

What Are We Doing?

Thank you for your interest in our operation. We are radio communications experimenters participating in a nationwide competition on the microwave Amateur Radio (ham) frequencies.

Who are we?

We are licensed Amateur radio operators ("hams") and members of the San Bernardino Microwave Society (SBMS). The goal of this contest is to talk to as many other ham radio stations with similar equipment as far away as possible.

Is this legal?

Yes. The Amateur Radio service was created to encourage development of radio communication technology and establish a public service communications force at no charge to citizens or the government.

Is this like CB?

Yes and no. Ham radio is similar in that we use two-way radios and antennas to talk with each other, but hams can communicate using Morse code and computers in addition to voice, and we even have our own satellites. Ham radio requires a license issued by the Federal Communications Commission (FCC) and licensees are required to successfully pass a written test involving electronics theory, radio regulations and operating procedures.

How far can you talk?

We can communicate with other ham stations around the corner or across the globe, depending on a variety of factors that affect the way radio waves travel. The equipment we are using here operates on frequencies that generally follow line-of-sight paths. However, through experimentation, we find that signals can be reflected against objects such as buildings, trees, islands and mountains, to extend the range. Using these techniques, we are able to contact other stations hundreds of miles away.

What kind of radios are you using?

We are builders and experimenters in microwave radio communications. No commercially-built, "off-the-shelf" equipment for these frequencies exists, so we must build our own equipment, or modify commercially-made equipment meant for other communications services, such as cell phone and long-distance telephone.

How much does this equipment cost?

Like any other hobby, people spend as much or as little as they can afford. Most people involved in ham radio spend as much as any serious stereo enthusiast, amateur photographer or woodworker.

Where can I get more information?

More information on ham radio is available from the American Radio Relay League (ARRL): <http://www.arrl.org>

If you are a licensed ham operator already, and want to try a new challenge, visit the San Bernardino Microwave Society (SBMS). Meetings are held the first Thursday of each month in Corona, Calif. For more SBMS information, go to <http://www.ham-radio.com/sbms/>