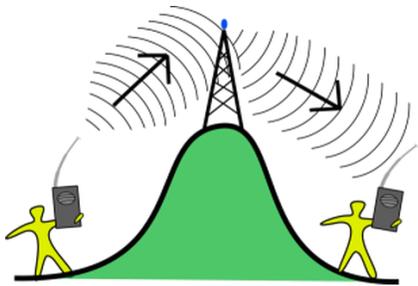


GMRS

Two-Way Radio for Everybody

General
Mobile
Radio
Service



- No Classes!
- No Test to take!
- Inexpensive FCC License! (\$70 for 10 years, for your whole household to share!)
- Inexpensive Radios! (\$60 and up)
- Easy to Learn!

GMRS

Step One:

Sign up at the FCC Web Site:

(That's the Federal Communications Commission, by the way...)



www.fcc.gov/general-mobile-radio-service-gmrs

Here is a very clear description of the process, thanks to the nice people at Quality Two-Way Radios:

quality2wayradios.com/store/GMRS-FCC-License

Only about \$70 for a 10-year FCC License, that your entire family (or household) can use and share.

GMRS

Step Two:

Buy an inexpensive, GMRS walkie-talkie (at least one! 2 or 3 might be a good idea...)



Important: you must purchase a Repeater-Capable radio, to be able to use Hilltop (or Building-Top) GMRS Repeaters, which amplify your little radio's signal, so that you can have conversations over greater distances.

Here's a short list:

<https://www.buytwowayradios.com/blog/search/?s=gmr>

The BTECH Walkie-Talkie pictured above, is at Amazon for \$60 (August 5th, 2019).

Search for "BTECH GMRS V1"



Step Three:

Let's try out some Two-Way Radio!

[these directions are for the BTECH GMRS-V1 handheld Radio]

In Seattle, there are (currently) 4 different GMRS Repeaters. There's also a new one (August 2019) on East Tiger Mountain.

Let's program one of them into the radio:

According to MyGMRS.com, one of the four is listed as an "Open System", meaning, the Owner is pleased to offer their Repeater for our use, without any permission needed, as long as we have a GMRS License.

The Repeater is called "Seattle #6", and it broadcasts on a frequency of 462.675 MHz ("megahertz"), and it "listens" for a tone of 141.3 Hertz, so that it only "repeats" transmissions that have the proper sub-audible tone included.

Also, the way a Repeater does its job, is that it is *simultaneously* listening on 1 frequency, and re-transmitting that same signal out on a *different* frequency.

The "Seattle #6" Repeater listens on 467.675 MHz, and re-transmits on 462.675 MHz. See the 5 megahertz difference? In Radio Terminology, that's called an "Offset".

The BTECH GMRS-V1 has most of the GMRS Repeater Channels already programmed into it; all we have to do is add the Transmission Tone that the Repeater is listening for.

That way, the Repeater will hear our transmission on 467.675 MHz, and will re-broadcast on 462.675 MHz, *instantly*, so that anybody else listening on the same channel, will be able to hear us, and when they answer us, we'll be listening as the Repeater is also re-broadcasting their transmissions.

Are you with me so far??

In the Radio, Channel "REPT22" is already programmed for a Repeater on 462.675 (the chart is in the Radio's Manual)

So, we dial the radio to "REPT22".

Then we press these buttons, to add the Tone:

[Menu] 1 3
[Menu] 1 4 1 3
[Menu]
[Exit]

That's it!

If we are "in range" of the repeater (especially if we're standing outside...), we should here a short "hiss" and possibly a "beep", which is the Repeater re-broadcasting our quick transmission, with a slight delay at the end, called a "tail".

We should transmit our GMRS License Callsign at this time:

Key the Transmit button, and speak clearly, and say the 4 letters and 3 digits of your Callsign.

You should hear a short "carrier" sound, just a quiet transmission, that is the Repeater transmitting just slightly longer after re-broadcasting *our* transmission.

You are now a Radio Operator!

More Information and How-To Instructions can be found online at:

Wiki.PSRG.org/wiki/GMRS

FCC.gov

SeattleEmergencyHubs.org