

FM/VHF & UHF Operating Guidelines

As a new ham radio operator with a shiny new HT radio in your hand, some of the following questions may enter your mind:

- How do I use a repeater station?
- What simplex frequencies may I use to be sure I don't interfere with repeaters or other operations?
- How do I provide a signal report if someone asks me for one?
- What do the various Q-signals mean?
- What part of the bands are used for SSB mode rather than FM, and what part of the band can I transmit CW?

And plenty more! Let's consider a couple of these and point you to a source of additional insight.

VHF/UHF Band Plans: The ARRL VHF-UHF Advisory Committee recommends the following 2-meter band plan. This plan recommends sub-bands within the 2-meter band for specific modes and types of operations, as follows:

144.00-144.05 EME (CW)
144.05-144.06 Propagation beacons
144.06-144.10 General CW and weak signals
144.10-144.20 EME and weak signal SSB
144.20 National SSB calling frequency
144.20-144.30 General SSB operation
144.30-144.50 OSCAR sub-band
144.50-144.60 Linear translator inputs
144.60-144.90 FM repeater inputs
144.90-145.10 Weak signal and FM simplex (includes packet radio)
145.10-145.20 Linear translator outputs
145.10-145.50 FM repeater outputs
145.50-145.80 Misc. and experimental modes
145.80-146.00 OSCAR sub-band
146.01-146.37 Repeater inputs
146.40-146.58 FM simplex
146.61-147.39 Repeater outputs
147.42-147.57 FM simplex
147.60-147.99 Repeater inputs

The blue highlighted sub-bands are the ones in which most beginners will have initial interest, FM simplex and repeater operations.

Simplex Channels: The frequency coordination body of most localities may have designated specific frequencies as standard simplex "channels" to be used in order to reduce chaos on the band. These

designated frequencies will have separation, or spacing, between them to help reduce interference. As an example the Colorado standard FM simplex frequencies are separated by 15 kHz, as follows:

146.415, 146.430, 146.445, 146.460, 146.475, 146.490, 146.505, 146.520, 146.535, 146.550, 146.565, 146.580, 146.595, 147.420, 147.435, 147.450, 147.465, 147.480, 147.495, 147.510, 147.525, 147.540, 147.555, 147.570, 147.585 MHz

To find out more about FM/VHF & UHF operations, including the 70cm band plan, glossary of terms, basic repeater operational tips, and more, visit the *FM/VHF Operating Guide* at the *KØNR Weblog*:

<http://www.k0nr.com/wordpress/fmvhf-operating-guide/>

~ HRS