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Amateur Radio Services

The FCC established amateur radio service as a voluntary non-commercial radio communications service that allows licensed operators to improve their communications and technical skills, while providing the nation with a pool of trained radio operators and technicians who can provide essential communications during emergencies.

No amateur station shall transmit communications for hire or for material compensation, or communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer.

During emergencies, amateur radio operators may transmit messages to other amateur stations, subject to the privileges authorized for the class of license the amateur station control operator holds. For these transmissions, no special FCC permissions are required. Some amateur radio operators coordinate their communications through groups referred to as "networks" or "nets."

Messages may be transmitted on behalf of unlicensed individuals, at the discretion of the amateur station licensee. These messages are referred to as third party communications. The FCC's rules permit an amateur station to transmit messages for a third party to any other amateur station within the jurisdiction of the United States. Amateur stations in the United States may transmit third party communications to amateur stations outside the United States under certain circumstances.

Amateur Radio Organizations

During emergencies, amateur radio operators coordinate their efforts through formal and informal groups referred to as "networks" or "nets." Amateur radio services are provided to both governmental and non-profit emergency organizations, and include both voice and digital communications. Amateur radio operators often work with state emergency management operations as well as various national emergency organizations, including:

- <u>ARES</u>, the Amateur Radio Emergency Service, is an organization of amateur radio operators overseen by the American Radio Relay League (<u>ARRL</u>). These amateur radio operators train to provide communications during emergencies. ARES has formal agreements to provide communications for several national, non-profit emergency agencies, FEMA and with many state and local emergency management organizations. Many ARES members complete training courses offered by the ARRL and provide emergency services through the ARRL's local and regional emergency communications organization. Additional information about ARES is available from ARRL.
- RACES, the Radio Amateur Civil Emergency Service, is used to provide radio communication for civil defense purposes. It is administered by local, county, and state civil defense organizations and is supported by the Federal Emergency Management Agency (FEMA) as well as the FCC. The rules that apply to RACES are in Section 97.407 of the Commission's Rules. All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served and only certain types of civil defense communications may be transmitted.
- <u>SKYWARN</u> is comprised of highly trained volunteers who act as weather spotters for the National Weather Service (NWS.) The program was established to promote cooperation between communities and the NWS. Skywarn volunteers obtain local weather information about wind gusts, hail size, rainfall, and cloud formations that could signal a developing tornado or other weather-related emergency and report this information to the NWS. Skywarn volunteers who are amateur radio operators often assist in the distribution of NWS information to alert the public of incoming weather-related emergencies.
- <u>NTS</u>, the National Traffic System, provides a means for rapidly sending amateur radio messages over long distances. NTS nets are not independent entities. Each net performs its functions as part of a nationwide

organization.

Websites with Best Practices Information

A number of state and county amateur radio groups maintain websites that, with the aim of promoting best practices, provide information on emergency communications services. These include the following websites, most of which are affiliated with Auxiliary Communications Service (ACS), Emergency Communications Service (ECS), or Radio Amateur Civil Emergency Service (RACES).

- <u>Arlington VA ACS</u>
- <u>California ACS</u>
- Freemont CA Cert Communications
- Hawaii State RACES
- Los Angles County CA Disaster Communications Service
- Orange County CA RACES
- Orange County CA Hospital Disaster Communications
- San Bernardino County CA ECS
- Sarasota County FL ACS
- Sarpy County NE Emergency Volunteer Communications
- <u>Virginia RACES</u>

Location of Amateur Radio Bands

The FCC has set aside bands of radio spectrum (i.e., specific groups of frequencies) for the amateur service and other radio users. The FCC has allocated 26 bands to amateur radio services. These bands are spaced from 1.8 Megahertz, which is just above the AM broadcast radio band, to 275 Gigahertz. The ability to be "frequency agile" is one of the strengths of the amateur radio service. See the ARRL band plan at http://www.arrl.org/FandES/field/regulations/bands.html.

At the community level, amateur networks typically use VHF (very high frequency) and UHF (ultra high frequency) spectrum. Communications requiring transmission over longer distances may be transmitted on amateur service bands in the HF (high frequency) portion of the radio spectrum. For more information on amateur radio or to share your perspective with the FCC on this important emergency preparedness and response mechanism, please contact us at <u>PSHSB Webmaster</u>.