

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 2, 25, 73, 74, 90, and 97

[DA No. 08–530]

Non-Substantive Revisions to the Table of Frequency Allocations

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: This document makes non-substantive, editorial revisions to the Commission's Table of Frequency Allocations (Allocation Table) and to various other Commission Rules. The purpose of this action is to update and clarify the Allocation Table, to remove obsolete and outdated provisions from the Commission's Rules, and to ensure that the Allocation Table and related rules are consistent with the Commission's decisions in recent rulemaking proceedings.

DATES: Effective May 6, 2008.

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SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Memorandum Opinion and Order*, DA 08–530, adopted March 11, 2008 and released March 12, 2008. The full text of this document is available on the Commission's Internet site at <http://www.fcc.gov>. It is also available for inspection and copying during regular business hours in the FCC Reference Center (Room CY–A257), 445 12th Street, SW., Washington, DC 20554. The full text of this document also may be purchased from the Commission's duplication contractor, Best Copy and Printing Inc., Portals II, 445 12th St., SW., Room CY–B402, Washington, DC 20554; telephone (202) 488–5300; fax (202) 488–5563; e-mail FCC@BCPIWEB.COM.

Summary of the Report and Order

1. By this action, the Commission amends its rules to make non-substantive, editorial revisions to the Allocation Table and related rule sections in part 2, and to the part 1 quiet zone rules, and to the service rules for satellite communications, international broadcast stations, aural broadcast auxiliary stations, the radiolocation service, and the Amateur Radio Service. These amendments to the Allocation Table are being implemented with the concurrence of the National Telecommunications and Information

Administration (NTIA). The purpose of this action is to update and clarify the Allocation Table, as well as to remove obsolete and outdated provisions from the Commission's rules. In doing so, we can also ensure that the Allocation Table and related rules are consistent with the Commission's decisions in recent rulemaking proceedings. This action is not intended to modify or otherwise change any licensee's underlying legal rights and/or responsibilities.

2. This action follows the model used in past Table Clean-up Orders, and is important because it helps ensure consistency between the allocation tables maintained by the Commission and NTIA. Among the revisions, the document:

- Updates the Allocation Table and associated service rules to no longer show now-concluded transition periods for the secondary amateur service allocation in the band 75.5–76 GHz and for international broadcast stations.
- Revises the part 25 rules to reflect a prior Commission decision that allocated feeder link spectrum for Non-Geostationary Satellite Orbit Mobile-Satellite Service systems.
- Makes conforming edits to the Allocation Table to accurately portray a variety of Commission decisions that were successfully updated within the Commission's service rules but that were left out of the Allocation Table.
- Updates numerous footnotes to the Allocation Table for consistency and to reflect corrected coordinates for Federal Government facilities, such as radio astronomy sites.
- Corrects typographical errors, updates the FCC rule part cross references, and clarifies the introductory language that describes the United States allocations.

Administrative Procedures Act and Ordering Clause

3. Parts 1, 2, 25, 73, 74, 90, and 97 of the Commission's rules are amended herein by incorporating non-substantive, editorial revisions only. Therefore, there is good cause for not using notice and comment procedure in this case, and for shortening the effective date of the amendments from a date not less than 30 days after publication in the **Federal Register** to the date of publication in the **Federal Register**. We find that the normal procedures for notice and comment and for publication as required under section 553 of the Administrative Procedures Act would be impracticable, unnecessary, or contrary to the public interest. See 5 U.S.C. 553(b)(3)(B), (d)(3); *Kessler v. FCC*, 326 F.2d 673 (DC Cir.

1963). Furthermore, the International Table, the Federal Table, and the FCC Rule Part(s) column within 47 CFR 2.106 are included in the Commission's rules for informational purposes only and are therefore exempt from the notice provisions of the Administrative Procedures Act.

4. Accordingly, *it is ordered* that 47 CFR parts 1, 2, 25, 73, 74, 90, and 97 of the Commission's rules, *are amended* and are effective upon date of publication in the **Federal Register**. This action is taken pursuant to authority found in sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i) and 303, and in §§ 0.31, 0.231(b) and 0.241 of the Commission's rules, 47 CFR 0.31, 0.231(b) and 0.241.

5. The Commission will not send a copy of this Memorandum Opinion and Order (MO&O), pursuant to the Congressional Review Act. The MO&O does not change any rules; it makes non-substantive, editorial revisions to the Table of Frequency Allocation and to various other Commission rules.

List of Subjects in 47 CFR Parts 1, 2, 25, 73, 74, 90 and 97

Reporting and recordkeeping requirements.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

Rule Changes

■ For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 1, 2, 25, 73, 74, 90, and 97 to read as follows:

PART 1—PRACTICE AND PROCEDURE

■ 1. The authority citation for part 1 continues to read as follows:

Authority: 15 U.S.C. 79 *et seq.*; 47 U.S.C. 151, 154(i), 154(j), 155, 157, 225, 303(r), and 309.

■ 2. Section 1.924 is amended by revising paragraph (g)(1) to read as follows:

§ 1.924 Quiet zones.

* * * * *

(g) * * *

(1) Applicants and licensees planning to construct and operate a new or modified station within the area bounded by a circle with a radius of 100 kilometers (62.1 miles) that is centered on 37°56'44" N, 75°27'37" W (Wallops Island) or 64°58'22" N, 147°30'04" W (Fairbanks) or within the area bounded by a circle with a radius of 65 kilometers (40.4 miles) that is centered

on 39°00'02" N, 76°50'29" W (Greenbelt) must notify the National Oceanic and Atmospheric Administration (NOAA) of the proposed operation. For this purpose, NOAA maintains the GOES coordination Web page at <http://www.osd.noaa.gov/radio/frequency.htm>, which provides the technical parameters of the earth stations and the point-of-contact for the notification. The notification shall include the following information: Requested frequency, geographical coordinates of the antenna location, antenna height above mean sea level, antenna directivity, emission type, equivalent isotropically radiated power, antenna make and model, and transmitter make and model.

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PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

■ 3. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

■ 4. Section 2.1(c) is amended by adding the terms “conterminous United States” and “insular area” in alphabetical order and by revising the term “Radiolocation Mobil Station” to read “Radiolocation Mobile Station.”

§ 2.1 Terms and definitions.

* * * * *

(c) * * *

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Conterminous United States. The contiguous 48 States and the District of Columbia. (FCC)

* * * * *

Insular Area. A jurisdiction that is neither a part of one of the several States nor a Federal district. The U.S. insular areas are listed in 47 CFR 2.105(a) at notes 2 and 3. (FCC)

* * * * *

■ 5. Section 2.105 is amended by revising paragraphs (a), (b), (d)(5)(iv), and (f), by revising footnotes 1 through 6 and removing footnote 7, by adding new paragraph (d)(6), and by revising the heading of paragraph (d) to read as follows:

§ 2.105 United States Table of Frequency Allocations.

(a) The United States Table of Frequency Allocations (United States Table) is subdivided into the Federal Table of Frequency Allocations (Federal Table, column 4 of § 2.106) and the non-Federal Table of Frequency Allocations (non-Federal Table, column 5 of § 2.106). The United States Table is based on the Region 2 Table because the relevant area of jurisdiction is located primarily in Region 2¹ (*i.e.*, the 50 States, the District of Columbia, the Caribbean insular areas,² and some of the Pacific insular areas).³ The Federal Table is administered by NTIA⁴ and the non-Federal Table is administered by the Federal Communications Commission (FCC).⁵

(b) In the United States, radio spectrum may be allocated to either Federal or non-Federal use exclusively, or for shared use. In the case of shared use, the type of service(s) permitted need not be the same [*e.g.*, Federal FIXED, non-Federal MOBILE]. The terms used to designate categories of services and allocations⁶ in columns 4 and 5 of § 2.106 correspond to the terms in the ITU *Radio Regulations*.

* * * * *

(d) *Format of the United States Table.*

* * *

(5) * * *

(iv) Any footnote consisting of the letter “G” followed by one or more digits, *e.g.*, G2, denotes a stipulation applicable only to Federal operations.

¹ See 2.104(b) for definitions of the ITU Regions.

² The operation of stations in the U.S. insular areas located in Region 2 is generally governed by the United States Table. The U.S. insular areas located in Region 2 are comprised of the Caribbean insular areas and two of the eleven Pacific insular areas. The Caribbean insular areas are Puerto Rico, the United States Virgin Islands, and Navassa Island. The Pacific insular areas located in Region 2 are Johnston Atoll and Midway Atoll.

³ The operation of stations in the Pacific insular areas located in Region 3 is generally governed by the Region 3 Table (*i.e.*, column 3 of § 2.106). The Pacific insular areas located in Region 3 are American Samoa, Guam, the Northern Mariana Islands, Baker Island, Howland Island, Jarvis Island, Kingman Reef, Palmyra Island, and Wake Island.

⁴ Section 305(a) of the Communications Act of 1934, as amended. See Public Law 102–538, 106 Stat. 3533 (1992).

⁵ The Communications Act of 1934, as amended.

⁶ The radio services are defined in 47 CFR 2.1.

Federal footnotes appear solely in the Federal Table (column 4).

(6) The coordinates of latitude and longitude that are listed in United States, Federal, and non-Federal footnotes are referenced to the North American Datum of 1983 (NAD 83).

* * * * *

(f) The FCC Online Table of Frequency Allocations is updated shortly after a final rule that amends § 2.106 is released. The address for the FCC Radio Spectrum Home Page, which includes the FCC Online Table and the FCC Allocation History File, is <http://www.fcc.gov/oet/spectrum>.

■ 6. Amend § 2.106 as follows:

■ a. The Table preceding the list of international footnotes is revised.

■ b. In the list of international footnotes, revise footnotes 5.155, 5.237, 5.339, 5.438, 5.462A, 5.469A, and 5.476A.

■ c. In the list of United States (US) footnotes, add footnote US1; revise footnotes US7, US11, US81, US90, US93, US99, US116, US117, US201, US216, US217, US222, US229, US230, US247, US251, US252, US259, US262, US265, US267, US273, US285, US290, US294, US299, US301, US307, US308, US309, US310, the introductory text and table of US311, US315, US316, US323, US324, US334, US335, US337, US338, US342, US344, US346, US348, US351, US353, US354, US355, US359, US360, US362, US366, US368, US378, US381, US388, US396, US397, US399, and US401; and remove footnotes US215, US302, US321, and US387.

■ d. In the list of non-Federal Government (NG) footnotes, add footnotes NG1 and NG30; revise footnotes NG28, NG51, NG53, NG56, NG66, NG112, NG124, NG141, NG143, NG144, NG147, NG149, NG155, NG158, NG159, NG160, NG163, NG167, NG172, NG173, NG175, and NG184; and remove footnote NG31.

■ e. In the list of Federal Government (G) footnotes, revise footnotes G2, G6, and G133; remove footnotes G31 and G106; and add footnote G127.

The revisions and additions read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

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Table of Frequency Allocations				0-275 kHz (VLF/ILF)		United States Table		FCC Rule Part(s)	Page
International Table		Region 3 Table		Federal Table	Non-Federal Table				
Region 1 Table		Region 2 Table		Below 9					
Below 9				(Not Allocated)					
5.53 5.54				5.53 5.54					
9-14				9-14					
RADIONAVIGATION				RADIONAVIGATION US18					
14-19.95				US294					
FIXED				14-19.95					
MARITIME MOBILE 5.57				FIXED					
5.55 5.56				MARITIME MOBILE 5.57					
19.95-20.05				US294					
STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)				19.95-20.05					
20.05-70				STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)					
FIXED				US294					
MARITIME MOBILE 5.57				20.05-59					
5.56 5.58				FIXED					
70-72				MARITIME MOBILE 5.57					
RADIONAVIGATION 5.60				US294					
72-84				59-61					
FIXED				STANDARD FREQUENCY AND TIME SIGNAL (60 kHz)					
MARITIME MOBILE 5.57				US294					
RADIONAVIGATION 5.60				61-70					
5.56				FIXED					
84-86				MARITIME MOBILE 5.57					
RADIONAVIGATION 5.60				US294					
86-90				70-90					
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Table of Frequency Allocations										275-2065 kHz (LF/MF)	United States Table		FCC Rule Part(s)		Page
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5.72 5.82		5.77 5.78 5.82						495-505 MOBILE (distress and calling) 5.83							
495-505 MOBILE (distress and calling)															
5.83		505-510 MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION		505-526.5 MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile		505-526.5 MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile		505-510 MARITIME MOBILE 5.79 510-525 MOBILE 5.79A 5.84 AERONAUTICAL RADIONAVIGATION		505-510 MARITIME MOBILE 5.79 510-525 MARITIME MOBILE (ships only) 5.79A 5.84 AERONAUTICAL RADIONAVIGATION (radiobeacons) US18 US14 US225		Maritime (80) Maritime (80) Aviation (87)			
5.72															

526.5-1606.5 BROADCASTING	525-535 BROADCASTING 5.86 AERONAUTICAL RADIONAVIGATION	526.5-535 BROADCASTING Mobile 5.88	525-535 MOBILE US221 AERONAUTICAL RADIONAVIGATION (radiobeacorns) US18	Aviation (87) Private Land Mobile (90)
5.87 5.87A	535-1605 BROADCASTING	535-1606.5 BROADCASTING	US239	
1606.5-1625 FIXED	1605-1625 BROADCASTING 5.89	1606.5-1800 FIXED MOBILE RADIOLOCATION RADIONAVIGATION	535-1605 BROADCASTING NG1 NG128	Radio Broadcast (AM)(73) Alaska Fixed (80) Private Land Mobile (90)
MARITIME MOBILE 5.90 LAND MOBILE	5.90		1605-1615 MOBILE US221 G127	
1625-1635 RADIOLOCATION	1625-1705 FIXED MOBILE		1615-1705	
5.93	BROADCASTING 5.89 Radiolocation			
1635-1800 FIXED	5.90		US299	
MARITIME MOBILE 5.90 LAND MOBILE	1705-1800 FIXED MOBILE RADIOLOCATION AERONAUTICAL RADIONAVIGATION	5.91	1705-1800 FIXED MOBILE RADIOLOCATION	Maritime (80) Private Land Mobile (90)
5.92 5.96	1800-1850 AMATEUR	1800-2000 AMATEUR FIXED MOBILE except aeronautical mobile RADIONAVIGATION Radiolocation	US240	
1800-1810 RADIOLOCATION			1800-1900 AMATEUR	Amateur (97)
5.93				
1810-1850 AMATEUR				
5.98 5.99 5.100 5.101				
1850-2000 FIXED	1850-2000 AMATEUR FIXED MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION		1900-2000 RADIOLOCATION	Private Land Mobile (90) Amateur (97)
MOBILE except aeronautical mobile				
5.92 5.96 5.103	5.102	5.97		
2000-2025 FIXED	2000-2065 FIXED MOBILE		US290	
MOBILE except aeronautical mobile (R)			2000-2065 FIXED MOBILE	Maritime (80)
5.92 5.103				
2025-2045 FIXED				
MOBILE except aeronautical mobile (R)				
Meteorological aids 5.104				
5.92 5.103			US340	

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2045-2160 FIXED MARITIME MOBILE LAND MOBILE	2065-2107 MARITIME MOBILE 5.105 5.106		2065-2107 MARITIME MOBILE 5.105 US296 US340			Maritime (80)	
5.92 2160-2170 RADIOLOCATION	2107-2170 FIXED MOBILE		2107-2170 FIXED MOBILE US340		2107-2170 FIXED MOBILE except aeronautical mobile NG19	Maritime (80) Private Land Mobile (90)	
5.93 5.107 2170-2173.5 MARITIME MOBILE			2170-2173.5 MARITIME MOBILE (telephony) US340		2170-2173.5 MARITIME MOBILE US340	Maritime (80)	
2173.5-2190.5 MOBILE (distress and calling)			2173.5-2190.5 MOBILE (distress and calling)				
5.108 5.109 5.110 5.111			5.108 5.109 5.110 5.111 US279 US340			Maritime (80) Aviation (87)	
2190.5-2194 MARITIME MOBILE			2190.5-2194 MARITIME MOBILE (telephony) US340		2190.5-2194 MARITIME MOBILE US340	Maritime (80)	
2194-2300 FIXED MOBILE except aeronautical mobile (R)	2194-2300 FIXED MOBILE		2194-2495 FIXED MOBILE		2194-2495 FIXED MOBILE except aeronautical mobile NG19	Maritime (80) Private Land Mobile (90)	
5.92 5.103 5.112	2300-2495 FIXED MOBILE		US340		US340		
2300-2498 FIXED MOBILE except aeronautical mobile (R)	2300-2495 FIXED MOBILE		2495-2501 STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)		2495-2505 STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)		
5.103 2498-2501 STANDARD FREQUENCY AND TIME SIGNAL (2500 kHz)			US340		US340		
2501-2502 STANDARD FREQUENCY AND TIME SIGNAL			2501-2505 STANDARD FREQUENCY AND TIME SIGNAL		2501-2505 STANDARD FREQUENCY AND TIME SIGNAL		
2502-2625 FIXED MOBILE except aeronautical mobile (R)	2502-2505 STANDARD FREQUENCY AND TIME SIGNAL		US1 US340		US1 US340		
5.92 5.103 5.114	2505-2850 FIXED MOBILE		2505-2850 FIXED MOBILE US285		2505-2850 FIXED MOBILE except aeronautical mobile US285	Maritime (80) Aviation (87) Private Land Mobile (90)	
2625-2650 MARITIME MOBILE MARITIME RADIONAVIGATION			US340		US340		
5.92 2650-2850 FIXED MOBILE except aeronautical mobile (R)			US340		US340		
5.92 5.103							

2850-3025 AERONAUTICAL MOBILE (R) 5.111 5.115	2850-3025 AERONAUTICAL MOBILE (R) 5.111 5.115 US283 US340	Aviation (87)
3025-3155 AERONAUTICAL MOBILE (OR)	3025-3155 AERONAUTICAL MOBILE (OR) US340	
3155-3200 FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	3155-3230 FIXED MOBILE except aeronautical mobile (R)	Maritime (80) Private Land Mobile (90)
3200-3230 FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.116	US340	
3230-3400 FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.116 5.118	3230-3400 FIXED MOBILE except aeronautical mobile Radiolocation US340	Maritime (80) Aviation (87) Private Land Mobile (90)
3400-3500 AERONAUTICAL MOBILE (R)	3400-3500 AERONAUTICAL MOBILE (R) US283 US340	Aviation (87)
3500-3800 AMATEUR FIXED MOBILE except aeronautical mobile 5.92	3500-3750 AMATEUR 5.119 3750-4000 AMATEUR FIXED MOBILE except aeronautical mobile (R)	Amateur (97)
3800-3900 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	3500-4000 AMATEUR	
3900-3950 AERONAUTICAL MOBILE (OR) 5.123	3900-3950 AERONAUTICAL MOBILE BROADCASTING	
3950-4000 FIXED BROADCASTING	3950-4000 FIXED BROADCASTING 5.126	
4000-4063 FIXED MARITIME MOBILE 5.127 5.126	US340 4000-4063 FIXED MARITIME MOBILE US340	Maritime (80)
4063-4438 MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128 5.129	4063-4438 MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 US82 US296 US340	Maritime (80) Aviation (87)

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4650-4700 AERONAUTICAL MOBILE (R)				4650-4700 AERONAUTICAL MOBILE (R)		Aviation (87)	
4700-4750 AERONAUTICAL MOBILE (OR)				US282 US283 US340 4700-4750 AERONAUTICAL MOBILE (OR)			
4750-4850 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 5.113	4750-4850 FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113	4750-4850 FIXED BROADCASTING 5.113 Land mobile		4750-4850 FIXED MOBILE except aeronautical mobile (R)		Maritime (80) Private Land Mobile (90)	
4850-4995 FIXED LAND MOBILE BROADCASTING 5.113				US340 4850-4995 FIXED MOBILE	4850-4995 FIXED	Aviation (87) Private Land Mobile (90)	
4995-5003 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)				US340 4995-5005 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	US340		
5003-5005 STANDARD FREQUENCY AND TIME SIGNAL Space research				US1 US340 5005-5060 FIXED		Maritime (80) Aviation (87) Private Land Mobile (90)	
5005-5060 FIXED BROADCASTING 5.113				US340 5060-5450 FIXED Mobile except aeronautical mobile		Maritime (80) Aviation (87) Private Land Mobile (90) Amateur (97)	
5060-5250 FIXED Mobile except aeronautical mobile 5.133				US212 US340 US381 5450-5680 AERONAUTICAL MOBILE (R)		Aviation (87)	
5250-5450 FIXED MOBILE except aeronautical mobile				5.111 5.115 US283 US340 5680-5730 AERONAUTICAL MOBILE (OR)			
5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5450-5480 AERONAUTICAL MOBILE (R)	5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE		5.111 5.115			
5480-5680 AERONAUTICAL MOBILE (R)				5.111 5.115			
5.111 5.115				5.111 5.115			
5680-5730 AERONAUTICAL MOBILE (OR)				5.111 5.115			
5.111 5.115				5.111 5.115			

