

Frequency Allocations to 30 MHz

153 to 279 kHz:

This is the European Long wave Broadcast band. The channel separation is 9 kHz.

279 to 530 kHz:

Most stations heard in this range are aeronautical and marine navigation beacons that continuously repeat their call signs in Morse code. These stations can be found locally, with some DX heard at night. Some RTTY signals are found in the upper end of this band. Marine weather and safety broadcasts, known as NAVTEX, are transmitted on 518 kHz. Your best reception here will be at night, especially during the fall and winter months. The old international distress frequency of 500 kHz is in this band, but it is no longer officially used.

530 to 1600 kHz:

This is the Medium wave Broadcast band (also known as the "AM" broadcasting band). The channel separation is 9 kHz in Europe, Africa and Asia, and 10 kHz in the Americas. In the United States, the frequencies of 1230, 1240, 1340, 1400, 1450, and 1490 kHz are allocated only for local stations (low power) and you may simply hear a 'rumble' on those frequencies, esp. at night due to the heavy congestion. Many powerful stations in South America use a non-standard frequency step in this band.

1600 to 1710 kHz:

In USA the Medium wave Broadcast band now ends at 1700 kHz, with 1610 to 1700 kHz being the new "X" or "extended" band. New stations began appearing here in late 1997, and this new "X band" is providing excellent DX listening opportunities. In Europe you can hear medium wave pirate radio stations in this band.

1710 to 1800 kHz:

This is a "grab bag" of miscellaneous radio communications, mainly beacons and navigation aids. You may hear several transmitters that sound like chirping crickets; these are floating beacons used to mark fishing and offshore oil exploration locations. In Europe you can hear Coastal Radio stations in this band. Best time to listen would be during the nighttime hours. Most two-way communications in this band is USB.

1800 to 2000 kHz:

This is the 160-meter ham radio band. Most voice communications will be in LSB and AM with best reception at night during the fall and winter months.

2000 to 2300 kHz:

This range is used maritime communications, with 2182 kHz reserved for distress messages and calling (DCS calling: 2187.5 kHz). There are also several regularly scheduled maritime weather broadcasts by Coastal Radio stations. Most activity will be in USB, and best reception is at night. The frequency of 2670 kHz is used by the Coast Guard for informational broadcasts.

2300 to 2495 kHz:

This is the 120-meter broadcasting band, mainly used by stations located in the tropics. In North America, this band is also used by government stations. You may also hear illegal marine stations in this band, in USB mode.

2498 to 2850 kHz:

More maritime stations are found here, as well as standard time and frequency stations WWV and WWVH on 2500 kHz.

2850 to 3155 kHz:

Mainly aeronautical stations in USB use this band. Several stations broadcast aeronautical weather bulletins, and you can also hear traffic between airports and airplanes aloft.

3150 to 3200 kHz:

This range is allocated to fixed stations, with most communications in RTTY.

3200 to 3400 kHz:

This is a very interesting segment. This is the 90-meter broadcasting band, used mainly by stations in the tropics. Canadian standard time and frequency station CHU can be heard on 3330 kHz. Several fixed stations also use this range, including several associated with various agencies of the U.S. government. Best reception will be at night.

3400 to 3500 kHz:

This range is used for civil aeronautical communications in USB. Some military stations use this band also, but activity is light. Pirate stations in North America use this band also, the calling frequency being 3475 kHz.

3500 to 3800 kHz:

This is the 80-meter ham radio band. The 3500 to 3750 kHz range is used for CW and RTTY communications, and the rest of the band is used for LSB voice. In the United States, this band is known as the 80/75-meter band, and ham use is allocated from 3500 to 4000 kHz.

3800 to 3950 kHz:

This range is used for civil aeronautical communications in USB. In North America this is a radio amateur band. Best reception is at night. An interesting frequency on this band is 3950 kHz; it is an active ham radio frequency, the "Liberty Net", the hurricane net during the summer (see also 14325 kHz) but is also used by many European military and government stations.

3950 to 4000 kHz:

This is the 75 m broadcasting band in Europe and Africa. In North America this is a radio amateur band (see the listing for 3800 to 3950 kHz, above). Best reception is at night.

4000 to 4063 kHz:

This is a fixed station band, mainly used by military forces for SSB traffic. Many marine operations are also in this band, with simplex operations in USB mode.

