

The many faces of Amateur Radio

Amateur Radio (or **HAM** Radio) is a way to communicate world-wide via wireless electronics. Anyone can be federally licensed to use it for fun and experimentation. No business or music allowed.

These are some of the different modes allowed:

- **High Frequency (HF)** - used for world wide communications with countries including the USA.
- **Very and Ultra High Frequencies (VHF - UHF)** - used for local and (with repeaters) state wide communications using car or walkie-talkie type radios. Great for hikes and camp-outs.
- **Packet radio** - used to send and receive computer messages and data - a type of wireless electronic mail and bulletin board.
- **Satellite radio** - used to talk with Astronauts on Space Missions, and other countries.
- **Amateur TV** - used to send and receive your own TV signals with another Ham.
- **Earth-Moon-Earth (EME)** - Bouncing signals off the Moon and back to Earth.
- **Super High Frequency (SHF)** - experiment with microwave communications and beyond.

These are some of the uses of Ham radio:

- **Personal** - just between fellow Hams
- **Emergencies** - provide communications when phone lines are down, such as during Hurricane Iniki
- **Public Service** - helping the community on parades, outings, etc.
- **Fox Hunts** - using radio expertise to find the hidden transmitter.
- **DX** - communicating with different countries - trying for "100 country" awards, etc. Learning about other folks around the world.
- **QRP** - talking world-wide with no more power than a flashlight - a real technical challenge.

What you get out of it:

- Fun.
- Learning electronics and computers.
- Building radio gear from kits or just parts from an electronics store.
- Learning about other people world-wide.
- Providing backup communications for hikes, etc. for emergencies
- Just talking with other Scout Hams
- Always good for your next Merit Badge.