5730-5900 FIXED LAND MOBILE	5730-5900 FIXED MOBILE except aeronautical mobile (R)	5730-5900 FIXED MOBILE except aeronautical mobile (R)	5730-5900 FIXED MOBILE except aeronautical mobile (R)	Maritime (80) Aviation (87) Private Land Mobile (90)
5900-5950 BROADCASTING 5.134 5.136	5900-5950 BROADCASTING 5.134	5900-5950 BROADCASTING 5.134	5900-5950 BROADCASTING 5.134	Radio Broadcast (HF)(73)
5950-6200 BROADCASTING	5950-6200 BROADCASTING	5950-6200 BROADCASTING	5950-6200 BROADCASTING	
6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132	6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132	6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132 US82	Maritime (80)
6525-6685 AERONAUTICAL MOBILE (R)	6525-6685 AERONAUTICAL MOBILE (R)	6525-6685 AERONAUTICAL MOBILE (R)	6525-6685 AERONAUTICAL MOBILE (R)	Aviation (87)
6685-6765 AERONAUTICAL MOBILE (OR)	6685-6765 AERONAUTICAL MOBILE (OR)	6685-6765 AERONAUTICAL MOBILE (OR)	6685-6765 AERONAUTICAL MOBILE (OR)	
6765-7000 FIXED MOBILE except aeronautical mobile (R)	6765-7000 FIXED MOBILE except aeronautical mobile (R)	6765-7000 FIXED MOBILE except aeronautical mobile (R)	6765-7000 FIXED MOBILE except aeronautical mobile (R)	ISM Equipment (18) Private Land Mobile (90)
7000-7100 AMATEUR AMATEUR-SATELLITE	7000-7100 AMATEUR AMATEUR-SATELLITE	7000-7100 AMATEUR AMATEUR-SATELLITE	7000-7100 AMATEUR AMATEUR-SATELLITE	Amateur (97)
7100-7200 AMATEUR	7100-7200 AMATEUR	7100-7200 AMATEUR	7100-7200 AMATEUR	Radio Broadcast (HF)(73) Amateur (97)
7200-7300 BROADCASTING	7200-7300 AMATEUR	7200-7300 BROADCASTING	7200-7300 BROADCASTING	
7300-7400 BROADCASTING 5.134	7300-7400 BROADCASTING 5.134	7300-7400 BROADCASTING 5.134	7300-7400 BROADCASTING 5.134	Radio Broadcast (HF)(73) Maritime (80) Private Land Mobile (90)
7400-7450 BROADCASTING	7400-7450 FIXED	7400-7450 BROADCASTING	7400-7450 BROADCASTING	Radio Broadcast (HF)(73) Maritime (80) Aviation (87) Private Land Mobile (90)
7450-8100 FIXED MOBILE except aeronautical mobile (R)	7450-8100 FIXED MOBILE except aeronautical mobile (R)	7450-8100 FIXED MOBILE except aeronautical mobile (R)	7450-8100 FIXED MOBILE except aeronautical mobile (R)	
5.143A 5.143B 5.143C 5.143D	5.143A 5.143B 5.143C 5.143D	5.143A 5.143B 5.143C 5.143D	5.143A 5.143B 5.143C 5.143D	
5.143E 5.144	5.143E 5.144	5.143E 5.144	5.143E 5.144	

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8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111			8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82 5.111 US296 US340		Maritime (80) Aviation (87)		
8815-8965 AERONAUTICAL MOBILE (R)			8815-8965 AERONAUTICAL MOBILE (R) US340		Aviation (87)		
8965-9040 AERONAUTICAL MOBILE (OR)			8965-9040 AERONAUTICAL MOBILE (OR) US340		Maritime (80) Private Land Mobile (90)		
9040-9400 FIXED			9040-9400 FIXED US340		Radio Broadcast (HF)(73)		
9400-9500 BROADCASTING 5.134 5.146			9400-9500 BROADCASTING 5.134 US340 US366				
9500-9900 BROADCASTING 5.147			9500-9900 BROADCASTING US340 US367				
9900-9995 FIXED			9900-9995 FIXED US340		Private Land Mobile (90)		
9995-10003 STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz) 5.111			9995-10005 STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)				
10003-10005 STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111			5.111 US1 US340				
10005-10100 AERONAUTICAL MOBILE (R) 5.111			10005-10100 AERONAUTICAL MOBILE (R) 5.111 US283 US340		Aviation (87)		
10100-10150 FIXED Amateur			10100-10150 AMATEUR US247 US340		Amateur (97)		
10150-11175 FIXED Mobile except aeronautical mobile (R)			10150-11175 FIXED Mobile except aeronautical mobile (R) US340		Private Land Mobile (90)		

11175-11275 AERONAUTICAL MOBILE (OR)	11175-11275 AERONAUTICAL MOBILE (OR) US340	
11275-11400 AERONAUTICAL MOBILE (R)	11275-11400 AERONAUTICAL MOBILE (R) US283 US340	Aviation (87)
11400-11600 FIXED	11400-11600 FIXED US340	Private Land Mobile (90)
11600-11650 BROADCASTING 5.134 5.146	11600-11650 BROADCASTING 5.134 US340 US366	Radio Broadcast (HF)(73)
11650-12050 BROADCASTING 5.147	11650-12050 BROADCASTING US340 US367	
12050-12100 BROADCASTING 5.134 5.146	12050-12100 BROADCASTING 5.134 US340 US366	
12100-12230 FIXED	12100-12230 FIXED US340	
12230-13200 MARITIME MOBILE 5.109 5.110 5.132 5.145	12230-13200 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82 US296 US340	Maritime (80)
13200-13260 AERONAUTICAL MOBILE (OR)	13200-13260 AERONAUTICAL MOBILE (OR) US340	
13260-13360 AERONAUTICAL MOBILE (R)	13260-13360 AERONAUTICAL MOBILE (R) US283 US340	Aviation (87)
13360-13410 FIXED RADIO ASTRONOMY 5.149	13360-13410 RADIO ASTRONOMY US342 G115	ISM Equipment (18) Private Land Mobile (90)
13410-13570 FIXED Mobile except aeronautical mobile (R) 5.150	13410-13570 FIXED Mobile except aeronautical mobile (R) 5.150 US340	
13570-13600 BROADCASTING 5.134 5.151	13570-13600 BROADCASTING 5.134 US340 US366	

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13600-13800 BROADCASTING			13600-13800 BROADCASTING US340			Radio Broadcast (HF)(73)	
13800-13870 BROADCASTING 5.134 5.151			13800-13870 BROADCASTING 5.134 US340 US366			Private Land Mobile (90)	
13870-14000 FIXED Mobile except aeronautical mobile (R)			13870-14000 FIXED Mobile except aeronautical mobile (R) US340	13870-14000 FIXED US340		Amateur (97)	
14000-14250 AMATEUR AMATEUR-SATELLITE			14000-14350	14000-14250 AMATEUR AMATEUR-SATELLITE US340		Private Land Mobile (90)	
14250-14350 AMATEUR 5.152			US340	14250-14350 AMATEUR US340		Private Land Mobile (90)	
14350-14990 FIXED Mobile except aeronautical mobile (R)			14350-14990 FIXED Mobile except aeronautical mobile (R) US340	14350-14990 FIXED US340			
14990-15005 STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz) 5.111			14990-15010 STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz)				
15005-15010 STANDARD FREQUENCY AND TIME SIGNAL Space research			5.111 US1 US340				
15010-15100 AERONAUTICAL MOBILE (OR)			15010-15100 AERONAUTICAL MOBILE (OR) US340			Radio Broadcast (HF)(73)	
15100-15600 BROADCASTING			15100-15600 BROADCASTING US340			Private Land Mobile (90)	
15600-15800 BROADCASTING 5.134 5.146			15600-15800 BROADCASTING 5.134 US340 US366				
15800-16360 FIXED 5.153			15800-16360 FIXED US340				

16360-17410 MARITIME MOBILE 5.109 5.110 5.132 5.145	16360-17410 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82 US296 US340	Maritime (80)
17410-17480 FIXED	17410-17480 FIXED US340	Private Land Mobile (90)
17480-17550 BROADCASTING 5.134 5.146	17480-17550 BROADCASTING 5.134 US340 US366	Radio Broadcast (HF)(73)
17550-17900 BROADCASTING	17550-17900 BROADCASTING US340	
17900-17970 AERONAUTICAL MOBILE (R)	17900-17970 AERONAUTICAL MOBILE (R) US283 US340	Aviation (87)
17970-18030 AERONAUTICAL MOBILE (OR)	17970-18030 AERONAUTICAL MOBILE (OR) US340	
18030-18052 FIXED	18030-18068 FIXED	Maritime (80) Private Land Mobile (90)
18052-18068 FIXED		
Space research		
18068-18168 AMATEUR AMATEUR-SATELLITE 5.154	18068-18168 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
18168-18780 FIXED Mobile except aeronautical mobile	18168-18780 FIXED Mobile US340	Maritime (80) Private Land Mobile (90)
18780-18900 MARITIME MOBILE	18780-18900 MARITIME MOBILE US82 US296 US340	Maritime (80)
18900-19020 BROADCASTING 5.134 5.146	18900-19020 BROADCASTING 5.134 US340 US366	Radio Broadcast (HF)(73)
19020-19680 FIXED	19020-19680 FIXED US340	Private Land Mobile (90)
19680-19800 MARITIME MOBILE 5.132	19680-19800 MARITIME MOBILE 5.132 US340	Maritime (80)

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19800-19990 FIXED						19800-19990 FIXED US340				Private Land Mobile (90)	
19990-19995 STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111						19990-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz)					
19995-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz) 5.111						5.111 US1 US340					
20010-21000 FIXED Mobile						20010-21000 FIXED Mobile US340		20010-21000 FIXED US340		Private Land Mobile (90)	
21000-21450 AMATEUR AMATEUR-SATELLITE						21000-21450 US340		21000-21450 AMATEUR AMATEUR-SATELLITE US340		Amateur (97)	
21450-21850 BROADCASTING						21450-21850 BROADCASTING US340				Radio Broadcast (HF)(73)	
21850-21870 FIXED 5.155A 5.155						21850-21924 FIXED				Aviation (87) Private Land Mobile (90)	
21870-21924 FIXED 5.155B											
21924-22000 AERONAUTICAL MOBILE (R)						US340 21924-22000 AERONAUTICAL MOBILE (R) US340				Aviation (87)	
22000-22855 MARITIME MOBILE 5.132 5.156						22000-22855 MARITIME MOBILE 5.132 US82 US296 US340				Maritime (80)	
22855-23000 FIXED 5.156						22855-23000 FIXED US340				Private Land Mobile (90)	
23000-23200 FIXED Mobile except aeronautical mobile (R)						23000-23200 FIXED Mobile except aeronautical mobile (R) US340		23000-23200 FIXED US340			
23200-23350 FIXED 5.156A AERONAUTICAL MOBILE (OR)						23200-23350 AERONAUTICAL MOBILE (OR) US340					

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23350-24000 FIXED MOBILE except aeronautical mobile 5.157	23350-24890 FIXED MOBILE except aeronautical mobile	23350-24890 FIXED	Private Land Mobile (90)
24000-24890 FIXED LAND MOBILE	US340	US340	
24890-24990 AMATEUR AMATEUR-SATELLITE	24890-24990	24890-24990 AMATEUR AMATEUR-SATELLITE	Amateur (97)
24990-25005 STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)	US340	US340	
25005-25010 STANDARD FREQUENCY AND TIME SIGNAL Space research	24990-25010 STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)		
25010-25070 FIXED MOBILE except aeronautical mobile	US1 US340		
25070-25210 MARITIME MOBILE	25010-25070 US340	25010-25070 LAND MOBILE US340 NG112	Private Land Mobile (90)
25210-25550 FIXED MOBILE except aeronautical mobile	25070-25210 MARITIME MOBILE US82 US281 US296 US340	25070-25210 MARITIME MOBILE US82 US281 US296 US340 NG112	Maritime (80) Private Land Mobile (90)
	25210-25330 US340	25210-25330 LAND MOBILE US340	Private Land Mobile (90)
	25330-25550 FIXED MOBILE except aeronautical mobile	25330-25550 US340	
25550-25670 RADIO ASTRONOMY 5.149	25550-25670 RADIO ASTRONOMY US74 US342	US340	
25670-26100 BROADCASTING	25670-26100 BROADCASTING US25 US340		Radio Broadcast (HF)(73) Remote Pickup (74D)
26100-26175 MARITIME MOBILE 5.132	26100-26175 MARITIME MOBILE 5.132 US25 US340		Remote Pickup (74D) Low Power Auxiliary (74H) Maritime (80)
26175-27500 FIXED MOBILE except aeronautical mobile	26175-26480 US340	26175-26480 LAND MOBILE US340	Remote Pickup (74D) Low Power Auxiliary (74H)
	26480-26950 FIXED MOBILE except aeronautical mobile	26480-26950 US340	
5.150	US340	US340	

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				5.150 US340		
				26.96-27.23 MOBILE except aeronautical mobile	ISM Equipment (18) Personal Radio (95)	
				5.150 US340		
				27.23-27.41 FIXED	ISM Equipment (18) Private Land Mobile (90) Personal Radio (95)	
27.5-28 METEOROLOGICAL AIDS FIXED MOBILE			5.150 US340	MOBILE except aeronautical mobile		
			27.41-27.54	5.150 US340		
				27.41-27.54 FIXED	Private Land Mobile (90)	
				LAND MOBILE		
			US340	US340		
28-29.7 AMATEUR AMATEUR-SATELLITE			27.54-28 FIXED MOBILE	27.54-28		
			US298 US340	US298 US340		
			28-29.89	28-29.7 AMATEUR AMATEUR-SATELLITE	Amateur (97)	
				US340		
				29.7-29.8 LAND MOBILE	Private Land Mobile (90)	
29.7-30.005 FIXED MOBILE				US340		
				29.8-29.89 FIXED		
			US340	US340		
			29.89-29.91 FIXED MOBILE	29.89-29.91		
			US340	US340		
30.005-30.01 SPACE OPERATION (satellite identification) FIXED MOBILE			29.91-30 FIXED	29.91-30 FIXED		
			US340	US340		
			30-30.56 FIXED MOBILE	30-30.56		
30.01-37.5 FIXED MOBILE						

37.5-38.25 FIXED MOBILE Radio astronomy	30.56-32 FIXED LAND MOBILE NG124	Private Land Mobile (90)
	32-33 FIXED MOBILE	
	33-34 FIXED LAND MOBILE NG124	Private Land Mobile (90)
	34-35 FIXED MOBILE	
	35-36 FIXED LAND MOBILE 36-37	Public Mobile (22) Private Land Mobile (90)
	US220	
	37-37.5 LAND MOBILE NG124	Private Land Mobile (90)
	37.5-38 Radio astronomy LAND MOBILE Radio astronomy US342 NG59 NG124	
	38-38.25 FIXED MOBILE RADIO ASTRONOMY US81 US342	
	38.25-39 FIXED MOBILE	
	39-40 LAND MOBILE NG124	Private Land Mobile (90)
	40-42 FIXED MOBILE	ISM Equipment (18) Private Land Mobile (90)
	5.150 US210 US220	
	5.150 US210 US220	

Table of Frequency Allocations				42-137 MHz (VHF)		Page 17	
International Table				United States Table		FCC Rule Part(s)	
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table (See previous page)		Non-Federal Table		
40.98-41.015 FIXED MOBILE Space research 5.160 5.161							
41.015-44 FIXED MOBILE							
5.160 5.161					42-43.69 FIXED LAND MOBILE NG124 NG141	Public Mobile (22) Private Land Mobile (90)	
44-47 FIXED MOBILE					43.69-46.6 LAND MOBILE NG124 NG141	Private Land Mobile (90)	
5.162 5.162A					46.6-47 FIXED MOBILE		
47-68 BROADCASTING	47-50 FIXED MOBILE	47-50 FIXED MOBILE BROADCASTING 5.162A			47-49.6 LAND MOBILE NG124	Private Land Mobile (90)	
	50-54 AMATEUR				49.6-50 FIXED MOBILE		
5.162A 5.163 5.164 5.165 5.169 5.171	5.162A 5.166 5.167 5.168 5.170	54-68 BROADCASTING Fixed Mobile 5.172			50-54 AMATEUR	Amateur (97)	
68-74.8 FIXED MOBILE except aeronautical mobile	68-72 BROADCASTING Fixed Mobile 5.173	68-74.8 FIXED MOBILE			54-72 BROADCASTING	Broadcast Radio (TV)(73) LP TV, TV Translator/Booster (74G) Low Power Auxiliary (74H)	
	72-73 FIXED MOBILE				NG115 NG128 NG142 NG149 72-73 FIXED MOBILE NG3 NG49 NG56	Public Mobile (22) Aviation (87) Private Land Mobile (90) Personal Radio (95)	
	73-74.6 RADIO ASTRONOMY 5.178				73-74.6 RADIO ASTRONOMY US74 US246		
5.149 5.174 5.175 5.177 5.179	74.6-74.8 FIXED MOBILE	5.149 5.176 5.179			74.6-74.8 FIXED MOBILE US273	Private Land Mobile (90)	

74.8-75.2 AERONAUTICAL RADIONAVIGATION 5.180 5.181	74.8-75.2 AERONAUTICAL RADIONAVIGATION 5.180	Aviation (87)
75.2-75.4 FIXED MOBILE except aeronautical mobile 5.179	75.2-75.4 FIXED MOBILE US273	Private Land Mobile (90)
75.4-76 FIXED MOBILE	75.4-76 FIXED MOBILE NG3 NG49 NG56	Public Mobile (22) Aviation (87) Private Land Mobile (90) Personal Radio (95)
76-88 BROADCASTING Fixed Mobile 5.185	76-88 BROADCASTING NG115 NG128 NG142 NG149	Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)
87.5-100 BROADCASTING 5.190	88-108 BROADCASTING NG2	Broadcast Radio (FM)(73) FM Translator/Booster (74L)
100-108 BROADCASTING 5.192 5.194	US93 US93 NG128	
108-117.975 AERONAUTICAL RADIONAVIGATION 5.197 5.197A 117.975-137 AERONAUTICAL MOBILE (R)	108-117.975 AERONAUTICAL RADIONAVIGATION US93 US343 117.975-121.9375 AERONAUTICAL MOBILE (R) 5.111 5.198 5.199 5.200 US26 US28 121.9375-123.0875 AERONAUTICAL MOBILE 5.198 US30 US31 US33 US80 US102 US213 123.0875-123.5875 AERONAUTICAL MOBILE 5.198 5.200 US32 US33 US112 123.5875-128.8125 AERONAUTICAL MOBILE (R) 5.198 US26 128.8125-132.0125 AERONAUTICAL MOBILE (R) 5.198 132.0125-136 AERONAUTICAL MOBILE (R) 5.198 US26 136-137 AERONAUTICAL MOBILE (R) US244	Aviation (87)
5.111 5.198 5.199 5.200 5.201 5.202 5.203 5.203A 5.203B		

Table of Frequency Allocations				137-157.0375 MHz (VHF)		FCC Rule Part(s)	
International Table				United States Table			
Region 1 Table	Region 2 Table	Region 3 Table		Federal Table	Non-Federal Table		
137-137.025 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208 137.025-137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) 5.208A 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208 137.175-137.825 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.209 SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208 137.825-138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile-satellite (space-to-Earth) 5.208A 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	138-143.6 FIXED MOBILE RADIOLOCATION Space research (space-to-Earth) 143.6-143.65 FIXED MOBILE RADIOLOCATION SPACE RESEARCH (space-to-Earth) 143.65-144 FIXED MOBILE RADIOLOCATION Space research (space-to-Earth)	138-143.6 FIXED MOBILE Space research (space-to-Earth) 5.207 5.213 143.6-143.65 FIXED MOBILE SPACE RESEARCH (space-to-Earth) 5.207 5.213 143.65-144 FIXED MOBILE Space research (space-to-Earth) 5.207 5.213		137-137.025 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) US319 US320 SPACE RESEARCH (space-to-Earth) 5.208 137.025-137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-satellite (space-to-Earth) US319 US320 5.208 137.175-137.825 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) US319 US320 SPACE RESEARCH (space-to-Earth) 5.208 137.825-138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Mobile-satellite (space-to-Earth) US319 US320 5.208 138-144 FIXED MOBILE	138-144 FIXED MOBILE		Satellite Communications (25)
138-143.6 AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214 143.6-143.65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) 5.211 5.212 5.214 143.65-144 AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214						C30	

