

# Radio Scouting - Learning by Listening

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Many amateurs begin as shortwave listeners as they only need a receiver and a licence is not required. Amateur radio stations, like all other radio stations, are allocated bands of frequencies within which they must operate. The most popular of these and therefore the bands where a listener is more likely to hear amateurs, are as follows:-

- **1.8MHz (160 metres)** This band is shared by amateurs with coastal and other commercial stations. You can hear mainly semi-local (up to 50-75 miles) amateur stations during daylight with the range increasing at night to cover the British Isles and occasional continental stations. In the Winter some long distance stations can be heard in the early hours.
- **3.5MHz (80 metres)** This band is also shared with commercial stations. Many British and Western European Stations can be heard, particularly after nightfall.
- **7MHz (40 metres)** Mainly British and European stations, although many long distance stations can be heard in the evenings and early mornings.
- **14MHz (20 metres)** Of all the amateur bands, this one is the most consistently suitable for long distance transmissions. There will be few days when at least some long distance (DX) signals cannot be heard. In addition, many European stations can be heard at very good strength during daylight.
- **21MHz (15 metres)** This is an extremely good daylight dx band except during sunspot minimum years when activity drops sharply. It is often open over North/South paths (eg South Africa or South America) when closed for East/West paths.
- **28MHz (10 metres)** This is rather like 21MHz. In sunspot maximum years it may be very good indeed with lots of signals even from low power dx stations. In the sunspot minimum periods few signals maybe heard for days on end.
- **50MHz (6 metres)** Local signals up to 50 miles, the range extending with good conditions. Under extremely good conditions the band will open to Western Europe and North America.
- **70 & 144MHz (4 & 2m)** Local and semi-local signals up to about 100 miles can be heard consistently and stations from several hundreds of miles away - including European - can be received when conditions are good.
- **432 MHz (70 cms)** Similar to 144MHz with local contacts up to 50 miles. Signals up to 100 miles can be heard in good conditions.

Signals from amateurs are relatively weak compared with commercial stations. Amateurs are not licensed to use very powerful transmitters. Most transmissions use Single Side Band (SSB) mode. It is not possible to receive amateur stations on a normal domestic receiver unless it is very sensitive and has an SSB mode switch. However, if you have a receiver which covers 108-178 MHz Fm, you may be able to hear local amateurs between 144 and 146 MHz. Alternatively, you may purchase a receiver kit for around twenty five pounds, which you can build yourself and have many hours of enjoyment, listening to amateur radio stations around the world.