

# WHAT IS AMATEUR RADIO?

> **There are over 700,000 licensed radio operators in the US and nearly 3 million worldwide.**

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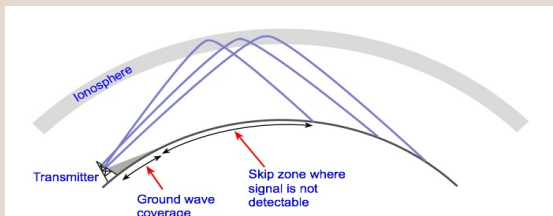
Amateur Radio (ham radio) is a popular hobby and service that brings people, electronics, and communication together. You can use ham radio to talk across town, around the world, or even into space, all without the internet or cell phones. It's fun, social educational, and can be a lifeline during times of need.

## How Do We Communicate?

Radio frequency communication uses a device called a transmitter and an antenna to radiate electromagnetic waves with a frequency which determines how the waves will travel to the receiving station.

By using a frequency in the **VHF and UHF spectrum**, we communicate with other amateur radio stations in the immediate area (typically under 100 miles).

We use a frequency in the **HF spectrum**, which is reflected back to the earth by the ionosphere, to speak with both local and amateur radio stations several hundred (or thousand) miles away.



The **New Jersey Emergency Communications Team (NJECT)** provides routine and emergency communications for local non-profit events to local, county, state, and federal authorities in times of disaster using our member resources.



### Get Involved in Public Service

Community events, such as parades and road races, require radio communications along their routes for logistic support, scoring, and first aid.



### Explore Technology

Discover **how radio works** by building projects and experimenting. Build a simple radio receiver and make a wire antenna to listen for far-away signals.



### Compete & Win

From "foxhunting" for hidden radio signals to on-the-air contests for awards, amateur radio offers many challenging & fun ways to compete.



### Make a Difference

When cell phones, the internet, and other systems are down, amateur radio still gets the message out. It is a vital service that can save lives when regular communication systems fail.



### Expand Your World

Talk through satellites and with astronauts on board the International Space Station.



### Get Creative

Design, build, and test your gear, whether from scratch or a kit. Challenge yourself to make a one-of-a-kind electronic project.



### Develop New Skills

Don't be afraid to try new things and learn new skills. Through amateur radio, you can develop communication skills to improve your career, friendships, and life!



## New Jersey Emergency Communications Team

North and South Jersey brought together by combining efforts to offer Public Service Communications and activities

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