144-146 AMATEUR AMATEUR-SATELLITE	144-148	144-146 AMATEUR AMATEUR-SATELLITE	Amateur (97)
5.216			
146-148 FIXED MOBILE except aeronautical mobile (R)	146-148 AMATEUR FIXED MOBILE 5.217	146-148 AMATEUR	
148-149.9 FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5.209	148-149.9 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.209 5.218 5.219 5.221	148-149.9 MOBILE-SATELLITE (Earth-to-space) US319 US320 US323 US325 5.218 5.219 G30 5.218 5.219	Satellite Communications (25)
149.9-150.05 MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B	149.9-150.05 MOBILE-SATELLITE (Earth-to-space) US319 US320 RADIONAVIGATION-SATELLITE 5.223		
5.220 5.222 5.223			
150.05-153 FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY	150.05-156.7625 FIXED MOBILE	150.05-150.8 FIXED MOBILE US216 G30 150.8-152.855 US216 NG124 152.855-156.2475	
5.149			
153-154 FIXED MOBILE except aeronautical mobile (R) Meteorological aids		150.8-152.855 FIXED LAND MOBILE NG4 NG51 NG112 US216 NG124	Public Mobile (22) Private Land Mobile (90) Personal Radio (95)
154-156.7625 FIXED MOBILE except aeronautical mobile (R)		152.855-154 LAND MOBILE NG4 NG124 154-156.2475 FIXED LAND MOBILE NG112 5.226 NG117 NG124 NG148 156.2475-157.0375	Remote Pickup (74D) Private Land Mobile (90) Personal Radio (95)
5.226 5.227	5.225 5.226 5.227		
156.7625-156.8375 MARITIME MOBILE (distress and calling)		156.2475-157.0375 MARITIME MOBILE US77 US106 US107 NG117	Maritime (80) Private Land Mobile (90) Personal Radio (95)
5.111 5.226		5.226 5.227 US77 US106 US107 US266	Maritime (80) Aviation (87)

Table of Frequency Allocations				157.0375-267 MHz (VHF)		Page 21	
International Table		United States Table		FCC Rule Part(s)			
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table			
156.8375-174 FIXED MOBILE except aeronautical mobile	156.8375-174 FIXED MOBILE		(See previous page)				
			157.0375-157.1875 MARITIME MOBILE US214	157.0375-157.1875		Maritime (80) Private Land Mobile (90)	
			5.226 US266 G109 157.1875-161.575	5.226 US214 US266 157.1875-157.45 MOBILE except aeronautical mobile US266		Maritime (80) Aviation (87) Private Land Mobile (90)	
				5.226 NG111 157.45-161.575 FIXED LAND MOBILE NG28 NG111 NG112		Public Mobile (22) Remote Pickup (74D) Maritime (80) Private Land Mobile (90)	
				5.226 NG6 NG70 NG124 NG148 NG155			
			161.575-161.625	161.575-161.625 MARITIME MOBILE US77		Public Mobile (22) Maritime (80)	
			5.226 US77	5.226 NG6 NG17		Public Mobile (22) Remote Pickup (74D) Low Power Auxiliary (74H)	
			161.625-161.775	161.625-161.775 LAND MOBILE NG6			
				5.226		Public Mobile (22) Maritime (80) Private Land Mobile (90)	
				161.775-162.0125 MOBILE except aeronautical mobile US266 NG6		Public Mobile (22) Maritime (80) Private Land Mobile (90)	
	5.226 US266 US399 162.0125-173.2 FIXED US13 MOBILE		5.226 US399 162.0125-173.2		Remote Pickup (74D) Maritime (80) Private Land Mobile (90)		
	5.226 US8 US11 US216 US300 US312 US399 G5		5.226 US8 US11 US13 US216 US300 US312 US399				
	173.2-173.4		173.2-173.4 FIXED Land mobile		Private Land Mobile (90)		
	173.4-174 FIXED MOBILE G5		173.4-174				
5.226 5.229	5.226 5.230 5.231 5.232						

174-223 BROADCASTING	174-216 BROADCASTING Fixed Mobile 5.234	174-223 FIXED MOBILE BROADCASTING	174-216	174-216 BROADCASTING	Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)
	216-220 FIXED MARITIME MOBILE Radiolocation 5.241		216-217 Fixed Land mobile Radiolocation 5.241 G2	NG115 NG128 NG142 NG149	Maritime (80) Private Land Mobile (90) Personal Radio (95)
	5.242		US210 US229	US210 US229 NG173	
	220-225 AMATEUR FIXED MOBILE Radiolocation 5.241		217-220 Fixed Mobile	219-220 FIXED MOBILE except aeronautical mobile Amateur NG152	Maritime (80) Private Land Mobile (90) Amateur (97)
5.235 5.237 5.243		5.233 5.238 5.240 5.245	US210 US229	US210 US229 NG173	
223-230 BROADCASTING Fixed Mobile		223-230 FIXED MOBILE BROADCASTING AERONAUTICAL RADIONAVIGATION Radiolocation	220-222 FIXED LAND MOBILE Radiolocation 5.241 G2	220-222 FIXED LAND MOBILE	Private Land Mobile (90)
			US335	US335	
5.243 5.246 5.247		5.250	222-225 Radiolocation 5.241 G2	222-225 AMATEUR	Amateur (97)
230-235 FIXED MOBILE	225-235 FIXED MOBILE	230-235 FIXED MOBILE AERONAUTICAL RADIONAVIGATION	225-235 FIXED MOBILE	225-235	
5.247 5.251 5.252		5.250			
235-267 FIXED MOBILE			G27	235-267	
5.111 5.199 5.252 5.254 5.256 5.256A			235-267 FIXED MOBILE	5.111 5.199 5.256 G27 G100	
			5.111 5.199 5.256 G27 G100	5.111 5.199 5.256	

Table of Frequency Allocations					267-410 MHz (VHF/UHF)		Page 23	
					International Table		United States Table	
					Region 1 Table	Region 2 Table	Region 3 Table	FCC Rule Part(s)
267-272					267-272			
FIXED								
MOBILE								
Space operation (space-to-Earth)								
5.254 5.257								
272-273								
SPACE OPERATION (space-to-Earth)								
FIXED								
MOBILE								
5.254								
273-312								
FIXED								
MOBILE								
5.254								
312-315								
FIXED								
MOBILE								
Mobile-satellite (Earth-to-space) 5.254 5.255								
315-322								
FIXED								
MOBILE								
5.254								
322-328.6								
FIXED								
MOBILE								
RADIO ASTRONOMY								
5.149								
328.6-335.4								
AERONAUTICAL RADIONAVIGATION 5.258								
5.259								
335.4-387								
FIXED								
MOBILE								
5.254								
387-390								
FIXED								
MOBILE								
Mobile-satellite (space-to-Earth) 5.208A 5.254 5.255								
390-399.9								
FIXED								
MOBILE								
5.254								
267-322								
FIXED								
MOBILE								
G27 G100								
322-328.6								
FIXED								
MOBILE								
US342 G27								
328.6-335.4								
AERONAUTICAL RADIONAVIGATION 5.258								
US342								
Aviation (87)								
335.4-399.9								
FIXED								
MOBILE								
G27 G100								

399.9-400.05 MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260 5.220		399.9-400.05 MOBILE-SATELLITE (Earth-to-space) US319 US320 RADIONAVIGATION-SATELLITE 5.260	Satellite Communications (25)
400.05-400.15 STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261 5.262		400.05-400.15 STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz) 5.261	
400.15-401 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.209 SPACE RESEARCH (space-to-Earth) 5.263 Space operation (space-to-Earth)		400.15-401 METEOROLOGICAL AIDS (radiosonde) US70 METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) US319 US320 US324 SPACE RESEARCH (space-to-Earth) 5.263 Space operation (space-to-Earth) 5.263 5.264	Satellite Communications (25)
5.262 5.264 401-402 METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile		401-402 METEOROLOGICAL AIDS (radiosonde) US70 SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) US384	
402-403 METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile		402-403 METEOROLOGICAL AIDS (radiosonde) US70 EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) US345 US384	Personal Radio (95)
403-406 METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile		403-406 METEOROLOGICAL AIDS (radiosonde) US70 US345 G6	
406-406.1 MOBILE-SATELLITE (Earth-to-space) 5.266 5.267		406-406.1 MOBILE-SATELLITE (Earth-to-space) 5.266 5.267	Maritime (80) Aviation (87) Personal Radio (95)
406.1-410 FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY		406.1-410 FIXED US13 MOBILE RADIO ASTRONOMY US74 US117 G5 G6	Private Land Mobile (90)
5.149		US13 US117	

Table of Frequency Allocations				410-698 MHz (UHF)		Page 25	
International Table				United States Table		FCC Rule Part(s)	
Region 1 Table	Region 2 Table	Region 3 Table		Federal Table	Non-Federal Table		
410-420 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) 5.268				410-420 FIXED US13 MOBILE SPACE RESEARCH (space-to-space) 5.268 G5	410-420		Private Land Mobile (90)
420-430 FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271				420-450 RADIOLOCATION US217 G2 G129	420-450 Amateur US7 NG135		Private Land Mobile (90) Amateur (97)
430-432 AMATEUR RADIOLOCATION 5.271 5.272 5.273 5.274 5.275 5.276 5.277	430-432 RADIOLOCATION Amateur 5.271 5.276 5.277 5.278 5.279						
432-438 AMATEUR RADIOLOCATION Earth exploration-satellite (active) 5.279A	432-438 RADIOLOCATION Amateur Earth exploration-satellite (active) 5.279A						
5.138 5.271 5.272 5.276 5.277 5.280 5.281 5.282	5.271 5.276 5.277 5.278 5.279 5.281 5.282						
438-440 AMATEUR RADIOLOCATION 5.271 5.273 5.274 5.275 5.276 5.277 5.283	438-440 RADIOLOCATION Amateur 5.271 5.276 5.277 5.278 5.279 5.279						
440-450 FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271 5.284 5.285 5.286				5.286 US7 US87 US230 US397 G8	5.282 5.286 US87 US217 US230 US397		
450-455 FIXED MOBILE				450-454 5.286 US87 454-456	450-454 LAND MOBILE 5.286 US87 NG112 NG124 454-455 FIXED LAND MOBILE NG12 NG112 NG148 455-456 LAND MOBILE		Remote Pickup (74D) Low Power Auxiliary (74H) Private Land Mobile (90) Public Mobile (22) Maritime (80) Remote Pickup (74D) Low Power Auxiliary (74H)
5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286E	5.286C 5.286D 5.286E						
455-456 FIXED MOBILE	455-456 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.286A 5.286B 5.286C 5.209	455-456 FIXED MOBILE					
5.209 5.271 5.286A 5.286B 5.286C 5.286E	5.209 5.271 5.286A 5.286B 5.286C 5.286E						

456-459 FIXED MOBILE		456-460 FIXED LAND MOBILE	Public Mobile (22) Maritime (80) Private Land Mobile (90)
5.271 5.287 5.288			
459-460 FIXED MOBILE	459-460 FIXED MOBILE	456-460 FIXED LAND MOBILE	Public Mobile (22) Maritime (80) Private Land Mobile (90)
5.209 5.271 5.286A 5.286B 5.286C 5.286E	459-460 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.286A 5.286B 5.286C 5.209	5.287 5.288 NG112 NG124 NG148 460-462.5375 FIXED LAND MOBILE 5.289 US201 US209 NG124 462.5375-462.7375 LAND MOBILE 5.289 US201 462.7375-467.5375 FIXED LAND MOBILE 5.287 5.289 US201 US209 US216 NG124 467.5375-467.7375 LAND MOBILE 5.287 5.289 US201 467.7375-470 FIXED LAND MOBILE 5.287 5.289 US201 US216 NG124 470-512 FIXED LAND MOBILE BROADCASTING NG66 NG115 NG128 NG142 NG149 512-608 BROADCASTING NG115 NG128 NG142 NG149	Private Land Mobile (90)
460-470 FIXED MOBILE Meteorological-satellite (space-to-Earth)		5.287 5.288 460-470 Meteorological-satellite (space-to-Earth)	Private Land Mobile (90)
5.287 5.288 5.289 5.290		5.287 5.288 5.289 US201 US209 US216 470-608	Personal Radio (95)
470-790 BROADCASTING	470-512 BROADCASTING Fixed Mobile 5.292 5.293 512-608 BROADCASTING 5.297 608-614 RADIO ASTRONOMY Mobile-satellite except aeronautical mobile-satellite (Earth-to-space)	470-585 FIXED MOBILE BROADCASTING 5.291 5.298 585-610 FIXED MOBILE BROADCASTING RADIO ASTRONOMY Mobile-satellite except aeronautical mobile-satellite (Earth-to-space)	Private Land Mobile (90)
5.149 5.291A 5.294 5.296 5.300 5.302 5.304 5.306 5.311 5.312	614-806 BROADCASTING Fixed Mobile 5.293 5.309 5.311	608-614 LAND MOBILE (medical telemetry and medical telecommand) RADIO ASTRONOMY US74 US246 614-698 BROADCASTING NG115 NG128 NG142 NG149	Public Mobile (22) Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H) Private Land Mobile (90) Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H) Personal (95) Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)

Table of Frequency Allocations					698-941 MHz (UHF)		Page 27	
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			</					

890-942 FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 Radiolocation	890-942 FIXED MOBILE 5.317A BROADCASTING Radiolocation	890-902	894-896 AERONAUTICAL MOBILE US116 US268 896-901 FIXED LAND MOBILE US116 US268 901-902 FIXED MOBILE US116 US268 902-928 RADIOLOCATION G59 5.150 US218 US267 US275 G11 928-932	894-896 AERONAUTICAL MOBILE US116 US268 896-901 FIXED LAND MOBILE US116 US268 901-902 FIXED MOBILE US116 US268 902-928 RADIOLOCATION G59 5.150 US218 US267 US275 G11 928-932	Public Mobile (22) Private Land Mobile (90) Personal Communications (24) ISM Equipment (18) Private Land Mobile (90) Amateur (97) Public Mobile (22) Private Land Mobile (90) Fixed Microwave (101) Private Land Mobile (90) Personal Communications (24) Public Mobile (22) Public Mobile (22) Fixed Microwave (101) Private Land Mobile (90) Personal Communications (24)
5.318 5.325 902-928 FIXED Amateur Mobile except aeronautical mobile 5.325A Radiolocation 5.150 5.325 5.326 928-942 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation	5.318 5.325 902-928 FIXED Amateur Mobile except aeronautical mobile 5.325A Radiolocation 5.150 5.325 5.326 928-942 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation	5.318 5.325 902-928 FIXED Amateur Mobile except aeronautical mobile 5.325A Radiolocation 5.150 5.325 5.326 928-942 FIXED MOBILE except aeronautical mobile 5.317A Radiolocation	5.150 US218 US267 US275 G11 928-932	5.150 US218 US267 US275 G11 928-932	ISM Equipment (18) Private Land Mobile (90) Amateur (97) Public Mobile (22) Private Land Mobile (90) Fixed Microwave (101) Private Land Mobile (90) Personal Communications (24) Public Mobile (22) Public Mobile (22) Fixed Microwave (101) Private Land Mobile (90) Personal Communications (24)
5.323	5.325	5.327	US116 US268 G2 932-935 FIXED US268 G2 935-941	US116 US268 G2 932-935 FIXED US268 NG120 935-940 FIXED LAND MOBILE US116 US268 940-941 FIXED MOBILE US116 US268	Public Mobile (22) Private Land Mobile (90) Personal Communications (24) Public Mobile (22) Fixed Microwave (101) Private Land Mobile (90) Personal Communications (24)

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Region 1 Table		Region 2 Table		Region 3 Table						
(See previous page)						941-944 FIXED		941-944 FIXED		Public Mobile (22) Aural Broadcast Auxiliary (74E) Fixed Microwave (101)
942-960 FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322		942-960 FIXED MOBILE 5.317A		942-960 FIXED MOBILE 5.317A BROADCASTING		US268 US301 G2 944-960		US268 US301 NG30 NG120 944-960 FIXED		Public Mobile (22) Aural Broadcast Auxiliary (74E) Low Power Auxiliary (74H) Fixed Microwave (101)
5.323				5.320				NG120		
960-1164 AERONAUTICAL RADIONAVIGATION 5.328						960-1164 AERONAUTICAL RADIONAVIGATION 5.328 US224 US400				Aviation (87)
1164-1215 AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B						1164-1215 AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328A US224				
1215-1240 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active)						1215-1240 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G56 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) G132 SPACE RESEARCH (active)		1215-1240 Earth exploration-satellite (active) Space research (active)		
5.330 5.331 5.332 1240-1300 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329 5.329A SPACE RESEARCH (active) Amateur						5.332 1240-1300 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G56 SPACE RESEARCH (active) AERONAUTICAL RADIONAVIGATION		1240-1300 AERONAUTICAL RADIONAVIGATION Amateur Earth exploration-satellite (active) Space research (active)		Amateur (97)
5.282 5.330 5.331 5.332 5.335 5.335A 1300-1350 AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (Earth-to-space)						5.332 5.335 1300-1350 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation G2 US342		5.282 1300-1350 AERONAUTICAL RADIONAVIGATION 5.337		Aviation (87)
5.149 5.337A 1350-1400 FIXED MOBILE RADIOLOCATION		1350-1400 RADIOLOCATION				1350-1390 FIXED MOBILE RADIOLOCATION G2 5.334 5.339 US311 US342 G27 G114 5.334 5.339 US311 US342				

5.149 5.338 5.339 5.339A 1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	5.149 5.334 5.339 5.339A	1390-1395	1390-1392 FIXED MOBILE except aeronautical mobile Fixed-satellite (Earth-to-space) US368 5.339 US311 US342 US351 US398 1392-1395 FIXED MOBILE except aeronautical mobile 5.339 US311 US342 US351 US398	Wireless Communications (27)
		5.339 US311 US342 US351 US398 1395-1400 LAND MOBILE (medical telemetry and medical telecommand) 5.339 US311 US342 US351 US398 1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.341 US246	5.339 US311 US342 US351 US398	
5.340 5.341 1427-1429 SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile	5.149 5.334 5.339 5.339A	1427-1429.5 LAND MOBILE (medical telemetry and medical telecommand) US350 5.341 US352 US398 1429.5-1432	1427-1429.5 LAND MOBILE (telemetry and telecommand) Fixed (telemetry) 5.341 US350 US352 US398 1429.5-1430 FIXED (telemetry and telecommand) LAND MOBILE (telemetry and telecommand) 5.341 US350 US352 US398 1430-1432 FIXED (telemetry and telecommand) LAND MOBILE (telemetry and telecommand) Fixed-satellite (space-to-Earth) US368 5.341 US350 US352 US398 1432-1435 FIXED MOBILE except aeronautical mobile 5.341 US361	Private Land Mobile (90) Personal (95)
		1429-1452 FIXED MOBILE 5.343	1429-1452 FIXED MOBILE 5.343	
5.339A 5.341 5.342	5.339A 5.341			Wireless Communications (27)

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(See previous page)					1435-1525						
1452-1492 FIXED MOBILE except aeronautical mobile BROADCASTING 5.345 5.347 BROADCASTING-SATELLITE 5.345 5.347 5.347A 5.341 5.342		1452-1492 FIXED MOBILE 5.343 BROADCASTING 5.345 5.347 BROADCASTING-SATELLITE 5.345 5.347 5.347A 5.341 5.344					MOBILE (aeronautical telemetry)				Aviation (87)
1492-1518 FIXED MOBILE except aeronautical mobile 5.341 5.342		1492-1518 FIXED MOBILE 5.343 5.341 5.344		1492-1518 FIXED MOBILE 5.341							
1518-1525 FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.348C 5.341 5.342		1518-1525 FIXED MOBILE 5.343 MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.348C 5.341 5.344		1518-1525 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.348C 5.341							
1525-1530 SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.349 5.341 5.342 5.350 5.351 5.352A 5.354		1525-1530 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A Earth exploration-satellite Fixed Mobile 5.343 5.341 5.351 5.354		1525-1530 SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A Earth exploration-satellite Mobile 5.349 5.341 5.351 5.352A 5.354		1525-1535 MOBILE-SATELLITE (space-to-Earth) US315 US380					Satellite Communications (25) Maritime (80)
1530-1535 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A 5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.341 5.342 5.351 5.354		1530-1535 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A 5.353A Earth exploration-satellite Fixed Mobile 5.343 5.341 5.351 5.354								5.341 5.351	
1535-1559 MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A		1535-1559 MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A								1535-1559 MOBILE-SATELLITE (space-to-Earth) US308 US309 US315 US380	Satellite Communications (25) Maritime (80) Aviation (87)
5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A 5.359 5.362A 1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329A 5.341 5.362B 5.362C 5.363		5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A 5.359 5.362A 1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.341 US208 US260 US343								5.341 5.351 5.356 1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.341 US208 US260 US343	Aviation (87)

