



# Ham Radio...

*...Getting the message through for your family and community*



**ARRL** The national association for  
AMATEUR RADIO

*Amateur Radio, often called "ham radio," has consistently been the most reliable means of communications in emergencies when other systems failed or were overloaded.*

### Simply Put—Ham Radio Works!

Most of the time, things work fine. But despite the development of very complex systems—or maybe because they ARE so complex—ham radio has been called into action again and again to provide communications when it really matters.

### Why Ham Radio Works So Well.

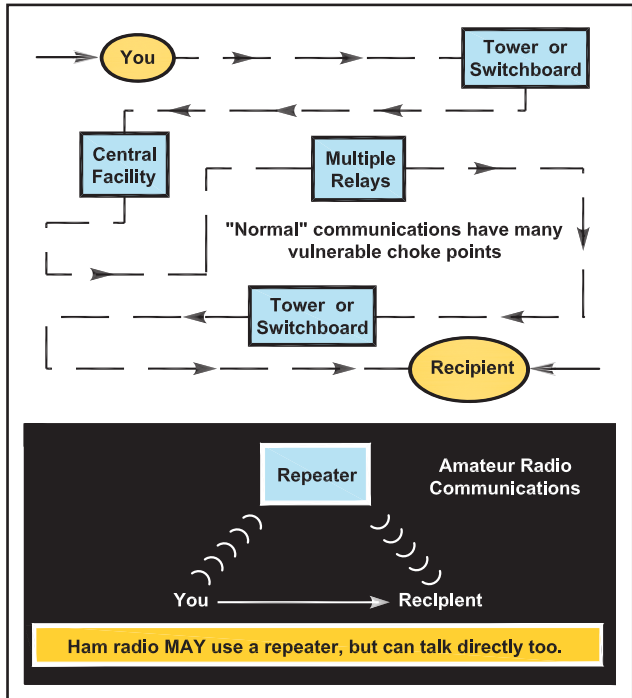
Telephones, cell phones, Internet, trunk lines, satellite phone—to get a message out they all have to go through many vulnerable choke points and need electric power. Even if the system is functioning, these systems can be overwhelmed by the number of cries for help and families seeking information.

### Ham Radio is Different.

While hams MAY use the Internet or a repeater system, they do not HAVE to do so! Hams can "go direct" and talk straight through to each other because each station is fully independent. Hams can operate just fine without other infrastructure. By selecting the right frequencies, hams can talk across town or around the world.

**In an emergency, when your family's lives may be at risk, which communications system would YOU want to have?**

*Hams meet on the air and in person. There are about 630,000 hams in the USA with ham radio clubs and gatherings all over the country.*



*Hams communicate using microphones, telegraph or Morse code keys, computers, TV cameras and even their own satellites.*

### Ham radio operators provided emergency communications during these recent events:

- Earthquake in Hawaii—2006
- Flooding in Northeastern States—2006
- Hurricanes Katrina, Wilma and Rita—2005
- Wildfires in Texas, Oklahoma and New Mexico—2005
- Hurricanes Charley, Frances, Ivan and Jeanne—2004
- Tsunami in Asia—2004
- Earthquake in Central California—2003
- Hurricane Isabel—2003
- Northeast Blackout—2003
- Shuttle Columbia Recovery Effort—2003
- Wildfires in Colorado—2002
- Flooding in Kentucky—2002

- World Trade Center, Pentagon and Western Pennsylvania Terrorist Attacks—2001
- Tropical Storm Allison—2001
- Fires in Los Alamos, New Mexico—2000
- Hurricane Floyd—1999
- Flooding in Texas—1998
- Hurricane Georges—1998
- "500-Year Flood" in N.D. and Minn.—1997
- Western U.S. Floods—1997
- Hurricane Fran—1996
- TWA Plane Crash—1996
- Oklahoma City Bombing—1995

## Hurricanes, Ice, Snow, Tornadoes, Storms and SKYWARN

The National Hurricane Center in Florida relies on its ham radio station, WX4NHC, to receive reports from hams in affected areas ([www.wx4nhc.org](http://www.wx4nhc.org)). The National Weather Service uses ham radio operators for their "SKYWARN" program to get ground level reports of events that are missed by Doppler radar.

