

There are many opportunities to get on the air, so take advantage of them. On-air activity is the first line of Amateur Radio training; there is no substitute!

Regularly Scheduled Nets

Many local ARES and RACES groups hold regularly scheduled training nets. Well-designed nets will vary the format and goals frequently to keep them interesting. One month may be devoted to learning about the county's new damage report form, and another to moving welfare messages to and from the National Traffic System (NTS).

Local Classroom and On-Air Training Sessions

Your emergency communications organization and/or partners may offer a variety of educational opportunities. Agencies such as the American Red Cross (ARC) may offer job-specific training, such as Introduction to Disasters, Mass Care Overview, Shelter Operations, and Disaster Damage Assessment courses. Smaller training sessions may deal with the use of certain forms or procedures. In addition to regular nets, special on-air training sessions may be held on a repeater or simplex frequency as an alternative to classroom sessions when the subject is simple or utilizes a net environment.

Public Service Events

Some of the best practice for tactical disaster communication is your local "-athon." It does not matter if it is a bikeathon, walkathon, or swimathon, but the larger the event, the better the experience. A large, fast-moving event closely simulates the conditions experienced in disaster communication situations. Even a smaller or slower event will allow you to practice tactical net operating skills or experiment with various modes under field conditions.

Learning Resources on the Internet

We strongly recommend downloading and printing copies of the *ARRL Public Service Manual* and *The ARES Field Resources Manual*. Put them in a three-ring binder and make them part of your go-kit for easy reference at home or in the field. Another option is to download materials onto a USB drive (commonly referred to as flash or thumb drives) for easy access in a digital format. In addition, you may want to check with your Section Manager to see if there are additional documents you should keep in your go-kit for your local area.

- *ARES Field Resources Manual*:
  www.arrl.org/files/file/ARESFieldResourcesManual.pdf
- ARRL Digital Mode Information: www.arrl.org/digital-modes
- ARRL Net Directory: www.arrl.org/arrl-net-directory
- ARRL Section Manager List: www.arrl.org/sections
- FCC Rules and Regulations: www.arrl.org/part-97-amateur-radio
- FEMA Community Emergency Response Teams (CERT):
  https://www.ready.gov/community-emergency-response-team

- FEMA Emergency Management Institute: http://training.fema.gov/is/crslist.asp — see "ISP Course List" and "NIMS Courses"
- FEMA Virtual Library: https://www.fema.gov/resource-document-library
- Ham Radio at the NWS Hurricane Center: http://w4ehw.fiu.edu/
- National SKYWARN: http://skywarn.org/
- NOAA Watch — NOAA's All Hazard Monitor: www.spc.noaa.gov/products/wwa/
- NWS Doppler Radar Sites: www.weather.gov/radar_tab.php

Auxiliary Communications (AuxComm)

Auxiliary communications or AuxComm is a communication course developed by the Department of Homeland Security (DHS) Office of Emergency Communications that focuses on radio communication and provides a broad knowledge of the fundamental principles of communication systems used by emergency management agencies. It aligns with both the Incident Command System (ICS) and National Incident Management System (NIMS). The course is typically taught by DHS-trained volunteers. This excellent course is recommended when it's available.

The course is designed to teach volunteer Amateur Radio communicators several essential topics that will assist them in working with the Communications Unit Leader (COML) and the Communications Technician (COMT) during a disaster. It is designed to confirm knowledge of responsibilities, roles, and functions within the communications unit, as well as roles and function of the auxiliary emergency communicator.

Other ARRL Courses

Public Service and Emergency Communications Management for Radio Amateurs (EC-016): This AREC course is designed for those in leadership positions who wish to further develop management skills. If you are an AEC (Assistant Emergency Coordinator), EC (Emergency Coordinator), DEC (District Emergency Coordinator), or SEC (Section Emergency Coordinator), or are serving in another leadership or training capacity, this is the course for you. Available online at www.arrl.org/online-course-catalog.

Books

- *The ARES Field Resources Manual* (ARRL) is a handy and rugged spiral-bound field guide packed with essential emergency communications information. It should be in the go-kit of every emergency communications volunteer.
- *The ARRL Operating Manual* covers all the basics of Amateur Radio operation, and more.
- The *FCC Rules and Regulations for the Amateur Radio Service* (ARRL) includes the complete Part 97 rules from Title 47 of the Code of Federal Regulations.

- *Transmitter Hunting: Radio Direction Simplified*, by Joseph Moell, KØOV, and Thomas Curlee, WB6UZZ, is the "bible" of radio direction finding.
- *The ARRL RFI Book* will help you locate and resolve all sorts of radio interference.
- *The ARRL Antenna Book* covers portable and emergency antennas for 40 and 80 meters.
- *The ARRL Repeater Directory* lists all VHF and UHF repeaters in the US, Canada, and many other countries. This directory is updated annually.
- *Storm Spotting and Amateur Radio*, by Michael Corey, KI1U, and Victor Morris, AH6WX, is a resource for the Amateur Radio operator who volunteers as a storm spotter.
- *Emergency Power for Radio Communications* discusses methods of alternative power generation for a variety of situations.
- *The Amateur Radio Public Service Handbook* from ARRL covers a wide range of topics related to Amateur Radio public service and emergency and disaster communications.
- *High Speed Multimedia for Amateur Radio*, by Glen Popiel, KW5GP.
- *VoIP: Internet Linking for Radio Amateurs*, by J. Taylor, K1RFD.
- *Get on the Air with HF Digital*, by Steve Ford, WB8IMY.

All the above are available from ARRL at www.arrl.org/arrl-store

Software

- Narrow Band Emergency Messaging System (*NBEMS*): A suite of programs for emergency applications. See https://sourceforge.net/projects/fldigi/files/ for software download.

- Tucson Amateur Packet Radio (TAPR) has a variety of packet software available. https://www.tapr.org/

- *Winlink 2000*: https://www.winlink.org/

- WXSpots Network: A useful tool on devoted to severe weather spotting as a means to enhance SKYWARN and similar operations. http://www.wxspots.com/

Review

Emergency communications education is an ongoing process. To be an asset to your emergency communications organization and its served agencies, you should take advantage of every possible learning opportunity.

Activities

1. Describe the next step you will take to either become involved with a local emergency communications group, and/or the next step in your emergency communications

education.

2. Interview three Amateur Radio operators who have been on an emergency deployment. Ask them to evaluate their preparedness for the experience, the degree to which they successfully supported emergency communications, and how they evaluate their overall response.

3. If you were placed in charge of training a new group of emergency communications team members, what five topics would you give the highest priority?

Welcome to Topic 28 Knowledge Review

Please review the following questions to improve your understanding of this topic:

Question 1:

Which of the following was *not* recommended as a means of practicing actual emergency communications skills?

a) Regularly scheduled nets.
b) On-air training sessions.
c) Discussion groups.
d) Public service events.

Question 2:

What is the purpose of ARRL's *Public Service and Emergency Communications Management for Radio Amateurs* course?

a) To review the skills and knowledge presented in this course.
b) To provide training for prospective Emergency Operation Center Managers.
c) To prepare individuals for the jobs of NCS and Net Manager.
d) To prepare individuals for management level jobs such as EC, DEC, or SEC, or other leadership or training roles.