1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.341 5.355 5.359 5.363 5.364 5.366 5.367 5.368 5.369 5.371 5.372	1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.341 5.364 5.366 5.367 5.368 5.370 5.372	1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.372	1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.341 5.364 5.366 5.367 5.368 5.372 US208	Satellite Communications (25) Aviation (87)
1610.6-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.149 5.341 5.355 5.359 5.363 5.364 5.366 5.367 5.368 5.369 5.371 5.372	1610.6-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.149 5.341 5.364 5.366 5.367 5.368 5.370 5.372	1610.6-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.149 5.341 5.355 5.359 5.364 5.366 5.367 5.368 5.369 5.372	1610.6-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) 5.341 5.364 5.366 5.367 5.368 5.372 US208 US342	Satellite Communications (25) Aviation (87)
1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (space-to-Earth) 5.347A 5.341 5.355 5.359 5.363 5.364 5.365 5.366 5.367 5.368 5.369 5.371 5.372	1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) Mobile-satellite (space-to-Earth) 5.347A 5.341 5.364 5.365 5.366 5.367 5.368 5.370 5.372	1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (space-to-Earth) 5.347A 5.341 5.355 5.359 5.364 5.365 5.366 5.367 5.368 5.369 5.372	1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIO DETERMINATION-SATELLITE (Earth-to-space) Mobile-satellite (space-to-Earth) 5.341 5.364 5.365 5.366 5.367 5.368 5.372 US208	Satellite Communications (25) Maritime (80) Aviation (87)
1626.5-1660 MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.357A 5.359 5.362A 5.374 5.375 5.376	1626.5-1660 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.149 5.341 5.351 5.354 5.362A 5.376A	1626.5-1660 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.149 5.341 5.351 5.354 5.362A 5.376A	1626.5-1660 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.341 5.351 5.375 1660-1660.5 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.341 5.351 5.375 1660.5-1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive)	Satellite Communications (25) Aviation (87)
1668-1668.4 MOBILE-SATELLITE (Earth-to-space) 5.348C 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379 5.379A	1668-1668.4 MOBILE-SATELLITE (Earth-to-space) 5.348C 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A 5.379D	1668-1668.4 MOBILE-SATELLITE (Earth-to-space) 5.348C 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379A 5.379D	1668-1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive)	

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1668.4-1670 METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) 5.348C 5.379B 5.379C RADIO ASTRONOMY 5.149 5.341 5.379D 5.379E 1670-1675 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE 5.380 MOBILE-SATELLITE (Earth-to-space) 5.348C 5.379B 5.341 5.379D 5.379E 5.380A 1675-1690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341				1668.4-1670 METEOROLOGICAL AIDS (radiosonde) RADIO ASTRONOMY US74 5.341 US99 US342 1670-1675 5.341 US211 US362 1675-1700 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SATELLITE (space-to-Earth)			
1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 5.289 5.341 5.382 1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341 5.381	1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth)	1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341 5.384		5.289 5.341 US211 1700-1710 FIXED G118 METEOROLOGICAL-SATELLITE (space-to-Earth) 5.289 5.341 1710-1755 5.341 US311 US378 1755-1850 FIXED MOBILE SPACE OPERATION (Earth-to-space) G42	1700-1710 METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed 5.289 5.341 1710-1755 FIXED MOBILE 5.341 US311 US378 1755-1850		
5.289 5.341 1710-1930 FIXED MOBILE 5.380 5.384A 5.388A 5.388B 5.149 5.341 5.385 5.386 5.387 5.388						Wireless Communications (27)	

1930-1970 FIXED MOBILE 5.388A 5.388B 5.388	1930-1970 FIXED MOBILE 5.388A 5.388B Mobile-satellite (Earth-to-space) 5.388	1930-1970 FIXED MOBILE 5.388A 5.388B 5.388	1850-2025	1850-2000 FIXED MOBILE	RF Devices (15) Personal Communications (24) Fixed Microwave (101)
1970-1980 FIXED MOBILE 5.388A 5.388B 5.388				NG177	Satellite Communications (25)
1980-2010 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A 5.389B 5.389F				2000-2020 MOBILE-SATELLITE (Earth-to-space) US380	
2010-2025 FIXED MOBILE 5.388B 5.388	2010-2025 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.388 5.389C 5.389E 5.390	2010-2025 FIXED MOBILE 5.388A 5.388B 5.388	NG156 2020-2025 FIXED MOBILE NG177	NG156 2020-2025 FIXED MOBILE NG177	
2025-2110 SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space)			2025-2110 SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) SPACE RESEARCH (Earth-to-space) (space-to-space) 5.391 5.392 US90 US222 US346 US347 US393	2025-2110 FIXED NG118 MOBILE 5.391 5.392 US90 US222 US346 US347 US393	TV Auxiliary Broadcasting (74F) Cable TV Relay (78) Local TV Transmission (101J)
5.392 2110-2120 FIXED MOBILE 5.388A 5.388B SPACE RESEARCH (deep space) (Earth-to-space) 5.388			2110-2120	2110-2120 FIXED MOBILE US252	Public Mobile (22) Wireless Communications (27) Fixed Microwave (101)
2120-2160 FIXED MOBILE 5.388A 5.388B 5.388	2120-2160 FIXED MOBILE 5.388A 5.388B Mobile-satellite (space-to-Earth) 5.388	2120-2170 FIXED MOBILE 5.388A 5.388B 5.388	2120-2200	2120-2180 FIXED MOBILE US252	
2160-2170 FIXED MOBILE 5.388A 5.388B 5.388 5.392A	2160-2170 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.388 5.389C 5.389E 5.390	5.388	NG153 NG178 2180-2200 MOBILE-SATELLITE (space-to-Earth) US380 NG168	NG153 NG178 2180-2200 MOBILE-SATELLITE (space-to-Earth) US380 NG168	Satellite Communications (25)

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2200-2290 SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space)			2200-2290 SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED (line-of-sight only) MOBILE (line-of-sight only including aeronautical telemetry, but excluding flight testing of manned aircraft) 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392 US303	2200-2290 SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED (line-of-sight only) MOBILE (line-of-sight only including aeronautical telemetry, but excluding flight testing of manned aircraft) 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392 US303	2200-2290		
5.392 2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)			2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	2290-2300 SPACE RESEARCH (deep space) (space-to-Earth)		
2300-2450 FIXED MOBILE Amateur Radiolocation	2300-2450 FIXED MOBILE RADIOLOCATION Amateur		2300-2305 G122 2305-2310	2300-2305 G122 2305-2310	2300-2305 Amateur 2305-2310 FIXED MOBILE except aeronautical mobile RADIOLOCATION Amateur	Amateur (97)	Wireless Communications (27) Amateur (97)
			US338 G122 2310-2320 Fixed Mobile US339 Radiolocation G2	US338 G122 2310-2320 Fixed Mobile US339 Radiolocation G2	US338 2310-2320 FIXED MOBILE US339 BROADCASTING-SATELLITE RADIOLOCATION	Wireless Communications (27) Aviation (87)	
			US327 2320-2345 Fixed Radiolocation G2	US327 2320-2345 Fixed Radiolocation G2	5.396 US327 2320-2345 BROADCASTING-SATELLITE	Satellite Communications (25)	
			US327 2345-2360 Fixed Mobile US339 Radiolocation G2	US327 2345-2360 Fixed Mobile US339 Radiolocation G2	5.396 US327 2345-2360 FIXED MOBILE US339 BROADCASTING-SATELLITE RADIOLOCATION	Wireless Communications (27) Aviation (87)	
			US327 2360-2390 MOBILE US276 RADIOLOCATION G2 G120 Fixed	US327 2360-2390 MOBILE US276 RADIOLOCATION G2 G120 Fixed	5.396 US327 2360-2390 MOBILE US276	Aviation (87)	

5.150 5.282 5.395 2450-2483.5 FIXED MOBILE Radiolocation	5.150 5.282 5.393 5.394 5.396 2450-2483.5 FIXED MOBILE RADIOLOCATION	2390-2395 MOBILE US276	2390-2395 AMATEUR MOBILE US276	Aviation (87) Amateur (97)
5.150 5.397 2483.5-2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A Radiolocation	5.150 5.394 2483.5-2500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIO DETERMINATION- SATELLITE (space-to-Earth) 5.398 RADIOLOCATION	2395-2400 G122 2400-2417 5.150 G122 2417-2450 Radiolocation G2	2395-2400 AMATEUR 2400-2417 AMATEUR 5.150 5.282 2417-2450 Amateur	Amateur (97) ISM Equipment (18) Amateur (97)
5.150 5.371 5.397 5.398 5.399 5.400 5.402 2500-2520 FIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to- Earth) 5.351A 5.403 5.405 5.407 5.412 5.414 2520-2655 FIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416	5.150 5.402 2500-2520 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (space-to-Earth) 5.351A 5.403 5.404 5.407 5.414 5.415A 2520-2655 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416	5.150 5.402 US41 2500-2655	5.150 5.402 US41 US391 NG147 2495-2500 FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to- Earth) US319 US380 RADIO DETERMINATION-SATEL- LITE (space-to-Earth) 5.398 5.150 5.402 US41 US391 NG147 2500-2655 FIXED US205 MOBILE except aeronautical mobile	ISM Equipment (18) Satellite Communications (25) Wireless Communications (27) Wireless Communications (27)
5.339 5.403 5.405 5.412 5.417C 5.417D 5.418B 5.418C	5.339 5.403 5.417C 5.417D 5.418B 5.418C 2520-2535 FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 5.403 5.415A 2535-2655 FIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 5.339 5.417A 5.417B 5.417C 5.417D 5.418 5.418A 5.418B 5.418C	5.339 US205	5.339	Page 36

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2655-2670 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.347A 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.409 5.411 (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2670 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.347A 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2655-2690 Earth exploration-satellite (passive) Radio astronomy US269 Space research (passive)	2655-2690 FIXED US205 MOBILE except aeronautical mobile Earth exploration-satellite (passive) Radio astronomy Space research (passive)			Wireless Communications (27)
5.149 5.412 5.420	5.149 5.420 5.347A	5.149 5.420 5.420					
2670-2690 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) 5.351A Radio astronomy Space research (passive)	2670-2690 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.347A 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) 5.351A Earth exploration-satellite (passive) Radio astronomy Space research (passive)	2670-2690 FIXED 5.409 5.411 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A MOBILE-SATELLITE (Earth-to-space) 5.351A Earth exploration-satellite (passive) Radio astronomy Space research (passive)					
5.149 5.412 5.419 5.420	5.149 5.419 5.420	5.149 5.419 5.420 5.420A	US205	US269			
2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)				
5.340 5.422			US246				
2700-2900 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation			2700-2900 METEOROLOGICAL AIDS AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation G2	2700-2900			Aviation (87)
5.423 5.424			5.423 US18 G15	5.423 US18			
2900-3100 RADIOLOCATION 5.424A RADIONAVIGATION 5.426			2900-3100 RADIOLOCATION 5.424A G56 MARITIME RADIONAVIGATION	2900-3100 MARITIME RADIONAVIGATION Radiolocation US44			Maritime (80) Private Land Mobile (90)
5.425 5.427			5.427 US44 US316	5.427 US316			
3100-3300 RADIOLOCATION Earth exploration-satellite (active) Space research (active)			3100-3300 RADIOLOCATION G59 Earth exploration-satellite (active) Space research (active)	3100-3300 Earth exploration-satellite (active) Space research (active) Radiolocation			Private Land Mobile (90)
5.149 5.428			US342	US342			

3300-3400 RADIOLOCATION	3300-3400 RADIOLOCATION Amateur Fixed Mobile	3300-3400 RADIOLOCATION Amateur	3300-3500 RADIOLOCATION US108 G2	3300-3500 Amateur Radiolocation US108	Private Land Mobile (90) Amateur (97)
5.149 5.429 5.430	5.149 5.430	5.149 5.429			
3400-3600 FIXED FIXED-SATELLITE (space-to-Earth) Mobile Radiolocation	3400-3500 FIXED FIXED-SATELLITE (space-to-Earth) Amateur Mobile Radiolocation 5.433				
5.431	5.282 5.432		US342	5.282 US342	
3600-4200 FIXED FIXED-SATELLITE (space-to-Earth) Mobile	3500-3700 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation 5.433		3500-3650 RADIOLOCATION G59 AERONAUTICAL RADIONAVIGATION (ground-based) G110 US245 3650-3700	3500-3600 Radiolocation 3600-3650 FIXED-SATELLITE (space-to-Earth) US245 Radiolocation 3650-3700 FIXED FIXED-SATELLITE (space-to-Earth) NG169 NG185 MOBILE except aeronautical mobile US348 US349	Private Land Mobile (90)
5.435			US348 US349		Satellite Communications (25) Private Land Mobile (90)
3700-4200 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile			3700-4200 FIXED NG41 FIXED-SATELLITE (space-to-Earth) NG180	3700-4200 FIXED NG41 FIXED-SATELLITE (space-to-Earth) NG180	International Fixed (23) Satellite Communications (25) Fixed Microwave (101)
4200-4400 AERONAUTICAL RADIONAVIGATION 5.438			4200-4400 AERONAUTICAL RADIONAVIGATION		Aviation (87)
5.439 5.440			5.440 US261		
4400-4500 FIXED MOBILE			4400-4500 FIXED MOBILE	4400-4500	
4500-4800 FIXED FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE			4500-4800 FIXED MOBILE US245	4500-4800 FIXED-SATELLITE (space-to-Earth) 5.441 US245	
4800-4990 FIXED MOBILE 5.442 Radio astronomy			4800-4940 FIXED MOBILE US203 US342 4940-4990	4800-4940 US203 US342 4940-4990 FIXED MOBILE except aeronautical mobile 5.339 US311 US342 US342	
5.149 5.339 5.443			5.339 US311 US342 G122		Private Land Mobile (90)

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4990-5000		4990-5000			4990-5000		4990-5000		4990-5000	
FIXED		MOBILE except aeronautical mobile			RADIO ASTRONOMY		RADIO ASTRONOMY		RADIO ASTRONOMY US74	
RADIO ASTRONOMY		Space research (passive)			Space research (passive)		Space research (passive)		Space research (passive)	
5.149		US246							US246	
5000-5010		5000-5010			5000-5010		5000-5010		5000-5010	
AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION			AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION US260	
RADIONAVIGATION-SATELLITE (Earth-to-space)		RADIONAVIGATION-SATELLITE (Earth-to-space)			RADIONAVIGATION-SATELLITE (Earth-to-space)		RADIONAVIGATION-SATELLITE (Earth-to-space)		RADIONAVIGATION-SATELLITE (Earth-to-space)	
5.367		5.367			5.367		5.367		5.367 US211 US344	
5010-5030		5010-5030			5010-5030		5010-5030		5010-5030	
AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION			AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION US260	
RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B		RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B			RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B		RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B		RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.443B	
5.367		5.367			5.367		5.367		5.367 US211 US344	
5030-5150		5030-5150			5030-5150		5030-5150		5030-5150	
AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION			AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION US260	
5.367 5.444 5.444A		5.367 5.444 5.444A			5.367 5.444 5.444A		5.367 5.444 5.444A		5.367 5.444 5.444A US211 US344	
5150-5250		5150-5250			5150-5250		5150-5250		5150-5250	
AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION			AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION		AERONAUTICAL RADIONAVIGATION US260	
FIXED-SATELLITE (Earth-to-space) 5.447A		FIXED-SATELLITE (Earth-to-space) 5.447A			FIXED-SATELLITE (Earth-to-space) 5.447A		FIXED-SATELLITE (Earth-to-space) 5.447A		FIXED-SATELLITE (Earth-to-space) 5.447A	
MOBILE except aeronautical mobile 5.446A 5.446B		MOBILE except aeronautical mobile 5.446A 5.446B			MOBILE except aeronautical mobile 5.446A 5.446B		MOBILE except aeronautical mobile 5.446A 5.446B		FIXED-SATELLITE (Earth-to-space) 5.447A US344	
5.446 5.447 5.447B 5.447C		5.446 5.447 5.447B 5.447C			5.446 5.447 5.447B 5.447C		5.446 5.447 5.447B 5.447C		5.447C US211 US307	
5250-5255		5250-5255			5250-5255		5250-5255		5250-5255	
EARTH EXPLORATION-SATELLITE (active)		EARTH EXPLORATION-SATELLITE (active)			EARTH EXPLORATION-SATELLITE (active)		EARTH EXPLORATION-SATELLITE (active)		Earth exploration-satellite (active)	
RADIOLOCATION		RADIOLOCATION			RADIOLOCATION		RADIOLOCATION		Radiolocation	
SPACE RESEARCH 5.447D		SPACE RESEARCH 5.447D			SPACE RESEARCH 5.447D		SPACE RESEARCH 5.447D		Space research	
MOBILE except aeronautical mobile 5.446A 5.447F		MOBILE except aeronautical mobile 5.446A 5.447F			MOBILE except aeronautical mobile 5.446A 5.447F		MOBILE except aeronautical mobile 5.446A 5.447F		Space research (active) 5.447D	
5.447E 5.448 5.448A		5.447E 5.448 5.448A			5.447E 5.448 5.448A		5.447E 5.448 5.448A		5.447C US211 US307	
5255-5350		5255-5350			5255-5350		5255-5350		5255-5350	
EARTH EXPLORATION-SATELLITE (active)		EARTH EXPLORATION-SATELLITE (active)			EARTH EXPLORATION-SATELLITE (active)		EARTH EXPLORATION-SATELLITE (active)		Earth exploration-satellite (active)	
RADIOLOCATION		RADIOLOCATION			RADIOLOCATION		RADIOLOCATION		Radiolocation	
SPACE RESEARCH (active)		SPACE RESEARCH (active)			SPACE RESEARCH (active)		SPACE RESEARCH (active)		Space research (active)	
MOBILE except aeronautical mobile 5.446A 5.447F		MOBILE except aeronautical mobile 5.446A 5.447F			MOBILE except aeronautical mobile 5.446A 5.447F		MOBILE except aeronautical mobile 5.446A 5.447F		Space research (active)	
5.447E 5.448 5.448A		5.447E 5.448 5.448A			5.447E 5.448 5.448A		5.447E 5.448 5.448A		5.448A	
5350-5460		5350-5460			5350-5460		5350-5460		5350-5460	
EARTH EXPLORATION-SATELLITE (active) 5.448B		EARTH EXPLORATION-SATELLITE (active) 5.448B			EARTH EXPLORATION-SATELLITE (active) 5.448B		EARTH EXPLORATION-SATELLITE (active) 5.448B		AERONAUTICAL RADIONAVIGATION 5.449	
SPACE RESEARCH (active) 5.448C		SPACE RESEARCH (active) 5.448C			SPACE RESEARCH (active) 5.448C		SPACE RESEARCH (active) 5.448C		5.449	
AERONAUTICAL RADIONAVIGATION 5.449		AERONAUTICAL RADIONAVIGATION 5.449			AERONAUTICAL RADIONAVIGATION 5.449		AERONAUTICAL RADIONAVIGATION 5.449		Earth exploration-satellite (active) 5.448B	
RADIOLOCATION 5.448D		RADIOLOCATION 5.448D			RADIOLOCATION 5.448D		RADIOLOCATION 5.448D		Space research (active) 5.448B	
									Space research (active) 5.448B	
									Radiolocation	
									US390 G130	

5460-5470 RADIONAVIGATION 5.449 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D 5.448B	5460-5470 RADIONAVIGATION 5.449 US65 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION G56 5.448B US49 G130	5460-5470 RADIONAVIGATION 5.449 US65 Earth exploration-satellite (active) Space research (active) Radiolocation	Maritime (80) Aviation (87) Private Land Mobile (90)
5470-5570 MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B 5.450 5.451	5470-5570 MARITIME RADIONAVIGATION US65 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION G56 5.448B US50 G131	5470-5570 MARITIME RADIONAVIGATION US65 RADIOLOCATION Earth exploration-satellite (active) Space research (active) US50	RF Devices (15) Maritime (80) Private Land Mobile (90)
5570-5650 MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION 5.450B	5570-5600 MARITIME RADIONAVIGATION US65 RADIOLOCATION G56 US50 G131 5600-5650 MARITIME RADIONAVIGATION US65 METEOROLOGICAL AIDS RADIOLOCATION G56 5.452 US50 G131	5570-5600 MARITIME RADIONAVIGATION US65 RADIOLOCATION US50 5600-5650 MARITIME RADIONAVIGATION US65 METEOROLOGICAL AIDS RADIOLOCATION 5.452 US50	RF Devices (15) ISM Equipment (18) Amateur (97)
5.450 5.451 5.452 5650-5725 MOBILE except aeronautical mobile 5.446A 5.450A RADIOLOCATION Amateur Space research (deep space) 5.282 5.451 5.453 5.454 5.455 5725-5830 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur 5.150 5.451 5.453 5.455 5.456 5830-5850 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) 5.150 5.451 5.453 5.455 5.456 5850-5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.150	5650-5925 RADIOLOCATION G2 5.150 US245	5650-5830 Amateur 5.150 5.282 5830-5850 Amateur Amateur-satellite (space-to-Earth) 5.150 5850-5925 FIXED-SATELLITE (Earth-to-space) US245 MOBILE NG160 Amateur 5.150	ISM Equipment (18) Private Land Mobile (90) Personal Radio (95) Amateur (97)

