§ 97.301

(c) For a station having a control operator who has been granted an operator license of Advanced Class:

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements see § 97.303 (paragraph)	
LF	kHz	kHz	kHz		
2200 m	135.7–137.8	135.7–137.8	135.7–137.8	(a), (g).	
Wavelength band	ITU region 1	ITU region 2	ITU region 3	Sharing requirement see § 97.303	
MF	kHz	kHz	kHz	(Paragraph)	
160 m	1810–1850 472–479	1800–2000 472–479	1800–2000 472–479	(a) (g).	
HF	MHz	MHz	MHz		
80 m	3.525-3.600 3.700-3.800 7.025-7.200 10.100-10.150 14.025-14.150 14.175-14.350 18.068-18.168 21.025-21.200 21.225-21.450 24.890-24.990 28.000-29.700	3.525-3.600 3.700-4.000 See § 97.303(h) 7.025-7.300 10.100-10.150 14.025-14.150 14.175-14.350 18.068-18.168 21.025-21.200 21.225-21.450 24.890-24.990 28.000-29.700	3.525-3.600	(a) (a) (h) (i) (j)	

(d) For a station having a control operator who has been granted an operator license of General Class:

Wavelength band	ITU Region 1		ITU Region 2		ITU Region 3		Sharing requirements see § 97.303 (paragraph)
LF 2200 m	kHz . 135.7–137.8		kHz 135.7–137.8		kHz 135.7–137.8		(a), (g).
							(), (0)
Wavelength band	ITU region 1	ITU region 2			ITU region 3		Sharing requirements
MF	kHz		kHz		kHz		see § 97.303 (paragraph)
160 m			1800–2000 472–479		1800–2000 472–479		(a) (g).
HF	MHz		MHz		MHz		
80 m	3.525–3.600 7.025–7.125 7.175–7.200 10.100–10.150 14.025–14.150 14.225–14.350 18.068–18.168 21.025–21.200 21.275–21.450	3. Se 7. 7. 10 14 18 21	525–3.600 800–4.000 se § 97.303(h) 025–7.125 175–7.300 0.100–10.150 0.025–14.150 0.225–14.350 0.068–18.168 0.025–21.200 0.275–21.450	7.02 7.17 10.1 14.0 14.2 18.0 21.0	25–3.600 00–3.900 25–7.125 75–7.200 100–10.150 025–14.150 225–14.350 068–18.168 005–21.200 275–21.450	(a) (a) (h) (i) (i) (j)	
12 m 10 m	24.890–24.990 28.000–29.700	ı –	3.890–24.990 3.000–29.700		890–24.990 000–29.700		

(e) For a station having a control operator who has been granted an oper-

ator license of Novice Class or Technician Class:

23 cm	1270–1295	1270–1295		1270–1295		(d), (o)	
UHF	MHz	MHz		MHz			
1.25 m		222–225				(a)	
VHF	MHz	MHz		MHz			
10 m	28.0–28.5	28.0–28.5	28.0)–28.5			
15 m	21.025–21.200	21.025–21.200		025-21.200			
40 m	7.025-7.125	7.025-7.125	7.025-7.125		(i)		
80 m	3.525-3.600	3.525-3.600	3.52	25–3.600	(a)		
HF	MHz	MHz		MHz	(paragraph)		
Wavelength band	ITU region 1	ITU region 2		ITU region 3	Sharing requirements see § 97.303		

[75 FR 27201, May 14, 2010, as amended at 75 FR 78171, Dec. 15, 2010; 80 FR 38911, July 7, 2015; 82 FR 27214, June 14, 2017]

§ 97.303 Frequency sharing requirements.

The following paragraphs summarize the frequency sharing requirements that apply to amateur stations transmitting in the frequency bands specified in §97.301 of this part. Each frequency band allocated to the amateur service is designated as either a secondary service or a primary service. A station in a secondary service must not cause harmful interference to, and must accept interference from, stations in a primary service.

- (a) Where, in adjacent ITU Regions or sub-Regions, a band of frequencies is allocated to different services of the same category (i.e., primary or secondary services), the basic principle is the equality of right to operate. Accordingly, stations of each service in one Region or sub-Region must operate so as not to cause harmful interference to any service of the same or higher category in the other Regions or sub-Regions.
- (b) Amateur stations transmitting in the 70 cm band, the 33 cm band, the 23 cm band, the 9 cm band, the 5 cm band, the 3 cm band, or the 24.05–24.25 GHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the United States Government in the radiolocation service.
- (c) Amateur stations transmitting in the 76–81 GHz segment, the 136–141 GHz segment, or the 241–248 GHz segment

must not cause harmful interference to, and must accept interference from, stations authorized by the United States Government, the FCC, or other nations in the radiolocation service.

