

## **Learning Unit 4 (E)**

### Emergency Communication Organizations & Systems

#### ARECC

#### ***Objective:***

Emergency communication organizations are what make an emergency communications response possible. This evenings training session will introduce several of the largest and best-known organizations, and a number of related emergency communications and public warning systems.

#### ***Information:***

#### **Why is organization so important to emergency communications?**

Imagine a random group of volunteers trying to tackle a full-scale disaster communication emergency, working together for the first time. They do not know each other well, have very different approaches to solving the same problem, and half of them want to be in charge. Get the picture? This is not too far fetched. Just ask anyone who has been around for a while -- they have seen it!

#### **Amateur Radio Emergency Service (ARES)**

Among the largest and oldest emergency communications groups is the ARES, a program sponsored by the American Radio Relay League (ARRL) since 1935. ARES is part of the

ARRL's field organization, which is composed of "Sections". Most Sections are entire states, but some larger states have two or more Sections.

The elected Section Manager (SM) appoints the ARES leadership. The top ARES leader in each Section is the Section Emergency Coordinator (SEC).

The next subdivision within ARES is the "county" or similar region assigned to an Emergency Coordinator (EC). Most ECs will have one or more Assistant Emergency Coordinators (AEC), who may have responsibility for specific tasks or cities. A large city with complex needs may have its own EC, but most towns and smaller cities will have an AEC.

ARES has Memoranda of Understanding (MOUs) with a variety of agencies at the national level, including the Homeland Security, Federal Emergency Management Agency (FEMA), American Red Cross, Salvation Army, and the National Weather Service. These documents set out the general relationship between ARES and the agency at the national level, and provide guidance for local units to draft more specific local MOUs.

In addition to local chapters of national groups, ARES groups often have MOUs or other written or verbal agreements with state and city emergency management departments, hospitals, schools, police and fire departments, public works agencies, and others.

**Radio Amateur Civil Emergency Service (RACES)**

The federal government created RACES after World War II. The RACES authorization provides the means to continue to serve the public even if the President or the FCC suspends regular Amateur operations. In this situation, the RACES rules provide for use of almost all regular Amateur frequencies, but place strict limits on the types of communications made, and with whom.

Over the years, "Emergency Management" in most states and the way it utilizes Amateur radio operators have changed dramatically. There are fewer "pure" RACES operators today. Increasingly, RACES-registered operators also belong to ARES, and can "switch hats" when the need arises. Emergency management officials like this arrangement since it provides more flexibility, and gives them more direct control over their ham radio volunteers.

#### **Salvation Army Team Emergency Radio Network (SATERN)**

SATERN members are also Salvation Army volunteers. Their HF networks are used for both logistical communication between various Salvation Army offices and for health and welfare messages. At the local level, ARES, REACT and other groups often help support the Salvation Army's operations.

#### **The "Rapid Response Team" (RRT)**

In the first minutes of an emergency, it is sometimes important to get the basic essentials of a network on the air quickly. The solution is the "RRT" concept, although its name may vary. Rather than a stand-alone organization, a RRT is small team within a larger

emergency communications group. Their job is to put a few strategically placed stations on the air within the first half-hour to an hour. These stations will usually include the emergency operations center (EOC), a resource net NCS, and often a few field teams where needed most. This is commonly known as a "Level 1 RRT response".

A Level 2 RRT response follows within a few hours, bringing additional resources and operators. Level 1 teams have pre-assigned jobs, and short-term (12-24 hour) "jump kits", ready to go whenever the call comes. Level 2 teams have longer term (72 hour) jump kits, and a variety of other equipment, possibly including tents, portable repeaters, extended food and water supplies, sleeping gear, spare radios, and generators, depending on local needs.

#### **ARES Mutual Assistance Team (ARESMAT)**

When a communication emergency lasts longer than a day or two, or when the scale of the emergency is beyond the ability of a local ARES group to handle, help can be requested from neighboring areas. The ARESMAT concept was created to meet that need. These teams consist of hams that are willing and able to travel to another area for a period to assist ARES groups based in the disaster area. They may also bring additional resources in the form of radios, antennas, and other critical equipment. If you travel to another area as part of an ARESMAT, remember that the local group is still in charge -- you are there to do what they need done. In a sense, the host ARES group becomes a "served agency".

#### **Military Affiliate Radio Service (MARS)**

MARS is a Department of Defense sponsored auxiliary communication program, established as three separately managed and operated programs by the United States Army, Navy/Marine Corp, and Air Force.

The program enlists the services of licensed hams that operate disciplined and structured nets on assigned military radio frequencies adjacent to the Amateur bands. MARS has a strict set of rules regarding the type, content and format of messages. Special call signs are issued for MARS use.

In day-to-day service, MARS stations handle quasi-official and morale messages for the three services. During times of emergency, MARS provides backup communication networks to military, federal, state, and local agencies. One advantage of the MARS system is that it is specifically authorized to communicate with other government radio services in time of emergency, including the federal SHARES HF networks.

#### **Local Radio Clubs**

Not every area has a working ARES or other nationally affiliated emergency communications group. In many cases, the void is filled by local radio clubs who either work informally with served agencies, or with a formal MOU.

#### **SHARES**

Even those who have been involved with emergency communications for years may not know of the US Government's "Shared Resources System", known as "SHARES". This system is part of the National Communications System. It pairs certain MARS operators

with various federal agencies and state emergency operations centers to provide a high frequency (HF) communication backbone if normal communication systems should fail. In addition to government agencies, key communications companies such as AT&T, and agencies such as the Red Cross have SHARES radios. The SHARES system utilizes a number of nationwide and regional networks.

#### Federal Emergency Management Agency - FEMA National Radio System

This is a FEMA high frequency (HF) radio network designed to provide a minimum essential emergency communication capability among federal agencies, state, local commonwealth, and territorial governments in times of national, natural and civil emergencies. At the state level, FNARS radios are typically located at the states emergency operations center (EOC).

#### *Review:*

Organization is critical to any emergency response. Without an organization that plans and prepares in advance, an Amateur Radio emergency communications response is likely to be disorganized and ineffective.

A variety of government and private emergency communication groups assist in time of disaster. While Amateur Radio operators may not interact with many of these systems, it may help to know that they exist, since your served agency may utilize or interact with one or more of them.