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5925-6700 FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B MOBILE			5925-6425	5925-6425 FIXED NG41 FIXED-SATELLITE (Earth-to-space) NG181		International Fixed (23) Satellite Communications (25) Fixed Microwave (101)	
			6425-6525	6425-6525 FIXED-SATELLITE (Earth-to-space) MOBILE		TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)	
			5.440 5.458 6525-6700	5.440 5.458 FIXED FIXED-SATELLITE (Earth-to-space)		Fixed Microwave (101)	
5.149 5.440 5.458 6700-7075 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE			5.458 US342 6700-7125	5.458 US342 6700-6875 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 5.458 5.458A 5.458B 6875-7025		Satellite Communications (25) Fixed Microwave (101)	
				FIXED NG118 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE NG171		Satellite Communications (25) TV Broadcast Auxiliary (74F) Cable TV Relay (78)	
				5.458 5.458A 5.458B 7025-7075 FIXED NG118 FIXED-SATELLITE (Earth-to-space) MOBILE NG171		TV Broadcast Auxiliary (74F) Cable TV Relay (78)	
5.458 5.458A 5.458B 5.458C 7075-7145 FIXED MOBILE			5.458 7125-7145 FIXED	5.458 7075-7125 FIXED NG118 MOBILE NG171			
			5.458 G116 7145-7190 FIXED	5.458 5.458A 5.458B 7075-7125 FIXED NG118 MOBILE NG171			
				5.458 7125-7190			
5.458 5.459 7145-7235 FIXED MOBILE SPACE RESEARCH (Earth-to-space) 5.460			5.458 G116 7145-7190 FIXED SPACE RESEARCH (deep space) (Earth-to-space) US262	5.458 7125-7190			
			5.458 G116 7190-7235 FIXED SPACE RESEARCH (Earth-to-space) G133	5.458 US262 7190-7235			
			5.458	5.458			

7235-7250 FIXED MOBILE	7235-7250 FIXED	7235-7250	
5.458	5.458	5.458	
7250-7300 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE	7250-7300 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Fixed	7250-8025	
5.461	G117		
7300-7450 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	7300-7450 FIXED FIXED-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth)		
5.461	G117		
7450-7550 FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	7450-7550 FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth)		
5.461A	G104 G117		
7550-7750 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	7550-7750 FIXED FIXED-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth)		
7750-7850 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B MOBILE except aeronautical mobile	7750-7850 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth)		
7850-7900 FIXED MOBILE except aeronautical mobile	5.461B 7850-7900 FIXED		
7900-8025 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	7900-8025 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Fixed		
5.461	G117		

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8025-8175 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463				8025-8175 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) Mobile-satellite (Earth-to-space) (no airborne transmissions)	8025-8400		
5.462A				US258 G117			
8175-8215 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463				8175-8215 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Mobile-satellite (Earth-to-space) (no airborne transmissions)			
5.462A				US258 G104 G117			
8215-8400 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463				8215-8400 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) Mobile-satellite (Earth-to-space) (no airborne transmissions)			
5.462A				US258 G117			
8400-8500 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) 5.465 5.466				8400-8450 FIXED SPACE RESEARCH (deep space) (space-to-Earth) 8450-8500 FIXED SPACE RESEARCH (space-to-Earth)	US258 8400-8450 Space research (deep space) (space-to-Earth) 8450-8500 SPACE RESEARCH (space-to-Earth)		
8500-8550 RADIOLOCATION				8500-8550 RADIOLOCATION G59	8500-8550 Radiolocation		Private Land Mobile (90)
5.468 5.469							
8550-8650 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)				8550-8650 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH (active)	8550-8650 Earth exploration-satellite (active) Radiolocation Space research (active)		
5.468 5.469 5.469A							

8650-8750 RADIOLOCATION 5.468 5.469	8650-9000 RADIOLOCATION G59	8650-9000 Radiolocation	Aviation (87) Private Land Mobile (90)
8750-8850 RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470 5.471			
8850-9000 RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473	US53 9000-9200 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation G2	US53 9000-9200 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	
9000-9200 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	US48 G19 9200-9300 MARITIME RADIONAVIGATION 5.472 Radiolocation US110 G59	US48 9200-9300 MARITIME RADIONAVIGATION 5.472 Radiolocation US110	Maritime (80) Private Land Mobile (90)
5.473 5.474 9300-9500 RADIOLOCATION 5.476 Radiolocation	5.474 9300-9500 RADIOLOCATION 5.476 US66 Radiolocation US51 G56 Meteorological aids	5.474 9300-9500 RADIOLOCATION 5.476 US66 Radiolocation US51 Meteorological aids	Maritime (80) Aviation (87) Private Land Mobile (90)
5.427 5.474 5.475 9500-9800 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)	5.427 5.474 US67 US71 9500-9800 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	5.427 5.474 US67 US71 9500-9800 Earth exploration-satellite (active) Radiolocation Space research (active)	Private Land Mobile (90)
5.476A 9800-10000 RADIOLOCATION Fixed	9800-10000 RADIOLOCATION	9800-10000 Radiolocation	
5.477 5.478 5.479	5.479	5.479	

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10-10.45 FIXED MOBILE RADIOLOCATION Amateur	10-10.45 RADIOLOCATION Amateur	10-10.45 FIXED MOBILE RADIOLOCATION Amateur	10-10.45 RADIOLOCATION G32	10-10.45 Amateur Radiolocation	Private Land Mobile (90) Amateur (97)		
5.479	5.479 5.480	5.479	5.479 US58 US108	5.479 US58 US108 NG42			
10.45-10.5 RADIOLOCATION Amateur	10.45-10.5 RADIOLOCATION Amateur		10.45-10.5 RADIOLOCATION G32	10.45-10.5 Amateur Amateur-satellite Radiolocation			
5.481	5.481		US58 US108	US58 US108 NG42 NG134			
10.5-10.55 FIXED MOBILE RADIOLOCATION	10.5-10.55 FIXED MOBILE RADIOLOCATION		10.5-10.55 RADIOLOCATION		Private Land Mobile (90)		
10.55-10.6 FIXED MOBILE except aeronautical mobile Radiolocation	10.55-10.6 FIXED MOBILE RADIOLOCATION		US59		Fixed Microwave (101)		
10.6-10.68 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation	10.6-10.68 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation		10.6-10.68 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	10.6-10.68 EARTH EXPLORATION-SATELLITE (passive) FIXED US265 SPACE RESEARCH (passive)			
5.149 5.482			US265 US277	US277			
10.68-10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	10.68-10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		10.68-10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246 US355		Satellite Communications (25) Fixed Microwave (101)		
10.7-11.7 FIXED FIXED-SATELLITE (space-to-Earth) 5.441 5.484A (Earth-to-space) 5.484 MOBILE except aeronautical mobile	10.7-11.7 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	5.441 5.484A	10.7-11.7	10.7-11.7 FIXED FIXED-SATELLITE (space-to-Earth) 5.441 US211 US355 NG104 NG182			
11.7-12.5 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE	11.7-12.1 FIXED 5.486 FIXED-SATELLITE (space-to-Earth) 5.484A Mobile except aeronautical mobile 5.485 5.488 12.1-12.2 FIXED-SATELLITE (space-to-Earth) 5.484A 5.485 5.488 5.489	11.7-12.2 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 5.487 5.487A 5.492	US211	11.7-12.2 FIXED-SATELLITE (space-to-Earth) NG143 NG145 NG183	Satellite Communications (25)		

5.487 5.487A 5.492	12.2-12.7 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE	12.2-12.5 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile BROADCASTING 5.484A 5.487	12.2-12.7 FIXED BROADCASTING-SATELLITE	Satellite Communications (25) Fixed Microwave (101)
12.5-12.75 FIXED-SATELLITE (space-to-Earth) 5.484A (Earth-to-space)	5.487A 5.488 5.490 5.492 12.7-12.75 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile	12.5-12.75 FIXED FIXED-SATELLITE (space-to-Earth) 5.484A MOBILE except aeronautical mobile BROADCASTING-SATELLITE 5.493	5.487A 5.488 5.490 12.7-12.75 FIXED NG118 FIXED-SATELLITE (Earth-to-space) MOBILE	TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)
5.494 5.495 5.496			12.75-13.25 FIXED NG118 FIXED-SATELLITE (Earth-to-space) 5.441 NG104 MOBILE US251 NG53	Satellite Communications (25) TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)
12.75-13.25 FIXED FIXED-SATELLITE (Earth-to-space) 5.441 MOBILE Space research (deep space) (space-to-Earth)			13.25-13.4 AERONAUTICAL RADIO NAVIGATION 5.497 Earth exploration-satellite (active) Space research (active)	Aviation (87)
5.498A 5.499			13.4-13.75 Earth exploration-satellite (active) Radiolocation Space research Standard frequency and time signal-satellite (Earth-to-space)	Private Land Mobile (90)
5.499 5.500 5.501 5.501B			13.75-14 FIXED-SATELLITE (Earth-to-space) 5.484A RADIOLOCATION Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research	Satellite Communications (25) Private Land Mobile (90)
14-14.25 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B RADIO NAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504C 5.506A Space research 5.504A 5.505			14-14.2 FIXED-SATELLITE (Earth-to-space) NG183 Mobile-satellite (Earth-to-space) Space research	Satellite Communications (25)

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14.25-14.3 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.506A 5.508A Space research 5.504A 5.505 5.508 5.509	14.3-14.4 FIXED-SATELLITE (Earth-to-space) 5.457A 5.484A 5.506 5.506B Mobile-satellite (Earth-to-space) 5.506A Radionavigation-satellite 5.509A	14.3-14.4 FIXED-SATELLITE (Earth-to-space) 5.457A 5.484A 5.506 5.506B MOBILE except aeronautical mobile 5.506A 5.509A Radionavigation-satellite 5.504A		14.4-14.47 Fixed Mobile			
14.4-14.47 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.506A 5.509A Space research (space-to-Earth) 5.504A					NG184		
14.47-14.5 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Radio astronomy 5.149 5.504A				14.47-14.5 Fixed Mobile	14.47-14.5 FIXED-SATELLITE (Earth-to-space) NG183 Mobile-satellite (Earth-to-space)		
14.5-14.8 FIXED-SATELLITE (Earth-to-space) 5.510 MOBILE Space research				US203 US342 14.5-14.7145 FIXED Mobile Space research 14.7145-14.8 MOBILE Fixed Space research	US203 US342 14.5-14.8		
14.8-15.35 FIXED MOBILE Space research				14.8-15.1365 MOBILE SPACE RESEARCH Fixed US310 15.1365-15.35 FIXED SPACE RESEARCH Mobile 5.339 US211	14.8-15.1365 US310 15.1365-15.35		
5.339					5.339 US211		

15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246			
5.340 5.511 15.4-15.43 AERONAUTICAL RADIONAVIGATION	15.4-15.43 AERONAUTICAL RADIONAVIGATION US260 US211			Aviation (87)
5.511D 15.43-15.63 FIXED-SATELLITE (Earth-to-space) 5.511A AERONAUTICAL RADIONAVIGATION	15.43-15.63 AERONAUTICAL RADIONAVIGATION US260 15.43-15.63 FIXED-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION US260 5.511C US211 US359			Satellite Communications (25) Aviation (87)
5.511C 15.63-15.7 AERONAUTICAL RADIONAVIGATION	15.63-15.7 AERONAUTICAL RADIONAVIGATION US260 US211			Aviation (87)
5.511D 15.7-16.6 RADIOLOCATION	15.7-16.6 RADIOLOCATION G59		15.7-17.2 Radiolocation	Private Land Mobile (90)
5.512 5.513 16.6-17.1 RADIOLOCATION Space research (deep space) (Earth-to-space)	16.6-17.1 RADIOLOCATION G59 Space research (deep space) (Earth-to-space)			
5.512 5.513 17.1-17.2 RADIOLOCATION	17.1-17.2 RADIOLOCATION G59			
5.512 5.513 17.2-17.3 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)	17.2-17.3 EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH (active)		17.2-17.3 Earth exploration-satellite (active) Radiolocation Space research (active)	
5.512 5.513 5.513A 17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 (space-to-Earth) 5.516A 5.516B Radiolocation	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 BROADCASTING-SATELLITE Radiolocation 5.514 5.515 5.517	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 Radiolocation	17.3-17.7 FIXED-SATELLITE (Earth-to-space) US271 BROADCASTING-SATELLITE US402 NG163 US259	Satellite Communications (25)
5.514	5.514 5.515 5.517	5.514		

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18.1-18.4 FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B (Earth-to-space) 5.520 MOBILE 5.519 5.521				US401 17.8-18.3 FIXED-SATELLITE (space-to-Earth) G117 5.519 US334 18.3-18.6 FIXED-SATELLITE (space-to-Earth) G117	US401 NG144 17.8-18.3 FIXED 5.519 US334 NG144 18.3-18.6 FIXED-SATELLITE (space-to-Earth) NG164	TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)	Satellite Communications (25)
18.4-18.6 FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B MOBILE				US334 18.6-18.8 EARTH EXPLORATION- SATELLITE (passive) FIXED-SATELLITE (space-to- Earth) US255 G117 SPACE RESEARCH (passive)	US334 NG144 18.6-18.8 EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) US255 NG164 SPACE RESEARCH (passive)		
18.6-18.8 EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A 5.522C 18.8-19.3 FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.523A MOBILE	18.6-18.8 EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.522B MOBILE except aeronautical mobile SPACE RESEARCH (passive) 5.522A 18.8-19.3 FIXED FIXED-SATELLITE (space-to-Earth) 5.516B 5.523A MOBILE	18.6-18.8 EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A		US254 US334 18.8-20.2 FIXED-SATELLITE (space-to-Earth) G117	US254 US334 NG144 18.8-19.3 FIXED-SATELLITE (space-to-Earth) NG165 US334 NG144 19.3-19.7 FIXED FIXED-SATELLITE (space-to-Earth) NG166 US334 NG144 19.7-20.1 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.525 5.526 5.527 5.528 5.529 US334 20.1-20.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.525 5.526 5.527 5.528 US334	Satellite Communications (25) TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)	Satellite Communications (25)
19.3-19.7 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.523B 5.523C 5.523D 5.523E MOBILE							
19.7-20.1 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B Mobile-satellite (space-to-Earth) 5.524 20.1-20.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.524 5.525 5.526 5.527 5.528	19.7-20.1 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B MOBILE-SATELLITE (space-to-Earth) 5.524 5.525 5.526 5.527 5.528 5.529 5.524	19.7-20.1 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B Mobile-satellite (space-to-Earth) 5.524					

20.2-21.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth)	20.2-21.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth)	20.2-21.2 Standard frequency and time signal-satellite (space-to-Earth)	
5.524	G117		Fixed Microwave (101)
21.2-21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	21.2-21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263		
21.4-22 FIXED MOBILE BROADCASTING-SATELLITE 5.347A 5.530	21.4-22 FIXED MOBILE	21.4-22 FIXED MOBILE BROADCASTING-SATELLITE 5.347A 5.530	
22-22.21 FIXED MOBILE except aeronautical mobile	22-22.21 FIXED MOBILE except aeronautical mobile US342		
5.149 22-21-22.5 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)	22-21-22.5 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) US263 US342		
5.149 5.532 22.5-22.55 FIXED MOBILE	22.5-22.55 FIXED MOBILE US211		
22.55-23.55 FIXED INTER-SATELLITE MOBILE	22.55-23.55 FIXED INTER-SATELLITE US278 MOBILE US342		Satellite Communications (25) Fixed Microwave (101)
5.149 23.55-23.6 FIXED MOBILE	23.55-23.6 FIXED MOBILE		Fixed Microwave (101)

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23.6-24				23.6-24					
EARTH EXPLORATION-SATELLITE (passive)				EARTH EXPLORATION-SATELLITE (passive)					
RADIO ASTRONOMY				RADIO ASTRONOMY US74					
SPACE RESEARCH (passive)				SPACE RESEARCH (passive)					
5.340				US246					
24-24.05				24-24.05		24-24.05			
AMATEUR						AMATEUR			
AMATEUR-SATELLITE						AMATEUR-SATELLITE			
5.150				5.150 US211		5.150 US211			
24.05-24.25				24.05-24.25		24.05-24.25			
RADIOLOCATION				RADIOLOCATION G59		Amateur			
Amateur				Earth exploration-satellite (active)		Earth exploration-satellite (active)			
Earth exploration-satellite (active)				Radiolocation		Radiolocation			
5.150				5.150		5.150			
24.25-24.45				24.25-24.45		24.25-24.45			
FIXED						FIXED			
24.45-24.75				24.45-24.65					
FIXED				INTER-SATELLITE					
INTER-SATELLITE				RADIATIONAVIGATION					
24.45-24.65				24.45-24.65					
FIXED				FIXED					
INTER-SATELLITE				INTER-SATELLITE					
RADIATIONAVIGATION				RADIATIONAVIGATION					
5.533				5.533					
24.65-24.75				24.65-24.75					
INTER-SATELLITE				FIXED					
RADIOLOCATION-SATELLITE				INTER-SATELLITE					
(Earth-to-space)				MOBILE					
24.75-25.25				24.75-25.25					
FIXED				FIXED					
FIXED-SATELLITE				FIXED-SATELLITE					
(Earth-to-space) 5.535				MOBILE					
25.25-25.5				25.25-25.5					
FIXED				FIXED					
INTER-SATELLITE 5.536				INTER-SATELLITE 5.536					
MOBILE				MOBILE					
Standard frequency and time signal-satellite (Earth-to-space)				Standard frequency and time signal-satellite (Earth-to-space)					

25.5-27 EARTH EXPLORATION-SATELLITE (space-to-Earth) 5.536B FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (space-to-Earth) 5.536C Standard frequency and time signal-satellite (Earth-to-space)	25.5-27 EARTH EXPLORATION- SATELLITE (space-to-Earth) FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (space-to-Earth) Standard frequency and time signal-satellite (Earth-to-space) 5.536A US258	25.5-27 Inter-satellite 5.536 Standard frequency and time signal-satellite (Earth-to-space)	
5.536A 27-27.5 FIXED INTER-SATELLITE 5.536 MOBILE	27-27.5 FIXED INTER-SATELLITE 5.536 MOBILE	5.536A US258 27-27.5 Inter-satellite 5.536	
27.5-28.5 FIXED 5.537A FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.539 MOBILE Earth exploration-satellite (Earth-to-space) 5.541 5.540 29.1-29.5 FIXED FIXED-SATELLITE (Earth-to-space) 5.516B 5.523C 5.523E 5.535A 5.539 5.541A MOBILE Earth exploration-satellite (Earth-to-space) 5.541 5.540	27.5-30 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	27.5-29.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	Satellite Communications (25) Fixed Microwave (101)
29.5-29.9 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.539 Earth exploration-satellite (Earth-to-space) 5.541 Mobile-satellite (Earth-to-space) 5.525 5.526 5.527 5.529 5.540 5.542 29.9-30 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.539 MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543 5.525 5.526 5.527 5.538 5.540 5.542	29.5-29.9 FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.539 Earth exploration-satellite (Earth-to-space) 5.541 Mobile-satellite (Earth-to-space) 5.525 5.526 5.527 5.529 5.540 5.542 29.9-30 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) 5.541 5.543 5.525 5.526 5.527 5.538 5.540 5.542	29.5-29.9 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 5.525 5.526 5.527 5.529 29.9-30 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 5.525 5.526 5.527 5.543	Satellite Communications (25)