4063 to 4438 kHz:

This is a large band used for maritime communications in USB, with 4125 kHz being used as a calling/distress frequency. (note: SAR agencies are switching over to DCS distress signaling for the HF and VHF marine bands. The 4 MHz marine band DCS frequency is 4207.5 kHz.) The United States Navy's Virginia Capes radio station can be heard on the frequency of 4372 kHz using the callsign "GAINTKILLER".

4438 to 4650 kHz:

This range is mainly used for fixed and mobile stations in USB. Many military and government agencies use this band for nighttime command-and-control nets.

4650 to 4750 kHz:

This range is used for aeronautical communications in USB. Both military and

civilian aircraft use this band, with military traffic centered around 4724 kHz.

4750 to 5060 kHz:

This is the 60-meter broadcasting band, used mainly by stations in the tropics. Best reception is in the evening and night hours during the fall and winter. In winter, stations to the east of you begin to fade in an hour or two before your local sunset, and stations to the west of you don't start to fade out until an hour or so after your local sunrise. The frequency 5000 kHz is allocated internationally to standard time and frequency stations. In North America, you'll mainly hear WWV and WWVH on 5000 kHz. During summer days, local civil defense station can also be found in this band.

5060 to 5450 kHz:

This range is a real jumble! Several broadcasting stations are found in the lower part of the segment, and fixed and mobile stations in SSB, RTTY, and CW are found throughout this band. Best reception is during the evening and night hours. The new 60-meter ham radio band uses the following frequencies: 5332, 5348, 5368, 5373 and 5405 kHz, with the only allowed mode being USB.

5450 to 5730 kHz:

This range is used for aeronautical communications in USB

5730 to 5950 kHz:

Another jumble of different stations! For years, this band has been used by fixed stations of the U.S. government for communications in USB and RTTY. However, several broadcasters are also showing up here, many from Central and South America.

5950 to 6295 kHz:

This is the 49-meter broadcasting band, and is loaded with signals from late afternoon to a couple of hours after your local sunrise. Some marine stations also use this band.

6295 to 6525 kHz:

This is a very busy band for maritime communication in USB and various FSK modes like AMTOR and FEC.

6525 to 6765 kHz:

This is another busy band, this time for aeronautical communications in USB. Best reception is during the evening and night hours.

6765 to 7000 kHz:

This segment is allocated to fixed stations, with signals in SSB, CW, FAX modes, and miscellaneous digital modes. There are several pirate broadcasters from the 6900 to 7000 kHz area, in USB or AM mode, with the most popular North American pirate frequency being 6955 kHz, USB. These stations are mainly heard on the weekends and evenings.

7000 to 7100 kHz:

The 7000 to 7100 kHz range is allocated exclusively to ham radio worldwide, although an occasional broadcaster will show up here. Hams use CW and RTTY from 7000 to 7040 kHz, and mainly LSB from 7040 to 7100 kHz. Best reception is from the late afternoon to early morning, although some hams can usually be heard here around the clock.

7100 to 7350 kHz:

The 7100 to 7300 kHz range is allocated exclusively to ham radio in North and South America, but is the 41-meter broadcasting band in the rest of the world. Best reception is from the late afternoon to early morning, although some stations can usually be heard here around the clock.

7350 to 8195 kHz:

Fixed stations mainly use this segment, although several broadcasters can be found in the lower reaches. Various FSK and digital modes are used. Pirate stations, similar to those found in the 6900 to 7000 kHz range, also use this segment, with activity centered around 7415 and 7475 kHz.

8195 to 8815 kHz:

This is a busy maritime band from the late afternoon until early morning, with most traffic in USB and FSK modes. Distress calls and beacons from lifeboats are found at 8364 kHz.

8815 to 9040 kHz:

This is another aeronautical communications band, with traffic in USB. Several stations broadcast aeronautical weather reports. Military "SKYKING" broadcasts can also be heard in this band, with most of the stations around 8992 kHz.

9040 to 9400 kHz:

This range is used mainly by fixed station in various FSK and digital modes, but several international broadcasters also use it.

9400 to 9900 kHz:

This is the 31-meter international broadcasting band, and is packed with stations from around the world. Best reception is usually from mid-afternoon to around mid-morning, although some stations can be heard here throughout the day, especially in winter.

