

RELATED TERMS

- HAM Radio
- Auxiliary Communications
- RACES
- ARES



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PRIMARY DISCIPLINES

- Emergency Communications
- Emergency Management

BEST PRACTICE

Use of Amateur Radio Operators to Augment Emergency Communications: Overview

PURPOSE

Emergency management agencies may want to incorporate amateur radio operators into an emergency communications management structure.

The website of the Amateur Radio Emergency Services (ARES) includes a [listing of grant programs](#) which may be used for funding the integration of amateur radio operators into emergency communications.

SUMMARY

Communications are a critical component of effective emergency responses at the local, state, and federal levels. Because major emergencies may overwhelm traditional communications systems, developing a secondary, nonstandard system of communications is invaluable for an effective emergency response.

For decades, amateur radio operators have organized themselves into volunteer associations with the purpose of assisting in emergency response communications. Because amateur radio operators fund and equip themselves and operate on unique frequencies that are less easily disrupted in the event of an emergency, amateur radio operators represent a cost-effective way of providing auxiliary emergency communications. Should normal communications be disrupted during an emergency, amateur radio operators can ensure continued communication between emergency responders using their own frequencies. Amateur radio operators can also assist emergency responders by managing and easing heavy communications traffic, providing up-to-date information through established communications networks, and helping to locate and facilitate the distribution of much-needed resources.

These best practices discuss how to establish contact and develop a working relationship with existing amateur radio organizations. The practices highlight technical issues that emergency managers should consider when incorporating amateur radio operators into emergency planning. The practices also make recommendations for including amateur radio operators in training exercises and for purchasing or housing useful additional equipment for amateur operators.

BEST PRACTICES OUTLINE

- Amateur Radio Operator Points of Contact
- Amateur Radio Information and Emergency Planning
- Training
- Equipment

BACKGROUND

Amateur radio organizations have had established working relationships with emergency responders since 1952 when the first Radio Amateur Civil Emergency Services (RACES) units were created. Designed initially to bolster civil defense communications during the Cold War, RACES units are regulated by the Federal Communications Commission and have an established relationship with local or state government. Aside from RACES, other non-governmental amateur radio organizations have also been established. For example, the Amateur Radio Emergency Services (ARES) consist of licensed amateur radio operators who volunteer to assist in disaster communications, but are not governed by the formal governmental rules that activate RACES units in certain emergency situations.

[Executive Order 12472](#), signed on April 3, 1984, gave the Federal Emergency Management Agency (FEMA) the responsibility of providing guidelines to local and state emergency agencies and volunteer organizations in order to develop an effective emergency communications system. In 1991, FEMA published its Civil Preparedness Guide (CPG) for [Radio Amateur Civil Emergency Service](#) (RACES), which outlined procedures for emergency management agencies to establish and manage working relationships with amateur radio organizations. This guide gave local or state emergency managers the responsibility to recruit and establish RACES units and integrate them into emergency communications plans.

Amateur radio units have been activated for and assisted in a variety of emergency situations. Following the 1987 Southern California earthquake, amateur radio operators installed antennas and coaxial cables and utilized their handheld radios to improve communications capabilities for responders. Throughout the 1990s, amateur radio operators have helped restore communications following major hurricanes, tornadoes, floods, and wildfires.

In the aftermath of September 11, 2001, the use of amateur radio operators for disaster communications has taken on new relevance. Within five minutes of the first plane's impact at the World Trade Center, amateur radio networks were activated. Throughout the course of the disaster, amateur operators shadowed officials, and provided communications support for them. Amateur operators also positioned themselves in Red Cross shelters, hospitals, and other locations where they relayed critical information among response and recovery organizations. In many areas, communications were restored only with the help of local amateur radio operators.

RESOURCES

Lindquist, Rick. "9/11/01: 'This is Not a Test'," *QST Magazine*, November 2001, pp. 29-34, 59.
([LLIS.gov ID# 8307](#))

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