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FIXED-SATELLITE (Earth-to-space)					FIXED-SATELLITE (Earth-to-space)		FIXED-SATELLITE (Earth-to-space)		Standard frequency and time signal-satellite (space-to-Earth)	
MOBILE-SATELLITE (Earth-to-space)					MOBILE-SATELLITE (Earth-to-space)		MOBILE-SATELLITE (Earth-to-space)			
Standard frequency and time signal-satellite (space-to-Earth)					Standard frequency and time signal-satellite (space-to-Earth)		Standard frequency and time signal-satellite (space-to-Earth)			
5.542					G117		G117		Fixed Microwave (101)	
31-31.3					31-31.3		31-31.3			
FIXED 5.543A MOBILE					Standard frequency and time signal-satellite (space-to-Earth)		FIXED MOBILE			
Standard frequency and time signal-satellite (space-to-Earth)					Standard frequency and time signal-satellite (space-to-Earth)		Standard frequency and time signal-satellite (space-to-Earth)		Fixed Microwave (101)	
Space research 5.544 5.545					Space research 5.544 5.545		Space research 5.544 5.545			
5.149					US211 US342		US211 US342			
31.3-31.5					31.3-31.8		31.3-31.8		EARTH EXPLORATION-SATELLITE (passive)	
EARTH EXPLORATION-SATELLITE (passive)					EARTH EXPLORATION-SATELLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
RADIO ASTRONOMY					RADIO ASTRONOMY		RADIO ASTRONOMY			
SPACE RESEARCH (passive)					SPACE RESEARCH (passive)		SPACE RESEARCH (passive)		EARTH EXPLORATION-SATELLITE (passive)	
5.340					US211 US342		US211 US342			
31.5-31.8					31.5-31.8		31.5-31.8			
EARTH EXPLORATION-SATELLITE (passive)					EARTH EXPLORATION-SATELLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)	
RADIO ASTRONOMY					RADIO ASTRONOMY		RADIO ASTRONOMY			
SPACE RESEARCH (passive)					SPACE RESEARCH (passive)		SPACE RESEARCH (passive)			
Fixed					Fixed		Fixed		EARTH EXPLORATION-SATELLITE (passive)	
Mobile except aeronautical mobile					Mobile except aeronautical mobile		Mobile except aeronautical mobile			
5.149 5.546					5.340		5.149			
31.8-32					31.8-32		31.8-32		SPACE RESEARCH (deep space)	
FIXED 5.547A					RADIO NAVIGATION US69		SPACE RESEARCH (deep space)			
RADIO NAVIGATION					SPACE RESEARCH (deep space)		(space-to-Earth) US262			
SPACE RESEARCH (deep space) (space-to-Earth)					SPACE RESEARCH (deep space) (space-to-Earth)		SPACE RESEARCH (deep space) (space-to-Earth)		SPACE RESEARCH (deep space)	
5.547 5.547B 5.548					5.547 5.547B 5.548		5.547 5.547B 5.548			
32-32.3					32-32.3		32-32.3			
FIXED 5.547A					RADIO NAVIGATION		RADIO NAVIGATION		SPACE RESEARCH (deep space)	
RADIO NAVIGATION					SPACE RESEARCH (deep space) (space-to-Earth)		SPACE RESEARCH (deep space) (space-to-Earth)			
SPACE RESEARCH (deep space) (space-to-Earth)					SPACE RESEARCH (deep space) (space-to-Earth)		SPACE RESEARCH (deep space) (space-to-Earth)			
5.547 5.547C 5.548					5.547 5.547C 5.548		5.547 5.547C 5.548		SPACE RESEARCH (deep space)	
32.3-33					32.3-33		32.3-33			
FIXED 5.547A					INTER-SATELLITE US278		INTER-SATELLITE US278			
INTER-SATELLITE					RADIO NAVIGATION US69		RADIO NAVIGATION US69		Aviation (87)	
RADIO NAVIGATION					RADIO NAVIGATION US69		RADIO NAVIGATION US69			
5.547 5.547D 5.548					5.547 5.547D 5.548		5.547 5.547D 5.548			
33-33.4					33-33.4		33-33.4		Aviation (87)	
FIXED 5.547A					RADIO NAVIGATION US69		RADIO NAVIGATION US69			
RADIO NAVIGATION					RADIO NAVIGATION US69		RADIO NAVIGATION US69			
5.547 5.547E					US360 G117		US360 G117			

33.4-34.2 RADIOLOCATION 5.549	33.4-34.2 RADIOLOCATION US360 G117	33.4-34.2 Radiolocation US360	Private Land Mobile (90)
34.2-34.7 RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) 5.549	34.2-34.7 RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) US262 US360 G34 G117	34.2-34.7 Radiolocation Space research (deep space) (Earth-to-space) US262 US360	
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35.2-35.5 METEOROLOGICAL AIDS RADIOLOCATION 5.549			
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37.5-38 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (space-to-Earth) Earth exploration-satellite (space-to-Earth) 5.547		37.5-38.6 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE	Satellite Communications (25)
38-39.5 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth exploration-satellite (space-to-Earth) 5.547	38-38.6 FIXED MOBILE 38.6-39.5	38.6-39.5 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE NG175	Satellite Communications (25) Fixed Microwave (101)

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					FIXED	FIXED-SATELLITE (space-to-Earth)	FIXED	FIXED
					FIXED-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
					MOBILE	US382	MOBILE	MOBILE NG175
					MOBILE-SATELLITE (space-to-Earth)			
					Earth exploration-satellite (space-to-Earth)			
					5.547	G117	US382	US382
					40-40.5	40-40.5	40-40.5	40-40.5
					EARTH EXPLORATION-SATELLITE (Earth-to-space)	EARTH EXPLORATION-SATELLITE (Earth-to-space)	FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
					FIXED	SATELLITE (Earth-to-space)	MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)
					FIXED-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)
					MOBILE	SPACE RESEARCH (Earth-to-space)	SPACE RESEARCH (Earth-to-space)	SPACE RESEARCH (Earth-to-space)
					MOBILE-SATELLITE (space-to-Earth)	Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)
					SPACE RESEARCH (Earth-to-space)			
					Earth exploration-satellite (space-to-Earth)			
					G117	G117		
					40.5-41	40.5-41	40.5-41	40.5-41
					FIXED	FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
					FIXED-SATELLITE (space-to-Earth)	MOBILE-satellite (space-to-Earth)	BROADCASTING	BROADCASTING
					BROADCASTING		Fixed	Fixed
					BROADCASTING-SATELLITE	BROADCASTING-SATELLITE	MOBILE	MOBILE
					Mobile	Mobile	Mobile-satellite (space-to-Earth)	Mobile-satellite (space-to-Earth)
					5.547	5.547	US211	US211
					41-42.5	41-42.5	41-42	41-42
					FIXED		FIXED	FIXED
					FIXED-SATELLITE (space-to-Earth)		FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
					BROADCASTING		MOBILE	MOBILE
					BROADCASTING-SATELLITE		BROADCASTING	BROADCASTING
					Mobile		BROADCASTING-SATELLITE	BROADCASTING-SATELLITE
							US211	US211
					5.547	5.547	42-42.5	42-42.5
					41-42.5		FIXED	FIXED
					FIXED		MOBILE	MOBILE
					FIXED-SATELLITE (space-to-Earth)		BROADCASTING	BROADCASTING
					BROADCASTING		BROADCASTING-SATELLITE	BROADCASTING-SATELLITE
					BROADCASTING-SATELLITE			
					Mobile			
							US211	US211
					5.547	5.547	42.5-43.5	42.5-43.5
					5.551F	5.551H	5.551I	5.551I
					42.5-43.5			
					FIXED			
					FIXED-SATELLITE (Earth-to-space)			
					MOBILE except aeronautical mobile			
					RADIO ASTRONOMY			
					5.149	5.547	US342	US342

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FIXED					FIXED		FIXED			
FIXED-SATELLITE (Earth-to-space)					FIXED-SATELLITE (Earth-to-space)		FIXED-SATELLITE (Earth-to-space)			
MOBILE					MOBILE		MOBILE			
Mobile-satellite (Earth-to-space)					MOBILE-SATELLITE (Earth-to-space)		MOBILE-SATELLITE (Earth-to-space)			
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MOBILE 5.558					INTER-SATELLITE G128		MOBILE 5.558			
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5.547 5.557					US263		US263			

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158.5-164 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)			158.5-164 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) US211					
164-167 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			164-167 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246					
167-174.5 FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 5.149 5.562D			167-174.5 FIXED FIXED-SATELLITE (space-to-Earth) INTER-SATELLITE MOBILE 5.558 US211 US342					
174.5-174.8 FIXED INTER-SATELLITE MOBILE 5.558			174.5-174.8 FIXED INTER-SATELLITE MOBILE 5.558					
174.8-182 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)			174.8-182 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)					
182-185 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340			182-185 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246					
185-190 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)			185-190 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.562H SPACE RESEARCH (passive)					
190-191.8 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340			190-191.8 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) US246					

191.8-200 FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.341 5.554	191.8-200 FIXED INTER-SATELLITE MOBILE 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.341 5.554 US211 US342	
200-209 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341 5.563A	200-209 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 5.341 5.563A US246	
209-217 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.149 5.341	209-217 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.341 US342	
217-226 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.149 5.341	217-226 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY SPACE RESEARCH (passive) 5.562B 5.341 US342	
226-231.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	226-231.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) US246	
231.5-232 FIXED MOBILE Radiolocation 232-235 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation 235-238 EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (passive) 5.563A 5.563B	231.5-232 FIXED MOBILE Radiolocation 232-235 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Radiolocation 235-238 EARTH EXPLORATION-SATELLITE (passive) FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (passive) 5.563A 5.563B	

Table of Frequency Allocations							238-1000 GHz (EHF)		United States Table		FCC Rule Part(s)		
Region 1 Table		Region 2 Table		Region 3 Table		Federal Table		Non-Federal Table					
238-240 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE						238-240 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE							
240-241 FIXED MOBILE RADIOLOCATION						240-241 FIXED MOBILE RADIOLOCATION							
241-248 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite						241-248 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite		241-248 RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite				ISM Equipment (18) Amateur (97)	
5.138 5.149 248-250 AMATEUR AMATEUR-SATELLITE Radio astronomy						5.138 US342 248-250 Radio astronomy		5.138 US342 248-250 AMATEUR AMATEUR-SATELLITE Radio astronomy				Amateur (97)	
5.149						US342		US342					
250-252 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)						250-252 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)							
5.340 5.563A 252-265 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE						5.563A US246 252-265 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY RADIONAVIGATION RADIONAVIGATION-SATELLITE							
5.149 5.554 265-275 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY						5.554 US211 US342 265-275 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY							
5.149 5.563A 275-1000 (Not allocated)						5.563A US342 275-1000 (Not allocated)						Amateur (97)	
5.565						5.565							

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Federation, Georgia, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, the Czech Rep., Tajikistan, Turkmenistan and Ukraine, the band 21850–21870 kHz is also allocated to the aeronautical mobile (R) service on a primary basis.

* * * * *

5.237 *Additional allocation:* in Congo (Rep. of the), Eritrea, Ethiopia, Gambia, Guinea, the Libyan Arab Jamahiriya, Malawi, Mali, Sierra Leone, Somalia, Chad and Zimbabwe, the band 174–223 MHz is also allocated to the fixed and mobile services on a secondary basis.

* * * * *

5.339 The bands 1370–1400 MHz, 2640–2655 MHz, 4950–4990 MHz and 15.20–15.35 GHz are also allocated to the space research (passive) and Earth exploration-satellite (passive) services on a secondary basis.

* * * * *

5.438 Use of the band 4200–4400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the Earth exploration-satellite and space research services may be authorized in this band on a secondary basis (no protection is provided by the radio altimeters).

* * * * *

5.462A In Regions 1 and 3 (except for Japan), in the band 8025–8400 MHz, the Earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following provisional values for angles of arrival (θ), without the consent of the affected administration:

- 174 dB(W/m²) in a 4 kHz band for $0^\circ \leq \theta < 5^\circ$
- $174 + 0.5(-5)$ dB(W/m²) in a 4 kHz band for $5^\circ \leq \theta < 25^\circ$
- 164 dB(W/m²) in a 4 kHz band for $25^\circ \leq \theta \leq 90^\circ$

These values are subject to study under Resolution 124 (WRC-97).⁶

* * * * *

5.469A In the band 8550–8650 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service.

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5.476A In the band 9500–9800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radionavigation and radiolocation services.

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United States (US) Footnotes

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US1 The bands 2501–2502 kHz, 5003–5005 kHz, 10003–10005 kHz, 15005–15010 kHz, 19990–19995 kHz, 20005–20010 kHz, and 25005–25010 kHz are also allocated to

the space research service on a secondary basis for Federal use. In the event of interference to the reception of the standard frequency and time broadcasts, these space research transmissions are subject to immediate temporary or permanent shutdown.

US7 In the band 420–450 MHz and within the following areas, the peak envelope power output of a transmitter employed in the amateur service shall not exceed 50 watts, unless expressly authorized by the FCC after mutual agreement, on a case-by-case basis, between the District Director of the applicable field office and the military area frequency coordinator at the applicable military base. For areas (e) through (g), the appropriate military coordinator is located at Peterson AFB, CO.

(a) Arizona, Florida, and New Mexico.

(b) Those portions of California and Nevada that are south of latitude $37^\circ 10' N$.

(c) That portion of Texas that is west of longitude $104^\circ W$.

(d) Within 322 km (200 miles) of Eglin AFB, FL ($30^\circ 30' N$, $86^\circ 30' W$); Patrick AFB, FL ($28^\circ 21' N$, $80^\circ 43' W$); and the Pacific Missile Test Center, Point Mugu, CA ($34^\circ 09' N$, $119^\circ 11' W$).

(e) Within 240 km (150 miles) of Beale AFB, CA ($39^\circ 08' N$, $121^\circ 26' W$).

(f) Within 200 km (124 miles) of Goodfellow AFB, TX ($31^\circ 25' N$, $100^\circ 24' W$) and Robins AFB, GA ($32^\circ 38' N$, $83^\circ 35' W$).

(g) Within 160 km (100 miles) of Clear, AK ($64^\circ 17' N$, $149^\circ 10' W$); Concrete, ND ($48^\circ 43' N$, $97^\circ 54' W$); and Otis AFB, MA ($41^\circ 45' N$, $70^\circ 32' W$).

* * * * *

US11 On the condition that harmful interference is not caused to present or future Federal stations in the band 162–174 MHz, the frequencies 166.25 MHz and 170.15 MHz may be authorized to non-Federal stations, as follows:

(a) Eligibles in the Public Safety Radio Pool may be authorized to operate in the fixed and land mobile services for locations within 150 miles (241.4 kilometers) of New York City; and

(b) Remote pickup broadcast stations may be authorized to operate in the land mobile service for locations within the conterminous United States, excluding locations within 150 miles of New York City and the Tennessee Valley Authority Area (TVA Area). The TVA Area is bounded on the west by the Mississippi River, on the north by the parallel of latitude $37^\circ 30' N$, and on the east and south by that arc of the circle with center at Springfield, IL, and radius equal to the airline distance between Springfield, IL, and Montgomery, AL, subtended between the foregoing west and north boundaries.

* * * * *

US81 The band 38–38.25 MHz is used by both Federal and non-Federal radio astronomy observatories. No new fixed or mobile assignments are to be made and Federal stations in the band 38–38.25 MHz will be moved to other bands on a case-by-case basis, as required, to protect radio astronomy observations from harmful interference. As an exception, however, low powered military transportable and mobile stations used for tactical and training

purposes will continue to use the band. To the extent practicable, the latter operations will be adjusted to relieve such interference as may be caused to radio astronomy observations. In the event of harmful interference from such local operations, radio astronomy observatories may contact local military commands directly, with a view to effecting relief. A list of military commands, areas of coordination, and points of contact for purposes of relieving interference may be obtained upon request from the Office of Engineering and Technology, FCC, Washington, DC 20554.

* * * * *

US90 In the band 2025–2110 MHz, the power flux-density at the Earth's surface produced by emissions from a space station in the space operation, Earth exploration-satellite, or space research service that is transmitting in the space-to-space direction, for all conditions and all methods of modulation, shall not exceed the following values in any 4 kHz sub-band:

- (a) – 154 dBW/m² for angles of arrival above the horizontal plane (δ) of 0° to 5° .
- (b) – $154 + 0.5(\delta - 5)$ dBW/m² for δ of 5° to 25° , and
- (c) – 144 dBW/m² for δ of 25° to 90° .

US93 In the conterminous United States, the frequency 108.0 MHz may be authorized for use by VOR test facilities, the operation of which is not essential for the safety of life or property, subject to the condition that no interference is caused to the reception of FM broadcasting stations operating in the band 88–108 MHz. In the event that such interference does occur, the licensee or other agency authorized to operate the facility shall discontinue operation on 108 MHz and shall not resume operation until the interference has been eliminated or the complaint otherwise satisfied. VOR test facilities operating on 108 MHz will not be protected against interference caused by FM broadcasting stations operating in the band 88–108 MHz nor shall the authorization of a VOR test facility on 108 MHz preclude the Commission from authorizing additional FM broadcasting stations.

US99 In the band 1668.4–1670 MHz, the meteorological aids service (radiosonde) will avoid operations to the maximum extent practicable. Whenever it is necessary to operate radiosondes in the band 1668.4–1670 MHz within the United States, notification of the operations shall be sent as far in advance as possible to the Electromagnetic Management Unit, Room 1030, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230.

* * * * *

US116 In the bands 890–902 MHz and 935–941 MHz, no new assignments are to be made to Federal radio stations after July 10, 1970, except on a case-by-case basis to experimental stations. Federal assignments existing prior to July 10, 1970, shall be on a secondary basis to stations in the non-Federal land mobile service and shall be subject to adjustment or removal from the bands 890–902 MHz, 928–932 MHz, and 935–941 MHz at the request of the FCC.

US117 In the band 406.1–410 MHz, the following provisions shall apply:

⁶ Note by the Secretariat: This Resolution was revised by WRC-2000.

(a) Stations in the fixed and mobile services are limited to a transmitter output power of 125 watts, and new authorizations for stations, other than mobile stations, are subject to prior coordination by the applicant in the following areas:

(1) Within Puerto Rico and the United States Virgin Islands, contact Spectrum Manager, Arecibo Observatory, HC3 Box 53995, Arecibo, PR 00612. Phone: 787-878-2612, Fax: 787-878-1861, E-mail: prcz@naic.edu.

(2) Within 350 km of the Very Large Array (34°04'44" N, 107°37'06" W), contact Spectrum Manager, National Radio Astronomy Observatory, P.O. Box O, 1003 Lopezville Road, Socorro, NM 87801. Phone: 505-835-7000, Fax: 505-835-7027, E-mail: nrao-rfi@nrao.edu.

(3) Within 10 km of the Table Mountain Observatory (40°07'50" N, 105°14'40" W) and for operations only within the sub-band 407–409 MHz, contact Radio Frequency Coordinator, Department of Commerce, 325 Broadway, Boulder, CO 80303. Phone: 303-497-6548, Fax: 303-497-3384.

(b) Non-Federal use is limited to the radio astronomy service and as provided by US13.

US201 In the band 460–470 MHz, space stations in the Earth exploration-satellite service may be authorized for space-to-Earth transmissions on a secondary basis with respect to the fixed and mobile services. When operating in the meteorological-satellite service, such stations shall be protected from harmful interference from other applications of the Earth exploration-satellite service. The power flux-density produced at the Earth's surface by any space station in this band shall not exceed –152 dBW/m²/4 kHz.

* * * * *

US216 The frequencies 150.775 MHz, 150.790 MHz, 152.0075 MHz, and 163.250 MHz, and the bands 462.94688–463.19688 MHz and 467.94688–468.19688 shall be authorized for the purpose of delivering or rendering medical services to individuals

(medical radiocommunication systems), and shall be authorized on a primary basis for Federal and non-Federal use. The frequency 152.0075 MHz may also be used for the purpose of conducting public safety radio communications that include, but are not limited to, the delivering or rendering of medical services to individuals.

(a) The use of the frequencies 150.775 MHz and 150.790 MHz is limited to mobile stations operating with a maximum e.r.p. of 100 watts. Airborne operations are prohibited.

(b) The use of the frequencies 152.0075 MHz and 163.250 MHz is limited to base stations that are authorized only for one-way paging communications to mobile receivers. Transmissions for the purpose of activating or controlling remote objects on these frequencies shall not be authorized.

(c) Non-Federal licensees in the Public Safety Radio Pool holding a valid authorization on May 27, 2005, to operate on the frequencies 150.7825 MHz and 150.7975 MHz may, upon proper renewal application, continue to be authorized for such operation; provided that harmful interference is not caused to present or future Federal stations in the band 150.05–150.8 MHz and, should harmful interference result, that the interfering non-Federal operation shall immediately terminate.

US217 In the band 420–450 MHz, pulse-ranging radiolocation systems may be authorized for use along the shoreline of the conterminous United States and Alaska. In the sub-band 420–435 MHz, spread spectrum radiolocation systems may be authorized within the conterminous United States and Alaska. All stations operating in accordance with this provision shall be secondary to stations operating in accordance with the Table of Frequency Allocations.

Authorizations shall be granted on a case-by-case basis; however, operations proposed to be located within the following geographic areas should not expect to be accommodated:

(a) Arizona, Florida, and New Mexico.

(b) Those portions of California and Nevada that are south of latitude 37°10' N.

(c) That portion of Texas that is west of longitude 104° W.

(d) Within 322 km (200 miles) of Eglin AFB, FL (30°30' N, 86°30' W); Patrick AFB, FL (28°21' N, 80°43' W); and the Pacific Missile Test Center, Point Mugu, CA (34°09' N, 119°11' W).

(e) Within 240 km (150 miles) of Beale AFB, CA (39°08' N, 121°26' W).

(f) Within 200 km (124 miles) of Goodfellow AFB, TX (31°25' N, 100°24' W) and Robins AFB, GA (32°38' N, 83°35' W).

(g) Within 160 km (100 miles) of Clear, AK (64°17' N, 149°10' W); Concrete, ND (48°43' N, 97°54' W); and Otis AFB, MA (41°45' N, 70°32' W).

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US222 In the band 2025–2035 MHz, geostationary operational environmental satellite (GOES) earth stations in the space research and Earth exploration-satellite services may be authorized on a coequal basis for Earth-to-space transmissions for tracking, telemetry, and telecommand at Honolulu, HI (21°21'12" N, 157°52'36" W); Seattle, WA (47°34'15" N, 122°33'10" W); and Wallops Island, VA (37°56'44" N, 75°27'42" W).

* * * * *

US229 Federal use of the fixed and land mobile services in the band 216–220 MHz and of the aeronautical mobile service in the sub-band 217–220 MHz shall be limited to telemetering and associated telecommand operations. NTIA shall not authorize new Federal assignments in the sub-band 216–217 MHz. The sub-band 216.88–217.08 MHz is allocated to the radiodetermination service on a primary basis for Federal use, limited to the Navy's Space Surveillance (SPASUR) radar system at the following nine sites.

