

## OPERATIONS

# Communication Training

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## 1 Purpose

Any communication system can only be as reliable as the least reliable component. While information abounds on maximizing the robustness of communication equipment in the field, it is we, the operators, who are the most unreliable component in the communication system. While automation of the communication of information through capabilities such as APRS, packet, and WiFi can be used in some circumstances to help mitigate the impact of our blunders, there is often no alternative to the involvement of the human operator. In order to maximize the reliability of the human operator it is necessary, therefore, that each undertake training designed with four essential qualities to ensure several important outcomes. These qualities are:

- the same training; operators trained under the same set of requirements are better able to anticipate the behavior of other operators and increase the reliability of the communication,
- frequent training; regular review of communication procedures keeps efficient operating habits fresh and more likely to be performed when they are needed,
- relevant training; training which covers a balance of broad topics and specialty areas gives operators insight into their role within the entire response effort but also specific skills to apply to their assignment,
- effective training; training which is timely, logically organized, well communicated, and designed to meet specific objectives is most easily comprehended, retained, and placed into practice by operators.

## 2 Scope

The training outlined in this section is presented as a catalog of primary training to meet the above goals. Specific requirements in meeting the above goals are as defined in ADM 1-4. The sections below should not, however, be considered a complete outline of all training which operators will find applicable to all situations encountered in the field. The scope of the training outlined below is instead intended to address only the role of providing effective communications.

## 3 Communication Training

### 3.1 ARRL ARECC

The Amateur Radio Emergency Communication Courses (ARECC) provided by the ARRL are offered in conjunction with Connecticut Distance Learning (CTDL) as online self-study courses. Email and internet access is required to complete these courses. The courses run over time periods from 8 to 12 weeks during which time students study online material, complete assigned exercises, and take quizzes and exams. A class mentor is available to answer questions and evaluate assignments submitted by students. The courses are offered in three levels with each level existing as a separate course. The current offerings of each course, their cost, and the means to register can be found at <http://www.arrl.org/cce/courses.html>. Sessions of each course begin once a month.

A sample course can be viewed at the website of the CTDL with a link available at the web address above.

## 3.2 FEMA Independent Study Courses

The Federal Emergency Management Agency (FEMA) offers a wide array of self study courses at no charge. New students without an account should begin at <http://training.fema.gov/VCNew/firstVC.asp> and follow the tutorial by picking the associated link.

Supported browsers are Microsoft Internet Explorer 5.5 or higher, or Netscape Navigator 4.7 or higher. Users must set their browsers to accept cookies and to support JavaScript, Java, OCX, and plug-ins. The browsers should also be set to show the newest version of a page, rather than showing cached pages. In Internet Explorer, this option is in the Settings section of Internet Options. In Netscape, this option is in the Cache section of Preferences - Advanced. Netscape users should additionally enable the use of plug-ins and the Netscape SmartUpdate feature.

### 3.2.1 IS100 Introduction to the Incident Command System (ICS-100)

IS100 provides an overview to the Incident Command System (ICS) and how it functions within the National Incident Management System (NIMS). The purpose, organization, application, terminology and other key aspects of the system are presented.

### 3.2.2 IS200 ICS for Single Resources and Initial Action Incidents

IS200 presents how leadership functions within ICS.

### 3.2.3 IS700 National Incident Management System (NIMS), An Introduction

IS700 presents purpose, principles, key components and benefits of the National Incident Management System (NIMS).

### 3.2.4 IS800

### 3.2.5 IS3 Radiological Emergency Management

### 3.2.6 IS331 Introduction to Radiological Emergency Preparedness Exercise Evaluation

## 3.3 Served Agency Specific Training

### 3.3.1 American Red Cross

Scheduled offerings are sent by the Red Cross Training Coordinator to the Training AEC as they become available. Training AEC will make the schedule available to the membership by email notification and posting on the MCARES website. Interested students should register for classes on their own by calling the phone number as instructed in the notices of training opportunities.

### Introduction to Disaster Services Series

The Introduction to Disaster Services series of courses serves as the introduction to volunteer participation with the Disaster Services of the American Red Cross. The series is a prerequisite to all other courses offered by Disaster Services. The first course is an online orientation which should be completed before attending the first class. The course can be found at [http://www.redcross.org/flash/course01\\_v01/](http://www.redcross.org/flash/course01_v01/) and requires the Flash plug-in. The remainder of the series is offered at various local chapters including the Greater Rochester chapter.

### Weapons of Mass Destruction/Terrorism: An Overview

### Disaster Assessment

Is this course being offered now?

### **Station Orientation**

Orientation DVD's are available from the MCARES/Red Cross Liaison.

