

Amateur Radio Band Characteristics

160 Meters

1.8-2.0 MHz.

A neighbor to the AM Broadcast band just slightly higher in frequency, 160 has very similar conditions to what you hear on AM Broadcast, quite localized during the day, with long distance capability at night. During the summer months the long distances at night can be several hundreds of miles and during the winter it can be several thousand miles.

Lots of noise created by static crashes hinder communications in the summer months but very nice in the winter! When there is no static, seems like you can hear.....forever!

80 Meters

3.5-4.0 MHz.

80 Meters is very similar to 160 meters but with greater distances especially at night. 80 tends to be a very reliable band less subject to variations of the sunspot cycle and is used a lot for regular net operations and message handling and "local rag chewing".

Again can be very noise prone in the summer static. You will meet lots of "local yocals" and make some very good friends with the "local" gang that hang out here. Various states and groups seem to frequent a particular frequency so tune around.

60 Meters

5.332 - 5.405

Not actually a "Ham Band" but a cluster of 5 frequencies or channels shared with Government users. Many restrictions apply to technical requirements of ham transmitters and antennas. Hams are secondary user of this band, not primary, so **we must yield** to interference problems with Government stations. 60 meters is much like 80 and 40 meters.

40 Meters

7.0-7.3 MHz

This is many ham's favorite band. It is always open somewhere. During the summer daytime distances of 300-400 miles and night time distances of 1000 miles are very common. Winter days with 500 miles or more are usual and night time conditions bring DX intercontinental communications. This band is shared with short-wave broadcast from countries outside of North America. Between these interfering signals a ham with a reasonable station can work stations worldwide if you can find a clear spot!. Not as affected by the sunspot cycle as 20-10 meters. Many nets frequent 40 meters both day and night.

[Check out the 1721 hf Group on 40 Meters](#) (Just a friendly bunch of Hams who think they are one big family! Join them!)

30 Meters

10.100-10.150 MHz.

A lot like 40 meters but can only be used on CW and RTTY. No broadcast interference and has slightly longer range than 40 meters. Daytime ranges of 1000 miles are quite common.

20 Meters

14.000-14.350 MHz.

Just about all of the serious DXers hang out on 20 meters!

This can be a VERY exciting band with some of the best DX found on any band. Around the world daytime communications are generally possible and when the sunspot cycle is peaking 20 can be used around the clock! Not likely to be used for short-range communications. The only way to work someone a few hundred miles away would be scatter or possibly "long path". Ground wave signals of about 50-75 miles might be all you would expect. At the bottom of the sunspot cycle, openings to other continents are short, rare and few and far between!

17 Meters

18.068-18.168 MHz.

Band conditions are very similar to 20 meters. This seems to be a very popular band when hams go mobile and lots of fun can be expected. You will meet some of the finest Hams in the world on 17 meters. A very cordial band!

15 Meters

21.000-21.450 MHz.

A lot like 20 meters but a bit more flakey.. More influenced by the sunspot cycle. Much less night time activity than 20 meters but at the peak of the sunspot cycle, 15 can provide much greater distances! On the down side, at the bottom of the cycle, 15 may not open for days.

12 Meters

24.890-24.990 MHz.

Very heavily influenced by the sunspot cycle. At the bottom of the cycle it is suitable only for very short distance groundwave communications only, for long periods of time. At the peak of the cycle it is capable of communications over thousands of miles with a minimum of equipment. Another nice mobile band when conditions are right.

10 Meters

28.000-29.7000 MHz.

This can be a FUN band, when it is open!

This is the HF band most heavily affected by sunspots and the sunspot cycle and it can be erratic and exciting at the same time with lots of Dx for the qsl hunter or just as a fun band. Minimum power and simple antennas can bring you a hundred countries in a short period of time when the sunspot cycle is rising towards the peak. Five watts or even less can work half way around the earth!. Ground wave coverage is 25 miles or so. Lots of beacon stations worldwide for you DX hunters. If you can hear beacons that run very low power on 10 Meters, there is an opening to that part of the world.....keep trying!