

Starting At the Beginning

Two Pages from A New Ham to New Hams

I passed! Now what? You have about ten days before you can go on the air, which is a good time to learn the important traditions and protocols expected of you as a licensed radio operator. The best way to learn is to listen to the local hams, on the local repeaters. Repeaters are mini-radio stations that listen for a signal, then re-broadcast it at a higher power level. They are usually on mountain tops. You'll find the ARRL Repeater Guide at the local ham equipment stores. Importantly, the staff there can put you in touch with the ham radio club in your area. You should be able to locate a repeater in your area and enter the frequency in your radio. To transmit to these repeaters you must program a tone into your radio. These are called PLL or CTCSS tones. WAIT for your license.

Most new hams start out with an "HT" or handheld VHF/UHF radio. These have become very sophisticated and now offer 3, and even 4 bands, which is a big bonus for a new ham. They are also receivers and scanners on the bands they receive, which means you can listen to police, fire, shortwave, AM-FM etc. They will only transmit on the ham frequencies. You may consider installing an outdoor antennae so you can operate your radio in the house. Try enlarging your radio manual on a Xerox machine for easier reading, and writing programming steps in your repeater book.

After a few days you'll learn how call signs are given and you'll hear a pattern in conversation that will help you avoid the "motor mouth" mistake. Two-way radio is typified by mostly equal transmit/receive cycles. In other words talk a little, listen a little, and leave about a 1-2 beat pause before you transmit to allow another to join in. "Radio talk" (10-4, Roger, etc.) is not normally used in ham conversations. First name and call sign are obligatory, but last names are not used. If you are asked to repeat your callsign, use international phonetics, (Kilo, bravo, X-ray). Go to: <http://www.arrl.org/FandES/field/forms/fsd220.html> for a copy.

Repeaters are usually built and operated by ham clubs or individuals. Most of them are open which means any licensed ham may use them. If you use a repeater frequently you are expected to contribute to the repeater fund. Priority is given to anyone reporting traffic problems or other important information, and mobile users have priority over others. A tone is usually generated after each transmission so "over" is not used.

If you hear any radio traffic involving searches for missing persons or other emergency traffic do not transmit unless you are able to help. Government emergency agencies frequently request help from the ham community, via the repeaters, and they will indicate clearly when the repeater is available for normal traffic. Always listen before talking.

When your call sign issues, a good way to begin transmitting is to wait until mid-day when there isn't much traffic on the repeater, key your mic and say "This is (callsign,) anyone around?" These first conversations with just one, or two other hams will diminish anxiety. You might tape your callsign to your radio. You'll find the ham community very receptive to new hams, and appreciative

that you have taken the time to learn and respect the norms and courtesies the hobby is known for. Listen, think, talk. Listen, think, talk. Listen, think, talk.

A ham radio operator never has a radio. A ham radio operator has a radio *station*. Your radio station will be licensed to *transmit* radio signals on a large part of the radio spectrum. These pathways have been very carefully organized and allotted for specific uses, and at specific times. No one wants to enter a new endeavor, with new equipment and inadvertently cause problems, which is fairly easy to do.

I was surprised how little emphasis was placed on informing the new ham of band plans. These tell you which radio activities are where, and most importantly where you should and shouldn't transmit. They are listed in the Repeater Directory, and in the ARRL Operating Manual. Attached are the band plans for the 2 meter and 430 MHz. Simplex means radio to radio without a repeater, and the calling frequencies are, well, calling frequencies. If you want to reach someone via simplex on that band you call on that frequency, and then move your traffic to an ascribed frequency, similar to marine radio.

Information Resources

The fastest way to absorb information is through magazines. By reading several back issues and the current issue of QST or CQ magazine you'll get a good overview of equipment, trends, jargon, debates, and most importantly stories about how other hams use their radio operator skills. You may consider joining the ARRL, as you receive a subscription to QST and optional insurance for your radio equipment. The ARRL is an exemplary organization and is largely credited with maintaining the amateur band allotments in the face of relentless pressure from the wireless industry.

BOOKS: The ARRL Repeater Directory (\$8) The ARRL Operating Manual. (\$25) This book is very comprehensive and well written, with a great description of activities on the various bands, translation of jargon, do's and don'ts, and thumbnail histories throughout.

EQUIPMENT STORES:

HRO Sunnyvale 408-736-9496
HRO Oakland 510-534-5757.

WEBSITES:

ARRL.org
QRZ.com
eHAM.net

Scan links on these sites for others.

Where Do We Go From Here?

The bands you are allowed to operate on with a technician license preclude the bands where most long distance radio traffic is conducted. For these bands you need a **General** class license, which requires slightly more technical knowledge. The General class license is required to participate in important parts of the emergency service. Many hams love the DX or distance contacts available on these bands. Talking to people in Japan and Australia, South Africa and on yachts at sea is a lot of fun.