#### **3.3.2 Monroe County RACES**

The following training activities are offered through Monroe County RACES.

#### **Radiological Exposure Training**

This training covers broad topics associated with the preparedness and response for a radiological event. The training is offered by the Monroe County Office of Emergency Preparedness and is typically held at MCARES meetings on occasion.

### **3.4 Monroe County ARES Training**

The following training are presentations and workshops developed by MCARES. Such training is typically held at MCARES monthly meetings or by special schedule.

#### **3.4.1 Directed Net Protocol**

This program covers the basics of the procedures used in the participation of a directed net. The format of the program is part presentation by the instructor and part student participation in table top drills. Topics covered include the rules of participation, prowords and their usage, and guidelines for efficient participation.

#### **3.4.2 Formal Written Traffic Handling**

##### **General Voice Procedures**

This general training covers the basic procedures of the handling of formal written traffic by voice and is applicable to all message formats. This general training should be augmented by training pertaining to each specific format as shown in the subsections below. The general training program covers common techniques to maximize the efficiency of sending and receiving formal written traffic.

##### **ARRL Format**

This program covers usage of the ARRL message format and is based on the content of Appendix B of the Public Service Communication Manual Chapter 1. The reader may find this document at <http://www.arrl.org/FandES/field/nts-mpg/pdf/index.html>. Topics include familiarization with the message format and the rules for authoring, sending, receiving, and delivering messages.

##### **American Red Cross Form 2079H**

Course not yet prepared. No plans currently in place.

##### **ICS 213 Format**

Course not yet prepared. Can build off of materials from NYC-ARECS.

##### **Radiological Event Format**

Course not yet prepared but we have what we need to prepare it. Keeping message formats under wraps is an issue. County does not want them to find their way out causing a hoopla. Whatever is put together must be shown to the RACES RO before it goes anywhere.

#### **3.4.3 Net Control Station**

This training covers the procedures for acting as the net control station of a directed net. Topics include calling up the net, keeping track of the net business, and directing participating station efficiently.

Some presentation training materials and table top drills prepared. Ideas developing for a magnetic net control board to make controlling a net easy. Will require additional development.

### 3.4.4 Call Out Scheduling Software

Can anyone even do this?

## 3.5 Operating Activities

### 3.5.1 Participation in the National Traffic System (NTS)

While formal training in efficient methods of communication is essential, the role of formal training is to prepare for actual practice. It is only through practice by each radio operator that communication skills are actually developed as usable assets. Formal classroom training does not substitute for on-the-air practice. An excellent way to practice such skills is through the National Traffic System (NTS). For more information about NTS see the Public Service Communications Manual at <http://www.arrl.org/FandES/field/pscm/>.

A schedule of NTS nets in the western New York area is available at the MCARES website, <http://www.monroecountyemcomm.org>.

### 3.5.2 Participation in Public Service

The Rochester Amateur Radio Association organizes many public service events to benefit several local area organizations. These events offer unique training opportunities in that they often involve unexpected situations demanding efficient communication skills. A currently scheduled list of events and contact information can be found at <http://www.rochesterham.org>.

### 3.5.3 Participation in Contests and Special Events

Contests and special events offer the experience of operating for long periods of time giving the operator the familiarity with how long he or she can operate reliably between rest periods. Field day additionally offers a chance to test portable communication equipment for robustness and effectiveness. Simulated Emergency Test (SET) offers the chance to operate in conjunction with other emergency communicators within. For more information check the schedules at <http://www.arrl.org>.

## 3.6 References

Public Service Communications Manual at <http://www.arrl.org/FandES/field/pscm/>

Appendix B of the Public Service Communication Manual at <http://www.arrl.org/FandES/field/nts-mpg/pdf/index.html>

## 4 Safety

## 5 Abbreviations and Terms

ARRL	Amateur Radio Relay League
ARECC	Amateur Radio Emergency Communication Course
CTDL	Connecticut Distance Learning
FEMA	Federal Emergency Management Agency
ICS	Incident Command System
NIMS	National Incident Management System
MCARES	Monroe County Amateur Radio Emergency Service
RACES	Radio Amateur Civil Emergency Service

NTS            National Traffic System  
NRP            National Response Plan

## 6 Related Documents and Information

Public Service Communications Manual at <http://www.arrl.org/FandES/field/pscm/>

Appendix B of the Public Service Communication Manual at <http://www.arrl.org/FandES/field/nts-mpg/pdf/index.html>

## Revision History

REV	DATE	DESCRIPTION	AUTHOR - CALL
0	9 Sept 2007	Initial publication.	Emergency Plan Team