- (d) Amateur stations transmitting in the 430–450 MHz segment, the 23 cm band, the 3.3–3.4 GHz segment, the 5.65–5.85 GHz segment, the 13 cm band, or the 24.05–24.25 GHz segment, must not cause harmful interference to, and must accept interference from, stations authorized by other nations in the radiolocation service.
- (e) Amateur stations receiving in the 33 cm band, the 2400–2450 MHz segment, the 5.725–5.875 GHz segment, the 1.2 cm band, the 2.5 mm band, or the 244–246 GHz segment must accept interference from industrial, scientific, and medical (ISM) equipment.
- (f) Amateur stations transmitting in the following segments must not cause harmful interference to radio astronomy stations: 3.332-3.339 GHz, 3.3458- $3.3525~\mathrm{GHz},\ 76-81~\mathrm{GHz},\ 136-141~\mathrm{GHz},\ 241-$ 248 GHz, 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz, or 926-945 GHz. In addition, amateur stations transmitting in the following segments must not cause harmful interference to stations in the Earth exploration-satellite service (passive) or the space research service (passive): 275-277 GHz, 294-306 GHz, 316-334 GHz, 342-349 GHz, 363-365 GHz, 371-389 GHz, 416-434 GHz, 442-444 GHz, 496-506 GHz, 546-568 GHz, 624-629 GHz, 634-654 GHz, 659-661 GHz, 684-692 GHz, 730-732 GHz, 851-853 GHz, or 951-956 GHz.

§ 97.303

- (g) In the 2200 m and 630 m bands:
- (1) Amateur stations in the 135.7–137.8 kHz (2200 m) and 472–479 kHz (630 m) bands shall only operate at fixed locations. Amateur stations shall not operate within a horizontal distance of one kilometer from a transmission line that conducts a power line carrier (PLC) signal in the 135.7–137.8 kHz or 472–479 kHz bands. Horizontal distance is measured from the station's antenna to the closest point on the transmission line.
- (2) Prior to commencement of operations in the 135.7–137.8 kHz (2200 m) and/or 472–479 kHz (630 m) bands, amateur operators shall notify the Utilities Telecom Council (UTC) of their intent to operate by submitting their call signs, intended band or bands of operation, and the coordinates of their antenna's fixed location. Amateur stations will be permitted to commence operations after the 30-day period unless UTC notifies the station that its fixed location is located within one kilometer of PLC systems operating in the same or overlapping frequencies.
- (3) Amateur stations in the 135.7–137.8 kHz (2200 m) band shall not cause harmful interference to, and shall accept interference from:
- (i) Stations authorized by the United States Government in the fixed and maritime mobile services;
- (ii) Stations authorized by other nations in the fixed, maritime mobile, and radionavigation service.
- (4) Amateur stations in the 472–479 kHz (630 m) band shall not cause harmful interference to, and shall accept interference from:
- (i) Stations authorized by the FCC in the maritime mobile service;
- (ii) Stations authorized by other nations in the maritime mobile and aeronautical radionavigation services.
- (5) Amateur stations causing harmful interference shall take all necessary measures to eliminate such interference—including temporary or permanent termination of transmissions.
- (h) 60 m band: (1) In the 5330.5-5406.4 kHz band (60 m band), amateur stations may transmit only on the five center frequencies specified in the table below. In order to meet this requirement, control operators of stations transmitting phone, data, and RTTY

emissions (emission designators 2K80J3E, 2K80J2D, and 60H0J2B, respectively) may set the carrier frequency 1.5 kHz below the center frequency as specified in the table below. For CW emissions (emission designator 150HA1A), the carrier frequency is set to the center frequency. Amateur operators shall ensure that their emissions do not occupy more than 2.8 kHz centered on each of these center frequencies.