(a) Three stations transmit at a very high power and other operations may be affected within the following areas:

Transmitter sites	Coordinates	Frequency	Interference radius
Gila River (Phoenix), AZ	33°06'32" N, 112°01'45" W	216.97 MHz	150 km (93.2 miles).
Lake Kickapoo (Archer City), TX ...	33°32'47" N, 98°45'46" W	216.983 MHz	250 km (155.3 miles).
Jordan Lake (Wetumpka), AL	32°39'33" N, 86°15'52" W	216.99 MHz	150 km.

(b) Reception of the sub-band 216.965–216.995 MHz shall be protected from harmful interference within 50 kilometers (31.1 miles) of the following sites:

Receive sites	Coordinates
Elephant Butte, NM ...	33°26'35" N, 106°59'50" W
Fort Stewart, GA	31°58'36" N, 081°30'34" W
Hawkinsville, GA	32°17'20" N, 083°32'10" W
Red River, AR	33°19'48" N, 093°33'01" W
San Diego, CA	32°34'42" N, 116°58'11" W
Silver Lake, MS	33°08'42" N, 091°01'16" W

US230 The bands 422.1875–425.4875 MHz and 427.1875–429.9875 MHz are allocated to the land mobile service on a primary basis for non-Federal use within 80.5 kilometers (50 miles) of Cleveland, OH (41°29'51.2" N, 81°41'49.5" W) and Detroit, MI (42°19'48.1" N, 83°02'56.7" W). The bands 423.8125–425.4875 MHz and 428.8125–429.9875 MHz are allocated to the land mobile service on a primary basis for non-Federal use within 80.5 kilometers of Buffalo, NY (42°52'52.2" N, 78°52'20.1" W).

US247 The band 10100–10150 kHz is allocated to the fixed service on a primary basis outside the United States and its insular areas. Transmissions from stations in the amateur service shall not cause harmful interference to this fixed service use and

stations in the amateur service shall make all necessary adjustments (including termination of transmission) if harmful interference is caused.

US251 The band 12.75–13.25 GHz is also allocated to the space research (deep space) (space-to-Earth) service for reception only at Goldstone, CA (35°20' N, 116°53' W).

US252 The band 2110–2120 MHz is also allocated to the space research service (deep space) (Earth-to-space) on a primary basis at Goldstone, CA (35°20' N, 116°53' W).

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US259 In the band 17.3–17.7 GHz, Federal stations in the radiolocation service shall operate with an e.i.r.p. of less than 51 dBW.

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US262 The band 7145–7190 MHz is also allocated to the space research service (deep space) (Earth-to-space) on a secondary basis for non-Federal use. Federal and non-Federal use of the bands 7145–7190 MHz and 34.2–34.7 GHz by the space research service (deep space) (Earth-to-space) and of the band 31.8–32.3 GHz by the space research service (deep space) (space-to-Earth) is limited to Goldstone, CA (35°20' N, 116°53' W).

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US265 In the band 10.6–10.68 GHz, the fixed service shall be limited to an e.i.r.p. of 40 dBW and the power delivered to the antenna shall not exceed –3 dBW per 250 kHz.

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US267 In the band 902–928 MHz, amateur stations shall transmit only in the sub-bands 902–902.4, 902.6–904.3, 904.7–925.3, 925.7–927.3, and 927.7–928 MHz within the States of Colorado and Wyoming, bounded by the area of latitudes 39° N and 42° N and longitudes 103° W and 108° W.

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US273 In the bands 74.6–74.8 MHz and 75.2–75.4 MHz, stations in the fixed and mobile services are limited to a maximum power of 1 watt from the transmitter into the antenna transmission line.

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US285 Under exceptional circumstances, the carrier frequencies 2635 kHz, 2638 kHz, and 2738 kHz may be authorized to coast stations.

US290 In the band 1900–2000 kHz, amateur stations may continue to operate on a secondary basis to the radiolocation service, pending a decision as to their disposition through a future rule making proceeding in conjunction with the implementation of the standard broadcasting service in the band 1625–1705 kHz.

US294 In the spectrum below 490 kHz, electric utilities operate Power Line Carrier (PLC) systems on power transmission lines for communications important to the

reliability and security of electric service to the public. These PLC systems operate under the provisions of 47 CFR part 15 or Chapter 7 of the *NTIA Manual*, on an unprotected and noninterference basis with respect to authorized radio users. Notification of intent to place new or revised radio frequency assignments or PLC frequency uses in the bands below 490 kHz is to be made in accordance with the Rules and Regulations of the FCC and NTIA, and users are urged to minimize potential interference to the degree practicable. This footnote does not provide any allocation status to PLC radio frequency uses.

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US299 In Alaska, the band 1615–1705 kHz is also allocated to the maritime mobile and Alaska fixed services on a secondary basis to Region 2 broadcast operations.

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US301 Except as provided in NG30, broadcast auxiliary stations licensed as of November 21, 1984, to operate in the band 942–944 MHz may continue to operate on a co-equal primary basis to other stations and services operating in the band in accordance with the Table of Frequency Allocations.

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US307 The band 5150–5216 MHz is also allocated to the fixed-satellite service (space-to-Earth) for feeder links in conjunction with the radiodetermination-satellite service operating in the bands 1610–1626.5 MHz and 2483.5–2500 MHz. The total power flux-density at the Earth's surface shall in no case exceed –159 dBW/m² per 4 kHz for all angles of arrival.

US308 In the bands 1549.5–1558.5 MHz and 1651–1660 MHz, those requirements of the aeronautical mobile-satellite (R) service that cannot be accommodated in the bands 1545–1549.5 MHz, 1558.5–1559 MHz, 1646.5–1651 MHz, and 1660–1660.5 MHz shall have priority access with real-time preemptive capability for communications in the mobile-satellite service. Systems not

interoperable with the aeronautical mobile-satellite (R) service shall operate on a secondary basis. Account shall be taken of the priority of safety-related communications in the mobile-satellite service.

US309 In the bands 1545–1559 MHz, transmissions from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorized when such transmissions are used to extend or supplement the satellite-to-aircraft links. In the band 1646.5–1660.5 MHz, transmissions from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.

US310 In the band 14.896–15.121 GHz, non-Federal space stations in the space research service may be authorized on a secondary basis to transmit to Tracking and Data Relay Satellites subject to such conditions as may be applied on a case-by-case basis. Such transmissions shall not cause harmful interference to authorized Federal stations. The power flux-density (pfd) produced by such non-Federal stations at the Earth's surface in any 1 MHz band for all conditions and methods of modulation shall not exceed:

–124 dB(W/m²) for 0° < θ ≤ 5°
–124 + (θ – 5)/2 dB(W/m²) for 5° < θ ≤ 25°
–114 dB(W/m²) for 25° < θ ≤ 90°

where θ is the angle of arrival of the radio-frequency wave (degrees above the horizontal). These limits relate to the pfd and angles of arrival which would be obtained under free-space propagation conditions.

US311 Radio astronomy observations may be made in the bands 1350–1400 MHz, 1718.8–1722.2 MHz, and 4950–4990 MHz on an unprotected basis at the following radio astronomy observatories:

Allen Telescope Array, Hat Creek, CA	Rectangle between latitudes 40°00' N and 42°00' N and between longitudes 120°15' W and 122°15' W.
NASA Goldstone Deep Space Communications Complex, Goldstone, CA	80 kilometers (50 mile) radius centered on 35°20' N, 116°53' W.
National Astronomy and Ionosphere Center, Arecibo, PR	Rectangle between latitudes 17°30' N and 19°00' N and between longitudes 65°10' W and 68°00' W.
National Radio Astronomy Observatory, Socorro, NM	Rectangle between latitudes 32°30' N and 35°30' N and between longitudes 106°00' W and 109°00' W.
National Radio Astronomy Observatory, Green Bank, WV	Rectangle between latitudes 37°30' N and 39°15' N and between longitudes 78°30' W and 80°30' W.
National Radio Astronomy Observatory, Very Long Baseline Array Stations.	80 kilometer radius centered on:

	North latitude	West longitude
Brewster, WA	48°08'	119°41'
Fort Davis, TX	30°38'	103°57'
Hancock, NH	42°56'	71°59'
Kitt Peak, AZ	31°57'	111°37'
Los Alamos, NM	35°47'	106°15'
Mauna Kea, HI	19°48'	155°27'
North Liberty, IA	41°46'	91°34'
Owens Valley, CA	37°14'	118°17'
Pie Town, NM	34°18'	108°07'
Saint Croix, VI	17°45'	64°35'

Owens Valley Radio Observatory, Big Pine, CA

Two contiguous rectangles, one between latitudes 36°00' N and 37°00' N and between longitudes 117°40' W and 118°30' W and the second between latitudes 37°00' N and 38°00' N and between longitudes 118°00' W and 118°50' W.

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US315 In the bands 1530–1544 MHz and 1626.5–1645.5 MHz, maritime mobile-satellite distress and safety communications, e.g., GMDSS, shall have priority access with real-time preemptive capability in the mobile-satellite service. Communications of mobile-satellite system stations not participating in the GMDSS shall operate on a secondary basis to distress and safety communications of stations operating in the GMDSS. Account shall be taken of the priority of safety-related communications in the mobile-satellite service.

US316 The band 2900–3000 MHz is also allocated to the meteorological aids service on a primary basis for Federal use. Operations in this service are limited to Next Generation Weather Radar (NEXRAD) systems where accommodation in the band 2700–2900 MHz is not technically practical and are subject to coordination with existing authorized stations.

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US323 In the band 148–149.9 MHz, no individual mobile earth station shall transmit on the same frequency being actively used by fixed and mobile stations and shall transmit no more than 1% of the time during any 15 minute period; except, individual mobile earth stations in this band that do not avoid frequencies actively being used by the fixed and mobile services shall not exceed a power density of –16 dBW/4 kHz and shall transmit no more than 0.25% of the time during any 15 minute period. Any single transmission from any individual mobile earth station operating in this band shall not exceed 450 ms in duration and consecutive transmissions from a single mobile earth station on the same frequency shall be separated by at least 15 seconds. Land earth stations in this band shall be subject to electromagnetic compatibility analysis and coordination with terrestrial fixed and mobile stations.

US324 In the band 400.15–401 MHz, Federal and non-Federal satellite systems shall be subject to electromagnetic compatibility analysis and coordination.

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US334 In the band 17.8–20.2 GHz, Federal space stations in both geostationary (GSO) and non-geostationary satellite orbits (NGSO) and associated earth stations in the fixed-satellite service (space-to-Earth) may be authorized on a primary basis. For a Federal geostationary satellite network to operate on a primary basis, the space station shall be located outside the arc, measured from east to west, 70° West longitude to 120° West longitude. Coordination between Federal fixed-satellite systems and non-Federal space and terrestrial systems operating in accordance with the United States Table of Frequency Allocations is required.

(a) In the sub-band 17.8–19.7 GHz, the power flux-density (pfd) at the surface of the Earth produced by emissions from a Federal GSO space station or from a Federal space

station in a NGSO constellation of 50 or fewer satellites, for all conditions and for all methods of modulation, shall not exceed the following values in any 1 MHz band:

(1) –115 dB(W/m²) for angles of arrival above the horizontal plane (δ) between 0° and 5°,

(2) –115 + 0.5(δ – 5) dB(W/m²) for δ between 5° and 25°, and

(3) –105 dB(W/m²) for δ between 25° and 90°.

(b) In the sub-band 17.8–19.3 GHz, the pfd at the surface of the Earth produced by emissions from a Federal space station in an NGSO constellation of 51 or more satellites, for all conditions and for all methods of modulation, shall not exceed the following values in any 1 MHz band:

(1) –115 – X dB(W/m²) for δ between 0° and 5°,

(2) –115 – X + ((10 + X)/20)(δ – 5) dB(W/m²) for δ between 5° and 25°, and

(3) –105 dB(W/m²) for δ between 25° and 90°; where X is defined as a function of the number of satellites, n, in an NGSO constellation as follows:

For n ≤ 288, X = (5/119) (n – 50) dB; and
For n > 288, X = (1/69) (n + 402) dB.

US335 In the band 220–222 MHz, Federal and non-Federal use of the fixed and land mobile services is restricted as follows:

(a) The sub-bands 220–220.55/221.0–221.55, 220.6–220.8/221.6–221.8, 220.85–220.9/221.85–221.9 and 220.925–221/221.925–222 MHz (Channels 1–110, 121–160, 171–180 and 186–200, respectively) are available for exclusive non-Federal use. These sub-bands are also available for temporary fixed geophysical telemetry operations on a secondary basis to the fixed and land mobile services.

(b) The sub-bands 220.55–220.6/221.55–221.6 MHz (Channels 111–120) are available for exclusive Federal use.

(c) The sub-bands 220.8–220.85/221.8–221.85 and 220.9–220.925/221.9–221.925 MHz (Channels 161–170 and 181–185, respectively) are available for shared Federal and non-Federal use.

US337 In the band 13.75–13.8 GHz, the FCC shall coordinate earth stations in the fixed-satellite service with NTIA on a case-by-case basis in order to minimize harmful interference to the Tracking and Data Relay Satellite System's forward space-to-space link (TDRSS forward link-to-LEO).

US338 In the band 2305–2310 MHz, space-to-Earth operations are prohibited. Additionally, in the band 2305–2320 MHz, the FCC shall coordinate all Wireless Communications Service (WCS) operations within 50 km of NASA's Deep Space facility in Goldstone, CA (35°20' N, 116°53' W) with NTIA in order to minimize harmful interference to deep space reception in the band 2290–2300 MHz.

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US342 In making assignments to stations of other services to which the bands: 13360–13410 kHz

25550–25670 kHz
37.5–38.25 MHz
322–328.6 MHz*
1330–1400 MHz*
1610.6–1613.8 MHz*
1660–1660.5 MHz*
1668.4–1670 MHz*
3260–3267 MHz*
3332–3339 MHz*
3345.8–3352.5 MHz*
4825–4835 MHz*
4950–4990 MHz
6650–6675.2 MHz*
14.47–14.5 GHz*
22.01–22.21 GHz*
22.21–22.5 GHz
22.81–22.86 GHz*
23.07–23.12 GHz*
31.2–31.3 GHz
36.43–36.5 GHz*
42.5–43.5 GHz
42.77–42.87 GHz*
43.07–43.17 GHz*
43.37–43.47 GHz*
48.94–49.04 GHz*
76–86 GHz
92–94 GHz
94.1–100 GHz
102–109.5 GHz
111.8–114.25 GHz
128.33–128.59 GHz*
129.23–129.49 GHz*
130–134 GHz
136–148.5 GHz
151.5–158.5 GHz
168.59–168.93 GHz*
171.11–171.45 GHz*
172.31–172.65 GHz*
173.52–173.85 GHz*
195.75–196.15 GHz*
209–226 GHz
241–250 GHz
252–275 GHz

are allocated (* indicates radio astronomy use for spectral line observations), all practicable steps shall be taken to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see ITU *Radio Regulations* at Nos. 4.5 and 4.6 and Article 29).

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US344 In the band 5091–5250 MHz, the FCC shall coordinate earth stations in the fixed-satellite service (Earth-to-space) with NTIA (see Recommendation ITU-R S.1342). In order to better protect the operation of the international standard system (microwave landing system) in the band 5000–5091 MHz, non-Federal tracking and telecommand operations should be conducted in the band 5150–5250 MHz.

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US346 Except as provided for below and by US222, Federal use of the band 2025–2110 MHz by the space operation service (Earth-to-space), Earth exploration-satellite service (Earth-to-space), and space research service

(Earth-to-space) shall not constrain the deployment of the Television Broadcast Auxiliary Service, the Cable Television Relay Service, or the Local Television Transmission Service. To facilitate compatible operations between non-Federal terrestrial receiving

stations at fixed sites and Federal earth station transmitters, coordination is required. To facilitate compatible operations between non-Federal terrestrial transmitting stations and Federal spacecraft receivers, the terrestrial transmitters in the band 2025–2110

MHz shall not be high-density systems (see Recommendations ITU–R SA.1154 and ITU–R F.1247). Military satellite control stations at the following sites shall operate on a co-equal, primary basis with non-Federal operations:

Facility	Coordinates
Naval Satellite Control Network, Prospect Harbor, ME	44°24'16" N, 068°00'46" W
New Hampshire Tracking Station, New Boston AFS, NH	42°56'52" N, 071°37'36" W
Eastern Vehicle Check-out Facility & GPS Ground Antenna & Monitoring Station, Cape Canaveral, FL	28°29'09" N, 080°34'33" W
Buckley AFB, CO	39°42'55" N, 104°46'36" W
Colorado Tracking Station, Schriever AFB, CO	38°48'21" N, 104°31'43" W
Kirtland AFB, NM	34°59'46" N, 106°30'28" W
Camp Parks Communications Annex, Pleasanton, CA	37°43'51" N, 121°52'50" W
Naval Satellite Control Network, Laguna Peak, CA	34°06'31" N, 119°03'53" W
Vandenberg Tracking Station, Vandenberg AFB, CA	34°49'21" N, 120°30'07" W
Hawaii Tracking Station, Kaena Pt, Oahu, HI	21°33'44" N, 158°14'31" W
Guam Tracking Stations, Anderson AFB, and Naval CTS, Guam	13°36'54" N, 144°51'18" E

* * * * *

US348 The band 3650–3700 MHz is also allocated to the Federal radiolocation service on a primary basis at the following sites: St. Inigoes, MD (38°10' N, 76°23' W); Pascagoula, MS (30°22' N, 88°29' W); and Pensacola, FL (30°21'28" N, 87°16'26" W). The FCC shall coordinate all non-Federal operations within

80 km of these sites with NTIA on a case-by-case basis.

* * * * *

US351 In the band 1390–1400 MHz, Federal operations (except for medical telemetry and telecommand operations in the sub-band 1395–1400 MHz) are on a non-

interference basis to non-Federal operations and shall not constrain implementation of non-Federal operations. However, Federal operations authorized as of March 22, 1995 at 17 sites identified below will be continued on a fully protected basis until January 1, 2009.

80 km radius of operation centered on:

State	Site	Coordinates
AK	Ft. Greely	63°47' N, 145°52' W
AL	Ft. Rucker	31°13' N, 085°49' W
AL	Redstone	34°35' N, 086°35' W
AZ	Ft. Huachuca	31°33' N, 110°18' W
AZ	Yuma	32°29' N, 114°20' W
CA	China Lake	35°41' N, 117°41' W
CA	Edwards AFB	34°54' N, 117°53' W
CA	Pacific Missile Range	34°07' N, 119°30' W
FL	Eglin AFB	30°28' N, 086°31' W
MD	Aberdeen PG	39°29' N, 076°08' W
MD	Patuxent River	38°17' N, 076°25' W
NC	Cherry Point	34°57' N, 076°56' W
NM	Holloman AFB	33°29' N, 106°50' W
NM	WSM Range	32°10' N, 106°21' W
OH	Wright-Patterson AFB	39°50' N, 084°03' W
UT	Dugway PG	40°11' N, 112°53' W
UT	Utah Test Range	40°57' N, 113°05' W

US353 In the bands 56.24–56.29 GHz, 58.422–58.472 GHz, 59.139–59.189 GHz, 59.566–59.616 GHz, 60.281–60.331 GHz, 60.41–60.46 GHz, and 62.461–62.511 GHz, space-based radio astronomy observations may be made on an unprotected basis.

US354 In the band 58.422–58.472 GHz, airborne stations and space stations in the space-to-Earth direction shall not be authorized.

US355 In the band 10.7–11.7 GHz, non-geostationary satellite orbit licensees in the fixed-satellite service (space-to-Earth), prior

to commencing operations, shall coordinate with the following radio astronomy observatories to achieve a mutually acceptable agreement regarding the protection of the radio telescope facilities operating in the band 10.6–10.7 GHz:

Observatory	North latitude	West longitude	Elevation (in meters)
Arecibo Observatory, PR	18°20'39"	66°45'10"	496
Green Bank Telescope (GBT), WV	38°25'59"	79°50'23"	825
Very Large Array (VLA), Socorro, NM	34°04'44"	107°37'06"	2126
Very Long Baseline Array (VLBA) Stations:			
Brewster, WA	48°07'52"	119°41'00"	255
Fort Davis, TX	30°38'06"	103°56'41"	1615
Hancock, NH	42°56'01"	71°59'12"	309
Kitt Peak, AZ	31°57'23"	111°36'45"	1916
Los Alamos, NM	35°46'30"	106°14'44"	1967
Mauna Kea, HI	19°48'05"	155°27'20"	3720

Observatory	North latitude	West longitude	Elevation (in meters)
North Liberty, IA	41°46'17"	91°34'27"	241
Owens Valley, CA	37°13'54"	118°16'37"	1207
Pie Town, NM	34°18'04"	108°07'09"	2371
St. Croix, VI	17°45'24"	64°35'01"	16

* * * * *

US359 In the band 15.43–15.63 GHz, use of the fixed-satellite service (Earth-to-space) is limited to non-Federal feeder links of non-geostationary systems in the mobile-satellite service. The FCC shall coordinate Earth stations in this band with NTIA (see Annex 3 of Recommendation ITU-R S.1340).