9900 to 9995 kHz:

Several international broadcasters use this range along with fixed stations using FSK modes.

9995 to 10005 kHz:

This is set aside for standard time and frequency stations, like WWV and WWVH on 10000 kHz.

10005 to 10100 kHz:

This range is used for civil aeronautical communications.

10100 to 10150 kHz:

This is the 30-meter ham radio band. Because it is so narrow, operation here is restricted to CW and RTTY, with lower power outputs. Fixed stations also use this band from time to time, using many different FSK modes.

10150 to 11170 kHz:

Fixed stations use this segment. In addition to various FSK and digital modes, you may hear several international broadcast stations being relayed in SSB. These "feeder" stations are used to send programming to relay sites not served by satellite downlinks.

11170 to 11400 kHz:

This range is used for aeronautical communications in USB. The most popular HF monitoring target, the USAF global-high frequency network common frequency of 11175, is used day and night.

11400 to 11650 kHz:

Fixed stations in FSK and digital modes mainly use this segment, but some international broadcasters also operate here.

11600 to 12100 kHz:

This is the 25-meter international broadcasting band. You can usually hear several stations here no matter what time of day you listen.

12100 to 12330 kHz:

Fixed stations in FSK and digital modes primarily use this band, although several international broadcasters are found in the lower area.

12330 to 13200 kHz:

This is a busy maritime communications band during the day and evening hours, with traffic in USB and various FSK modes. Military EAM broadcasts are on 13155 kHz. (supplementary to the USAF common frequency of 11175 kHz).

13200 to 13360 kHz:

Aeronautical communications in USB are heard here during the day and evening.

13360 to 13570 kHz:

Fixed stations, mainly in FSK and digital modes use this range.

13570 to 13870 kHz:

This is the 22-meter international broadcasting band, with best reception generally during the daytime and early evening.

13870 to 14000 kHz:

Fixed stations use this range, with most communications in FSK modes.

14000 to 14350 kHz:

This is the 20-meter ham radio band. The lowest 100 kHz is reserved for CW and RTTY use, with USB popular in the rest of the band. Best reception is during the daytime and early evening. This is the most popular HF ham radio band, with stations day and night. During Hurricane Season the frequency of 14325 kHz is used for direct contact with the National Hurricane Center and areas affected by the storm. Frequencies around 14175 to 14275 kHz are the highly active "DX" frequencies.

14350 to 14490 kHz:

Fixed stations, primarily in FSK and digital modes use this segment.

14990 to 15010 kHz:

This sliver is reserved for standard time and frequency stations; with the best-heard being WWV and WWVH on 15000 kHz.

15010 to 15100 kHz:

This range is for military aeronautical communications in USB, although a few international broadcasters do show up here. An interesting frequency would be 15050 kHz, which has used since 1970s by European pirate stations.

15100 to 15800 kHz:

This is the 19-meter international broadcasting band, and it is usually packed with signals during the daytime and early evening.

15800 to 16460 kHz:

Fixed stations in USB, FSK modes, and digital modes use this band. Because this is such a large band and activity is pretty light, many military and government stations from all around the world can be found in this band, using anything from voice in USB to advanced digital modes.

16460 to 17360 kHz:

This range is shared between maritime and fixed stations using USB, FSK modes, and digital modes. Best reception here is generally during the daytime.

17360 to 17480 kHz:

Aeronautical and fixed stations using USB, FSK modes, and digital modes share the range. Military and government stations are also heard in this segment.

17480 to 17900 kHz:

This is the 16-meter international broadcasting band, and best reception is usually during the daylight hours.

17900 to 18030 kHz:

This band is used for aeronautical communications in USB.

18030 to 18068 kHz:

Fixed stations, mainly in FSK and digital modes use this range.

18068 to 18168 kHz:

This is the 17-meter ham radio band, where CW, RTTY, and USB are used.

18168 to 18900 kHz:

Fixed stations, with a few maritime stations also found here use this large band. Most traffic is in FSK and digital modes. Reception in this range will usually be limited to daylight hours. Many marine stations also use USB in this section.

18900 to 19020 kHz:

This is the 19-meter international broadcasting band.

19020 to 19990 kHz

Fixed stations, with a few maritime stations also found here use this large band. Most traffic is in FSK and digital modes.