Ham radio operators by the hundreds volunteered for service to the devastated areas of the Gulf Coast after Hurricane Katrina and her sisters Rita and Wilma pounded a five state area and destroyed other communications systems. For their life-saving work, the hams received commendations from the President and Congress as well as international praise. It truly proved the saying, "When all else fails, ham radio works!"

Within minutes of the September 11, 2001 terrorist attacks, ham operators communicated from emergency operations centers as other systems failed. The ham operations continued for weeks as the amateurs handled emergency and other important messages for disaster and government agencies as well as for displaced families.

Hams use all sorts of radios and antennas on a wide variety of frequencies to communicate with other hams across town or around the world. They use ham radio for personal enjoyment, for keeping in touch with friends and family, for public service communications and to experiment with radio technology.

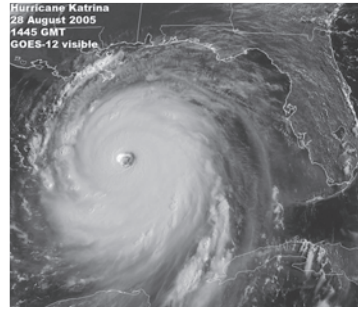
Boaters, RVers and outdoor enthusiasts also use ham radio as an excellent way to maintain communications from wherever they are.

Big station or small and portable, hams enjoy the security of knowing they can get a message through in almost any situation without depending on a fragile infrastructure that can fail or be overloaded.



**FEMA advises that in a crisis you should plan to be totally on your own for at least 3 days—**

**How will YOU communicate?**



*The National Weather Service uses ham operators for its "SKYWARN" program to get ground level reports of events that are missed by Doppler radar.*



### "Amateur"

ám'e-túr - noun

A person who engages in an art, science or other activity purely for the personal interest or self-improvement value of it, rather than a financially compensated profession.

- Amateur athlete
- Amateur astronomer
- Amateur musician

# You Can Have This Capability for Yourself and Your Family—

## Getting Your Own Ham Radio License

Unlike some other types of radio services, you need an FCC license to communicate with a ham radio. There are three levels of Amateur Radio licenses, and getting your first one is not all that hard. Many people pass their FCC exam in a week of spare time study and there are lots of groups and people who will help you.

You can get help from a local club at [www.arrl.org/findaclub](http://www.arrl.org/findaclub).

There is even an online, self-teaching course at [www.arrl.org/cce/courses.html#ec010](http://www.arrl.org/cce/courses.html#ec010).

## Costs

In general, you can expect to spend about \$40 in books and fees to earn your first license. With another \$200 you can purchase your first radio and the gear you will use to get on the air for yourself and start making contacts. Of course good, used equipment is available for less.

## Joining an Emergency Communications Group

To join the Amateur Radio Emergency Service (ARES), you must have a ham radio license. ARES members constantly learn more about emergency operations and practice regularly by providing aid to non-emergency events like parades, marathons and drills.

## ARES

ARES has formal, national agreements to provide emergency communications aid for FEMA, DHS, The American Red Cross, the Salvation Army, and many other response organizations.



**Simply stated, ham radio provides the broadest and most powerful wireless communications capability available to any private citizen anywhere in the world.**

## What is the ARRL?

Founded in 1914, the American Radio Relay League is the 150,000-member national association for Amateur Radio in the USA. Other countries have their own national associations.

ARRL is the primary source of information about what is going on in ham radio. It provides books, news, support and information for individuals and clubs, special events, all sorts of continuing education classes and other benefits for its members.

Amateur or “ham” radio has been around for a century. In that time, it’s grown into a worldwide community of licensed operators using the airwaves with every conceivable means of communications technology. Its practitioners range in age from youngsters to grandparents. Ham radio attracts those who have never held a microphone as well as the technical expert who grew up with a computer. Even rocket scientists and a rock star or two are in the ham ranks.

Most, however, are just normal folks like you and me who transmit voice, data and pictures through the airwaves, use the Internet, lasers and microwave transmitters, satellites and TV, and even travel to unusual places near and far to make contact.

## Where do I start?

**Go to:**

**[www.emergency-radio.org](http://www.emergency-radio.org)**

You can find more information to get started on the Web site or contact the local group listed below:

