

# Local Emergency Communications Volunteers: Force Multipliers for Local Disaster Resilience

**Most municipalities and counties do not have the funding for dedicated Emergency Communications staff.** This is where a communications volunteer program to recruit, train, equip and exercise pays huge dividends. These volunteers work as radio operators, communications technicians, incident communications center managers and communications unit leaders. Your primary source of volunteers will come from Amateur Radio Operations, also known as Hams. Non-Hams can still contribute in many ways.

1. Radio Amateur Civil Emergency Service (RACES)
  - a. RACES is a radio service regulated by Title 47 Code of Federal Regulations (CFR), Part 97, Subpart E, para 97.907 and overseen by the Federal Communications Commission (FCC).
  - b. RACES stations may only transmit with other RACES stations.
  - c. RACES radio operators must be FCC licensed amateur radio operators and certified volunteers with a civil defense (or EM) government jurisdiction.
  - d. RACES may operate in time of war when other radio services may not be allowed to operate.
  - e. RACES are typically limited to one hour a week of on-air comm drills.
  
2. Amateur Radio Emergency Service (ARES)
  - a. ARES is a radio service organized by the U.S. Amateur Radio Association, known as ARRL.
  - b. ARES consists of licensed amateurs who have voluntarily registered their qualification and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL, is eligible for membership in the ARES.
  - c. ARES are not limited to the number of hours per week for on-air comm drills.

Note: We recommend that your civil defense or emergency management program utilize a joint RACES-ARES program. This covers all bases.

3. Emergency Communications (EMCOMM)
  - a. Some jurisdictions use the term “EMCOMM” instead of RACES or ARES.
  - b. Many EMCOMM ham radio operators specialize in using Winlink.
  - c. <https://emcomm-training.org/>

4. Auxiliary Communications (AUXCOMM)
  - a. AUXCOMM is a U.S. Department of Homeland Security (DHS) concept, overseen by the Cybersecurity and Infrastructure Security Agency (CISA).
  - b. <https://www.cisa.gov/safecom/comu-training-resources>
  - c. There is a non-DHS program at: <https://www.auxcommusa.org/>
  - d. It is not limited to just Ham radio operators. May include the use of ham, military radio, citizens band radio service (CBRS), GMRS and FRS.
  - e. Auxcomm is primarily used as an Incident Command System (ICS) position.
  
5. General Mobile Radio Service (GMRS) and Family Radio Service (FRS)
  - a. GMRS is a mobile two-way voice communication service for facilitating activities of individual licensees and their family members, including, but not limited to, voluntary provision of assistance to the public during emergencies and natural disasters.
  - b. GMRS operators must be licensed with the FCC, but the license also covers the licensees family members. Unlike Ham radio, there is no license test.
  - c. GMRS radios can operate up to 50 watts on specific frequencies. They can also utilize radio repeaters to extend the range.
  - d. FRS is a two-way, short-distance voice communications service for facilitating family and group activities. The most common use for FRS channels is short-distance, two-way voice communications using small hand-held radios, sometimes called “walkie-talkies”.
  - e. No FCC license is required. These are low power radios.
  - f. GMRS and FRS share some channels.
  
6. Shared Resources (SHARES)
  - a. SHARES is a High Frequency (HF) radio service used by national security and emergency preparedness (NS/EP) personnel and overseen by DHS/CISA.
  - b. <https://www.cisa.gov/resources-tools/programs/shared-resources-shares-high-frequency-hf-radio-program>
  - c. SHARES can be used for voice and data communications (Winlink).
  - d. “Licenses” are issued to a NS/EP official by CISA not the FCC.
  
7. Several methods of transmitting information
  - a. Voice – using your voice to transmit information.
  - b. Winlink – a network of amateur radio and government stations that provide worldwide radio email using radio pathways where the internet is not present.
  - c. APRS – radio network capable of sending text messages and GPS locations.
  - d. FLDigi – simple 2-way radio data modem – send pictures and other files.