19990 to 20010 kHz:

This segment is reserved for standard time and frequency stations like WWV on 20000 kHz. Reception here is usually possible only in daytime.

20010 to 21000 kHz:

Fixed stations and a few aeronautical stations mainly use this range. Most traffic is in FSK and digital modes as well as USB.

21000 to 21450 kHz:

This is the 15-meter amateur band. CW and RTTY is mainly found in the first 200 kHz, and USB is used in the rest of the band. Best reception here is in the daytime hours.

21450 to 21850 kHz:

This is the 13-meter international broadcasting band, with best reception during the daytime.

21850 to 21870 kHz:

Fixed service in FSK and digital modes as well as USB use this band...

21870 to 22000 kHz:

This band is used for civil aeronautical communications in USB.

22000 to 22855 kHz:

This range is reserved for maritime communications in USB and FSK modes. Best reception is in daytime during years of high sunspot activity.

22855 to 23200 kHz:

Fixed stations, mainly in FSK and digital modes use this band.

23200 to 23350 kHz:

This band is used for civil aeronautical communications in USB.

23350 to 24890 kHz:

Fixed stations in FSK and digital modes use this segment.

24890 to 24990 kHz:

This is the 12-meter ham radio band, used for CW, FSK, and USB work. Reception is usually limited to the daytime during years of high sunspot activity.

24990 to 25010 kHz:

This range is for standard time and frequency stations, although none are currently operating here.

25010 to 25550 kHz:

In the United States, the 25020 to 25320 kHz section of this band is allocated for Petroleum Stations, in FM mode. This band is also allocated for maritime stations in USB, but it is only active during the summer days in periods of high sunspot activity.

25550 to 25670 kHz:

This region is reserved for radio astronomy and is usually free of stations, with a few pirate CB stations showing up from time to time in AM and SSB mode.

25670 to 26100 kHz:

This is the 11-meter international broadcasting band. Reception is usually possible only in daytime during years of high sunspot activity.

26100 to 26965 kHz:

This band is allocated to low-powered beacon and remote broadcast pickup stations operating in FM mode, as well as military and government users. This band is filled with pirate stations operating illegally modified CB equipment, with activity found near 26715, 26885 and 26915 kHz. Mode is usually AM, but some SSB is also heard.

26965 to 27405 kHz:

This is the legal citizens band; the channel separation is 10 kHz, with few channels skipped for telemetry and remote control. AM and SSB are used in North America, while FM is authorized in Europe and most of the rest of the world. Channel 9, or 27065 kHz, is for emergency communications only, but it is however, usually being jammed. The CB band is incredibly congested, so many stations around the 27 MHz band use illegal amplifiers to get larger range, but therefore they jam the channel for miles.

27405 to 28000 kHz:

This band is allocated to military and government users, but there are many pirate two-way stations that can also be found in this area, with the most active frequencies being 27495 and 27555 kHz. USB and AM are mainly used, but FM can also be heard. Listen for activity from early morning to late-afternoon during the summer months. In years of high sunspot activity, stations from around the world can be heard on this band day and night. In the USA, licensed civilian mobile stations can be found at 27430, 27450, 27470, and 27490 kHz, FM mode.

28000 to 29700 kHz:

This is the 10-meter ham radio band. Most activity is in USB from 28300 to 28600 kHz, with FM used in the range 29510 - 29700 kHz (the FM calling frequency is 29600 kHz). It is possible to receive amateur radio satellites between 29300 and 29510 kHz. Best reception is during daytime in years of high sunspot activity or during a sporadic-E propagation opening. There is also a significant amount of AM being used in this band also. This band is used for local ham communications all year round, with some FM repeaters above 29605 kHz in major metro areas.

29700 to 30000 kHz:

In North America, this band is allocated to low powered fixed and mobile stations, operating in AM or FM mode. Civilian land mobile radio stations can be found at 29710, 29730, 29750 and 29770 kHz, using FM mode. In times of high sunspot activity, stations from around the world can be heard in this band (many using SSB). Because this range is so close to the VHF-low band, it is used for pretty much everything and you can hear everything when the sunspots are high.

this is only a guide, and should (could?) be used when tuning around the HF spectrum.

thanks, Phil Sperry, KF4ZTO