

The Future of ARES

I recently read an article on the internet featuring Amateur Radio and the writer suggested that Amateur Radio is rapidly approaching a point where it is no longer needed for emergency/disaster communications. He cited that today's use of wireless devices, FRS radios, and similar personal technology has rapidly become the glue that provides interoperability. There is no doubt that some of his observations are correct. Certainly, many minor emergencies no longer require Amateur Radio capabilities. Even sizeable disasters, such as strong tornadoes and similar events often see cellular service restored in a matter of hours. In addition, the commercial wireless infrastructure, AWIN, is becoming increasingly diverse as more and more unique services are coming on line. Despite the ubiquity of these new wireless systems, such infrastructure does remain vulnerable. As more individuals become dependent on the convenience of wireless devices, the potential for network overload and slow downs becomes increasingly likely. Many wireless networks rely on local telephone company facilities and a Central Office, which, if damaged, could render a wide variety of such capabilities inoperative over a significant area. An intelligent terrorist attack on some communications

infrastructure could result in significant, long lasting disruptions over a wide area.

The problem...

The problem is not so much whether Amateur Radio will be needed if “the big one” hits, but rather, if Amateur Radio will be prepared to provide the level of service and connectivity expected by those we serve in the event of a major disaster, such as an “EF-5” tornado or a major earthquake. After all, no responsible emergency manager would suggest that they no longer need Amateur Radio. The decentralized and survivable nature of the Amateur Radio Service is still of great potential value in a worst case scenario. Yet, the loss of the less significant service opportunities associated with smaller emergencies and public service events means that many rank-and-file public service communicators no longer has low-stress opportunities to learn how to function in time of emergency with smaller stakes at hand. If we expect our ARES personnel to be available and properly equipped to be called out once every five or ten years for a significant mission, then we are fooling ourselves. Disuse atrophy will have set in, equipment will not be staged, and individuals will have no idea how to communicate.

So What Is the Solution?

Ultimately, the solution to obsolescence lies in “value added” services. Emergency Managers do not recruit cell phone operators in time of emergency because such individuals can not provide the necessary administrative support to go along with the capability, even if it remains operative. Radio amateurs can often offer the value added knowledge and skills that justify their role even when common carrier services remain operational. Such skills include understanding individual roles and responsibilities, the structure of the organization in which they serve, and knowledge of the methods and procedures used for disaster response in the form of the Incident Management System and Comprehensive Emergency Management. The better ARES groups also have individuals who can actually manage and administer message traffic and other data. A well prepared ARES group has at least a couple members who can step forward to solve computer or other connectivity problems in the Emergency Operations Center, wire additional telephone circuits, and provide a wide range of related technical services!

The problem we face today is that many radio amateurs, including some of our ARES/RACES leadership, still live in the 1960s, when mere

possession of a two-way radio was enough to render you a significant community asset. Likewise, back in the 60s, many rank and file radio amateurs, whether registered with ARES or RACES or not, probably had background and experience gained through military service or commercial communications, which prepared them to handle messages, control nets, and improvise to meet rapidly evolving situations.

Today, many who are coming into the hobby have little practical military or commercial communications experience. This works against Amateur Radio in a variety of ways. First, many such individuals form opinions about the relative merits of skills, modes, and policies based on extremely limited practical experience. Second, when the time comes to actually communicate under stress, many nets collapse or barely function because a critical mass of individuals have no real experience communicating under the stress of emergency conditions. Third, in many areas, ARES and RACES groups refuse to adopt newer technologies. While serving as an ARRL Section Training Manager, Section Traffic Manager and Emergency Coordinator I have heard some people say over and over “I want nothing to do with Packet or PACTOR message handling.” This statement and tone says it all!!

Amateurs are encouraged to make up their own mind on these issues. Take the time to listen to many nets in time of emergency, and one often hears incredible inefficiency. Traffic, both tactical and formal is not prioritized. Messages arrive distorted. Messages must be repeated several times because operators have difficulty writing the necessary information down. Operators are unfamiliar with a standard phonetic alphabet. Operators “think aloud” on the air instead of composing their message mentally before transmitting it. Newer technologies are not deployed.

If Amateur Radio is to be of value, we must face some basic realities:

1. Mere possession of a two-way radio is no longer of significant value.
 2. An untrained operator is of little value, and more likely a liability, especially those that either do not know proper procedures or refuses to follow them.
 3. Amateurs must not only be familiar with how emergency agencies work, they must also be familiar with how to communicate. Casual operating does not train one on how to communicate efficiently.
- Amateur Radio in general needs to diversify it's capabilities beyond the two meter FM net.

Sure, much of this sounds familiar. The problem is, in many areas, the necessary steps are not being taken to correct this inefficiency. In other areas, any reasonable steps to promote standardized training, mode diversification, and interoperability meet with almost tricky political opposition. This is especially true if the individual or the topic is even remotely associated with a high-stress topic. As an example of this, an emergency manager recently told me that he is afraid to bring up the use of the Internet for any ARES/RACES application in his jurisdiction because, in his words, “all heck breaks loose.” This comment also needs no further discussion other than to say that it speaks to the level of destructive discord within Amateur Radio.

The ARRL has taken some excellent steps with its emergency training courses. Local leadership should not only promote this and other training, it should also take additional steps to insure that Emergency Coordinators, Net Managers, and others are moving forward into the 21st century by insuring their personnel are properly equipped to serve in time of emergency. Most importantly, we need to quit arguing modes with each other, avoid crying in our beer, and instead seek some common ground on which to build the future of Amateur Radio public service.