60 M BAND FREQUENCIES (KHZ)

Carrier	Center	
5330.5	5332.0	
5346.5	5348.0	
5357.0	5358.5	
5371.5	5373.0	
5403.5	5405.0	

- (2) Amateur stations transmitting on the 60 m band must not cause harmful interference to, and must accept interference from, stations authorized by:
- (i) The United States (NTIA and FCC) and other nations in the fixed service; and
- (ii) Other nations in the mobile except aeronautical mobile service.
- (i) Amateur stations transmitting in the 7.2–7.3 MHz segment must not cause harmful interference to, and must accept interference from, international broadcast stations whose programming is intended for use within Region 1 or Region 3.
- (j) Amateur stations transmitting in the 30 m band must not cause harmful interference to, and must accept interference from, stations by other nations in the fixed service. The licensee of the amateur station must make all necessary adjustments, including termination of transmissions, if harmful interference is caused.
- (k) For amateur stations located in ITU Regions 1 and 3: Amateur stations transmitting in the 146–148 MHz segment or the 10.00–10.45 GHz segment must not cause harmful interference to, and must accept interference from, stations of other nations in the fixed and mobile services.
 - (1) In the 219–220 MHz segment:
- (1) Use is restricted to amateur stations participating as forwarding stations in fixed point-to-point digital message forwarding systems, including

intercity packet backbone networks. It is not available for other purposes.

- (2) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by:
- (i) The FCC in the Automated Maritime Telecommunications System (AMTS), the 218–219 MHz Service, and the 220 MHz Service, and television stations broadcasting on channels 11 and 13: and
- (ii) Other nations in the fixed and maritime mobile services.
- (3) No amateur station may transmit unless the licensee has given written notification of the station's specific geographic location for such transmissions in order to be incorporated into a database that has been made available to the public. The notification must be given at least 30 days prior to making such transmissions. The notification must be given to: The American Radio Relay League, Inc., 225 Main Street, Newington, CT 06111–1494.
- (4) No amateur station may transmit from a location that is within 640 km of an AMTS coast station that operates in the 217–218 MHz and 219–220 MHz bands unless the amateur station licensee has given written notification of the station's specific geographic location for such transmissions to the AMTS licensee. The notification must be given at least 30 days prior to making such transmissions. The location of AMTS coast stations using the 217–218/219–220 MHz channels may be obtained as noted in paragraph (1)(3) of this section
- (5) No amateur station may transmit from a location that is within 80 km of an AMTS coast station that uses frequencies in the 217–218 MHz and 219–220 MHz bands unless that amateur station licensee holds written approval from that AMTS licensee. The location of AMTS coast stations using the 217–218/219–220 MHz channels may be obtained as noted in paragraph (1)(3) of this section.
 - (m) In the 70 cm band:
- (1) No amateur station shall transmit from north of Line A in the 420–430 MHz segment. See $\S 97.3(a)$ for the definition of Line A.
- (2) Amateur stations transmitting in the 420–430 MHz segment must not

- cause harmful interference to, and must accept interference from, stations authorized by the FCC in the land mobile service within 80.5 km of Buffalo, Cleveland, and Detroit. See § 2.106, footnote US230 for specific frequencies and coordinates.
- (3) Amateur stations transmitting in the 420-430 MHz segment or the 440-450 MHz segment must not cause harmful interference to, and must accept interference from, stations authorized by other nations in the fixed and mobile except aeronautical mobile services.
 - (n) In the 33 cm band:
- (1) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by:
 - (i) The United States Government;
- (ii) The FCC in the Location and Monitoring Service; and
- (iii) Other nations in the fixed service.
- (2) No amateur station shall transmit from those portions of Texas and New Mexico that are bounded by latitudes 31°41′ and 34°30′ North and longitudes 104°11′ and 107°30′ West; or from outside of the United States and its Region 2 insular areas.
- (3) No amateur station shall transmit from those portions of Colorado and Wyoming that are bounded by latitudes 39° and 42° North and longitudes 103° and 108° West in the following segments: 902.4–902.6 MHz, 904.3–904.7 MHz, 925.3–925.7 MHz, and 927.3–927.7 MHz.
- (o) Amateur stations transmitting in the 23 cm band must not cause harmful interference to, and must accept interference from, stations authorized by:
- (1) The United States Government in the aeronautical radionavigation, Earth exploration-satellite (active), or space research (active) services;
- (2) The FCC in the aeronautical radionavigation service; and
- (3) Other nations in the Earth exploration-satellite (active), radionavigation-satellite (space-to-Earth) (space-to-space), or space research (active) services.
 - (p) In the 13 cm band:
- (1) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by other nations in fixed and mobile services.