

CALL SIGNS

Actual call signs could be: K1N, K1AA, AB2A, AH0Y, KN0W, W1ND, WH0M, N1ECE, NOBDY, W1SE, KL3VER, etc. There are three parts to a call sign; the prefix, the separating number, and the suffix. The prefix must start with either A, K, N, or W and be one or two letters. The separating number is a single digit and shows what area the person was first licensed in. The suffix can be one, two, or three letters. Your first call sign will end with three letters.

A new licensee would be issued a “sequential” FCC call sign which means it will be whatever call sign that is next in the list. After you have a call sign, you can apply for a vanity call sign and get your choice (within FCC guidelines) of letters and numbers. I suggest keeping the number of where you were first licensed but that is optional.

FREQUENCIES AND WAVELENGTHS

435.000 MHz is in the 70-centimeter band. That means the radio wavelength is about 0.7 meters long. This is UHF.

144.500 MHz is in the 2-Meter band. That means the radio wavelength is about 2 meters long. This is VHF.

3.850 MHz is in the 80-Meter band. That means the radio wavelength is about 80 meters long. This is HF.

The frequency is shown in megahertz (MHz).

To get a rough idea what band a frequency is in you can calculate it out. To check what band 145 MHz is in, clear the calculator and enter $300 \div 145 = 2.0689\dots$ which shows as in the 2 Meter band. Any frequency in the 2 Meter band will calculate out to somewhere between 2.082 and 2.027 which rounds to 2. Not all frequencies calculate out this clearly but most of the choices on the test are very obvious as to what band they are.

You can also calculate the other way around. Enter $300 \div 2 = 1.5$ MHz which is close to the 144-148 range of the 2 Meter band.

Not all frequencies are open for transmitting by Amateur Radio Operators. Some are for government, military, and other users.

Anyone can receive radio transmissions. You must have a license to be able to transmit in the Amateur Radio range.

A radio wave is an electromagnetic force. It has electrical and magnetic properties. High exposure can be dangerous.