US360 The band 33–36 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for Federal use. Coordination between Federal fixed-satellite service systems and non-Federal systems operating in accordance with the United States Table of Frequency Allocations is required.

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US362 The band 1670–1675 MHz is allocated to the meteorological-satellite service (space-to-Earth) on a primary basis for Federal use. Earth station use of this allocation is limited to Wallops Island, VA (37°56'44" N, 75°27'37" W), Fairbanks, AK (64°58'22" N, 147°30'04" W), and Greenbelt, MD (39°00'02" N, 76°50'29" W). Applicants for non-Federal stations within 100 kilometers of the Wallops Island or Fairbanks coordinates and within 65 kilometers of the Greenbelt coordinates shall notify NOAA in accordance with the procedures specified in 47 CFR 1.924.

* * * * *

US366 In the bands 5900–5950 kHz, 7300–7350 kHz, 9400–9500 kHz, 11600–11650 kHz, 12050–12100 kHz, 13570–13600 kHz, 13800–13870 kHz, 15600–15800 kHz, 17480–17550 kHz, and 18900–19020 kHz, the following provisions shall apply to stations in the fixed and mobile except aeronautical mobile services:

(a) *All Stations.* Federal and non-Federal stations shall:

(1) Be limited to communicating only within the United States and its insular areas;

(2) Not cause harmful interference to the reception of, and must accept interference from, international broadcast stations;

(3) Be limited to the minimum power required to achieve reliable communications; and

(4) Take account of the seasonal use of frequencies by the broadcasting service published in accordance with Article 12 of the ITU *Radio Regulations*.

(b) *Existing and Future Federal Stations.*

(1) Frequencies in all of the above listed frequency bands may be used by existing and future Federal stations in the fixed service; and

(2) Frequencies in the bands 5900–5950 kHz, 7300–7350 kHz, 13570–13600 kHz, and 13800–13870 kHz may also be used by existing and future Federal stations in the mobile except aeronautical mobile service.

(c) *Grandfathered non-Federal Stations.* (1) Frequencies in the bands 5900–5950 kHz, 7300–7350 kHz, 9400–9500 kHz, 11600–11650 kHz, 12050–12100 kHz, 13800–13870 kHz, and 15600–15800 kHz may continue to be used by non-Federal stations in the fixed service that were licensed prior to March 25, 2007; and

(2) Frequencies in the bands 5900–5950 kHz and 7300–7350 kHz may continue to be used by non-Federal stations in the mobile except aeronautical mobile service that were licensed prior to March 25, 2007.

* * * * *

US368 (a) The use of the bands 1390–1392 MHz and 1430–1432 MHz by the fixed-satellite service is limited to feeder links for

the Non-Voice Non-Geostationary Mobile-Satellite Service and is contingent on:

(1) The completion of ITU-R studies on all identified compatibility issues as shown in Annex 1 of Resolution 745 (WRC–2003);

(2) Measurement of emissions from equipment that would be employed in operational systems and demonstrations to validate the studies as called for in Resolution 745 (WRC–2003); and

(3) Compliance with any technical and operational requirements that may be imposed at WRC–07 to protect other services in these bands and passive services in the band 1400–1427 MHz from unwanted emissions.

(b) The FCC shall coordinate individual assignments with NTIA (see, for example, Recommendations ITU-R RA.769–2 and ITU-R SA.1029–2) to ensure the protection of passive services in the band 1400–1427 MHz. As part of the coordination requirements, the feeder uplink and downlink systems shall be tested and certified to be in conformance with the technical and operational out-of-band requirements for the protection of passive services in the band 1400–1427 MHz. Certification and all supporting documentation shall be submitted to the FCC at least three months prior to launch.

US378 In the band 1710–1755 MHz, the following provisions apply:

(a) Federal fixed and tactical radio relay stations may operate indefinitely on a primary basis within 80 km of Cherry Point, NC (34°58' N, 076°56' W) and Yuma, AZ (32°32' N, 113°58' W).

(b) Federal fixed and tactical radio relay stations shall operate on a secondary basis to primary non-Federal operations at the 14 sites listed below:

State	Location	Coordinates
80 km radius of operation centered on:		
CA	China Lake	35°41' N, 117°41' W
CA	Pacific Missile Test Range/Point Mugu	34°07' N, 119°30' W
FL	Eglin AFB	30°29' N, 086°31' W
MD	Patuxent River	38°17' N, 076°25' W
NM	White Sands Missile Range	33°00' N, 106°30' W
NV	Nellis AFB	36°14' N, 115°02' W
UT	Hill AFB	41°07' N, 111°58' W
AL	Fort Rucker	31°13' N, 085°49' W
CA	Fort Irwin	35°16' N, 116°41' W
GA	Fort Benning	32°22' N, 084°56' W
GA	Fort Stewart	31°52' N, 081°37' W
KY	Fort Campbell	36°41' N, 087°28' W
NC	Fort Bragg	35°09' N, 079°01' W
WA	Fort Lewis	47°05' N, 122°36' W

(c) In the sub-band 1710–1720 MHz, precision guided munitions shall operate on a primary basis until inventory is exhausted

or until December 31, 2008, whichever is earlier.

(d) All other Federal stations in the fixed and mobile services shall operate on a primary basis until reaccommodated in

accordance with the Commercial Spectrum Enhancement Act.

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US381 The frequencies 5332 kHz, 5348 kHz, 5368 kHz, 5373 kHz, and 5405 kHz are allocated to the amateur service on a secondary basis. Amateur use of these frequencies shall be limited to 50 watts e.r.p. and to single sideband suppressed carrier

modulation (emission designator 2K8J3E), upper sideband voice transmissions only.

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US388 In the bands 81–86 GHz, 92–94 GHz, and 94.1–95 GHz and within the coordination distances indicated below, assignments to allocated services shall be coordinated with the following radio astronomy observatories. New observatories shall not receive protection from fixed stations that are licensed to operate in the

one hundred most populous urbanized areas as defined by the U.S. Census Bureau for the year 2000.

Note: Satisfactory completion of the coordination procedure utilizing the automated mechanism, see 47 CFR 101.1523, will be deemed to establish sufficient separation from radio astronomy observatories, regardless of whether the distances set forth above are met.

Telescope and site	150 kilometer (93 mile) radius centered on:	
	North latitude	West longitude
National Radio Astronomy Observatory (NRAO), Robert C. Byrd Telescope, Green Bank, WV	38°25'59"	79°50'23"
NRAO, Very Large Array, Socorro, NM	34°04'44"	107°37'06"
University of Arizona 12-m Telescope, Kitt Peak, AZ	31°57'12"	111°36'53"
Caltech Telescope, Owens Valley, CA	37°13'54"	118°17'36"
Five College Observatory, Amherst, MA	42°23'30"	72°20'42"
Haystack Observatory, Westford, MA	42°37'24"	71°29'18"
James Clerk Maxwell Telescope, Mauna Kea, HI	19°49'33"	155°28'47"
Combined Array for Research in Millimeter-wave Astronomy (CARMA), CA	37°16'43"	118°08'32"
NRAO, Very Long Baseline Array Stations	25 kilometer (15.5 mile) radius centered on:	
	North latitude	West longitude
Brewster, WA	48°07'52"	119°41'00"
Fort Davis, TX	30°38'06"	103°56'41"
Hancock, NH	42°56'01"	71°59'12"
Kitt Peak, AZ	31°57'23"	111°36'45"
Los Alamos, NM	35°46'30"	106°14'44"
Mauna Kea, HI	19°48'05"	155°27'20"
North Liberty, IA	41°46'17"	91°34'27"
Owens Valley, CA	37°13'54"	118°16'37"
Pie Town, NM	34°18'04"	108°07'09"
Saint Croix, VI	17°45'24"	64°35'01"

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US396 The band 7350–7400 kHz is allocated exclusively to the broadcasting service in accordance with the schedule specified below, except that, in Alaska, the sub-band 7368.5–7371.3 kHz is allocated to the fixed service on an exclusive basis for non-Federal use in accordance with 47 CFR 80.387.

(a) Until March 29, 2009, the band 7350–7400 kHz is allocated to the fixed service on a primary basis and to the mobile except aeronautical mobile service on a secondary basis for Federal and non-Federal use.

(b) After March 29, 2009, authority to operate in the band 7350–7400 kHz shall not be extended to new non-Federal stations in the fixed and mobile except aeronautical mobile services.

(c) After March 29, 2009, Federal and non-Federal stations in the fixed and mobile except aeronautical mobile services shall:

(1) Be limited to communications wholly within the United States and its insular areas;

(2) Not cause harmful interference to the broadcasting service;

(3) Be limited to the minimum power needed to achieve communications; and

(4) Take account of the seasonal use of frequencies by the broadcasting service published in accordance with Article 12 of the ITU *Radio Regulations*.

US397 In the band 432–438 MHz, the Earth exploration-satellite service (active) is allocated on a secondary basis for Federal use. Stations in the Earth exploration-satellite service (active) shall not be operated within line-of-sight of the United States except for the purpose of short duration pre-operational testing. Operations under this allocation shall not cause harmful interference to, nor claim protection from, any other services allocated in the band 432–438 MHz in the United States, including secondary services and the amateur-satellite service.

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US399 Except as indicated below, the bands 161.9625–161.9875 MHz (AIS 1 with its center frequency at 161.975 MHz) and 162.0125–162.0375 MHz (AIS 2 with its center frequency at 162.025 MHz) are allocated to the maritime mobile service on a primary basis for Federal and non-Federal use, and shall be used exclusively for Automatic Identification Systems. However, in VHF Public Coast Station Areas (VPCSAs) 1–9, site-based VHF Public Coast stations licensed prior to November 13, 2006 may continue to operate on a co-primary basis in the band 161.9625–161.9875 MHz until expiration of the license term for licenses in active status as of November 13, 2006, and in VPCSAs 10–42, the band 161.9625–161.9875 MHz is allocated to the maritime mobile service on a primary basis for

exclusive non-Federal use. See 47 CFR 80.371(c)(1)(ii) for the definitions of VPCSAs.

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US401 In the band 17.7–17.8 GHz, Federal earth stations in the fixed-satellite service (space-to-Earth) may be authorized in the Denver, CO and Washington, DC areas on a primary basis. Before commencement of operations, the FCC shall coordinate fixed service applications supporting Multichannel Video Programming Distributors (MVPD) with NTIA.

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Non-Federal Government (NG) Footnotes

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NG1 The band 535–1705 kHz is also allocated to the mobile service on a secondary basis for the distribution of public service information from Travelers Information Stations operating in accordance with the provisions of 47 CFR 90.242 on 10 kilohertz spaced channels from 540 kHz to 1700 kHz.

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NG28 In Puerto Rico and the United States Virgin Islands, the band 160.86–161.4 MHz is available for assignment to remote pickup broadcast stations on a shared basis with stations in the Industrial/Business Pool.

NG30 In Puerto Rico, the band 942–944 MHz is alternatively allocated to the fixed service (aural broadcast auxiliary stations).

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NG51 In Puerto Rico and the United States Virgin Islands, the use of band 150.8–151.49 MHz by the fixed and land mobile services is limited to stations in the Industrial/Business Pool.

NG53 In the band 13.15–13.25 GHz, the following provisions shall apply:

(a) The sub-band 13.15–13.2 GHz is reserved for television pickup (TVPU) and cable television relay service (CARS) pickup stations inside a 50 km radius of the 100 television markets delineated in 47 CFR 76.51; and outside these areas, TVPU stations, CARS stations and non-geostationary satellite orbit fixed-satellite service (NGSO FSS) gateway earth stations shall operate on a co-primary basis.

(b) The sub-band 13.2–13.2125 GHz is reserved for TVPU stations on a primary basis and for CARS pickup stations on a secondary basis inside a 50 km radius of the 100 television markets delineated in 47 CFR 76.51; and outside these areas, TVPU stations and NGSO FSS gateway earth stations shall

operate on a co-primary basis and CARS stations shall operate on a secondary basis.

(c) In the band 13.15–13.25 GHz, fixed television auxiliary stations licensed pursuant to applications accepted for filing before September 1, 1979, may continue operation, subject to periodic license renewals.

(d) In the sub-band 13.15–13.2125 GHz, NGSO FSS gateway uplink transmissions shall be limited to a maximum e.i.r.p. of 3.2 dBW towards 0° on the radio horizon.

Note: The above provisions shall not apply to geostationary satellite orbit (GSO) FSS operations in the band 12.75–13.25 GHz.

NG56 In the bands 72–73 and 75.4–76 MHz, the use of mobile radio remote control of models is on a secondary basis to all other fixed and mobile operations. Such operations are subject to the condition that interference will not be caused to common carrier domestic public stations, to remote control of industrial equipment operating in the band 72–76 MHz, or to the reception of television signals on channels 4 (66–72 MHz) or 5 (76–82 MHz). Television interference shall be considered to occur whenever reception of regularly used television signals is impaired

or destroyed, regardless of the strength of the television signal or the distance to the television station.

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NG66 The band 470–512 MHz (TV channels 14–20) is allocated to the broadcasting service on an exclusive basis throughout the United States and its insular areas, except as described below:

(a) In the urbanized areas listed in the table below, the indicated frequency bands are allocated to the land mobile service on an exclusive basis for assignment to eligibles in the Public Mobile Services, the Public Safety Radio Pool, and the Industrial/Business Radio Pool, except that:

(1) Licensees in the land mobile service that are regulated as Commercial Mobile Radio Service (CMRS) providers may also use their assigned spectrum to provide fixed service on a primary basis.

(2) The use of the band 482–488 MHz (TV channel 16) is limited to eligibles in the Public Safety Radio Pool in or near (i) the Los Angeles urbanized area; and (ii) New York City; Nassau, Suffolk, and Westchester Counties in New York State; and Bergen County, NJ.

Urbanized area	Bands (MHz)	TV channels
Boston, MA	470–476, 482–488	14, 16
Chicago, IL-Northwestern IN	470–476, 476–482	14, 15
Cleveland, OH	470–476, 476–482	14, 15
Dallas-Fort Worth, TX	482–488	16
Detroit, MI	476–482, 482–488	15, 16
Houston, TX	488–494	17
Los Angeles, CA	470–476, 482–488, 506–512	14, 16, 20
Miami, FL	470–476	14
New York, NY-Northeastern NJ	470–476, 476–482, 482–488	14, 15, 16
Philadelphia, PA-NJ	500–506, 506–512	19, 20
Pittsburgh, PA	470–476, 494–500	14, 18
San Francisco-Oakland, CA	482–488, 488–494	16, 17
Washington, DC-MD-VA	488–494, 494–500	17, 18

(b) In the Gulf of Mexico offshore from the Louisiana-Texas coast, the band 476–494 MHz (TV channels 15–17) is allocated to the fixed and mobile services on a primary basis for assignment to eligibles in the Public Mobile and Private Land Mobile Radio Services.

(c) In Hawaii, the band 488–494 MHz (TV channel 17) is allocated exclusively to the fixed service for use by common carrier control and repeater stations for point-to-point inter-island communications only.

(d) The use of these allocations is further subject to the conditions set forth in 47 CFR parts 22 and 90.

* * * * *

NG112 The frequencies 25.04, 25.08, 150.980, 154.585, 158.445, 159.480, 454.000 and 459.000 MHz may be authorized to stations in the Industrial/Business Pool for use primarily in oil spill containment and cleanup operations and secondarily in regular land mobile communication.

* * * * *

NG124 In the bands 30.85–34, 37–38, 39–40, 42–47.41, 150.995–156.25, 158.715–159.465, 453.0125–453.9875, 458.0125–

458.9875, 460.0125–465.6375, and 467.9375–467.9875 MHz, police licensees are authorized to operate low-power transmitters on a secondary basis in accordance with the provisions of 47 CFR 2.803 and 90.20(e)(5).

* * * * *

NG141 In Alaska, the frequencies 42.4 MHz and 44.1 MHz are authorized on a primary basis for meteor burst communications by fixed stations in the Rural Radio Service operating under the provisions of 47 CFR part 22. In Alaska, the frequencies 44.2 MHz and 45.9 MHz are authorized on a primary basis for meteor burst communications by fixed private radio stations operating under the provisions of 47 CFR part 90. The private radio station frequencies may be used by Common Carrier stations on a secondary, noninterference basis and the Common Carrier frequencies may be used by private radio stations for meteor burst communications on a secondary, noninterference basis. Users shall cooperate to the extent practical to minimize potential interference. Stations utilizing meteor burst communications shall not cause harmful interference to stations of other radio

services operating in accordance with the Table of Frequency Allocations.

* * * * *

NG143 In the band 11.7–12.2 GHz, protection from harmful interference shall be afforded to transmissions from space stations not in conformance with ITU Radio Regulation No. 5.488 only if the operations of such space stations impose no unacceptable constraints on operations or orbit locations of space stations in conformance with No. 5.488.

NG144 Stations authorized as of September 9, 1983 to use frequencies in the bands 17.7–18.3 GHz and 19.3–19.7 GHz may, upon proper application, continue operations. Fixed stations authorized in the band 18.3–19.3 GHz that remain coprimary under the provisions of 47 CFR 21.901(e), 74.502(c), 74.602(g), 78.18(a)(4), and 101.147(r) may continue operations consistent with the provisions of those sections.

* * * * *

NG147 In the band 2483.5–2500 MHz, non-Federal stations in the fixed and mobile services that are licensed under 47 CFR parts

74, 90, or 101, which were licensed as of July 25, 1985, and those whose initial applications were filed on or before July 25, 1985, may continue to operate on a primary basis with the mobile-satellite and radiodetermination-satellite services, and in the sub-band 2495–2500 MHz, these grandfathered stations may also continue to operate on a primary basis with stations in the fixed and mobile except aeronautical mobile services that are licensed under 47 CFR part 27.

* * * * *

NG149 The bands 54–72 MHz, 76–88 MHz, 174–216 MHz, 470–512 MHz, 512–608 MHz, and 614–698 MHz are also allocated to the fixed service to permit subscription television operations in accordance with 47 CFR part 73.

* * * * *

NG155 The bands 159.500–159.675 MHz and 161.375–161.550 MHz are allocated to the maritime service as described in 47 CFR part 80. Additionally, the frequencies 159.550, 159.575 and 159.600 MHz are available for low-power intership communications.

* * * * *

NG158 The bands 763–775 MHz and 793–805 MHz are available for assignment to the public safety services, as described in 47 CFR part 90.

NG159 Any full-power television licensee that holds a television broadcast license to operate between 698 and 806 megahertz (TV channels 52–69) shall be entitled to protection from harmful interference through February 17, 2009, and may not operate at that frequency after February 17, 2009. Auxiliary broadcast stations (*i.e.*, low-power TV stations, translator stations, booster stations, TV auxiliary (backup) facilities, and low-power auxiliary stations) may continue to operate indefinitely in the band 698–806 MHz on a secondary basis to all other stations operating in that band.

NG160 In the band 5850–5925 MHz, the use of the non-Federal mobile service is limited to Dedicated Short Range Communications operating in the Intelligent Transportation System radio service.

NG163 The use of the band 17.3–17.7 GHz by the broadcasting-satellite service is limited to geostationary satellites.

* * * * *

NG167 The use of the band 24.75–25.25 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

* * * * *

NG172 In the band 7025–7075 MHz, the fixed-satellite service (space-to-Earth) is allocated on a primary basis, but the use of this allocation shall be limited to two grandfathered satellite systems. Associated earth stations located within 300 meters of the following locations shall be grandfathered: (a) In the band 7025–7075 MHz, Brewster, WA (48°08'46.7" N., 119°42'8.0" W.); and (b) In the sub-band 7025–7055 MHz, Clifton, TX (31°47'58.5" N., 97°36'46.7" W.) and Finca Pascual, PR (17°58'41.8" N., 67°8'12.6" W.).

NG173 In the band 216–220 MHz, secondary telemetry operations are permitted

subject to the requirements of 47 CFR 90.259. After January 1, 2002, no new assignments shall be authorized in the sub-band 216–217 MHz.

NG175 In the band 38.6–40 GHz, television pickup stations that were authorized on or before April 16, 2003, may continue to operate on a secondary basis to stations operating in accordance with the Table of Frequency Allocations.

* * * * *

NG184 Land mobile stations in the bands 11.7–12.2 GHz and 14.2–14.4 GHz and fixed stations in the band 11.7–12.1 GHz that are licensed pursuant to 47 CFR part 101, subpart J as of March 1, 2005 may continue to operate on a secondary basis until their license expires. Existing licenses issued pursuant to 47 CFR part 101, subpart J will not be renewed in the bands 11.7–12.2 GHz and 14.2–14.4 GHz.

* * * * *

Federal Government (G) Footnotes

* * * * *

G2 In the bands 216–217 MHz, 220–225 MHz, 420–450 MHz (except as provided by US217 and G129), 890–902 MHz, 928–942 MHz, 1300–1390 MHz, 2310–2390 MHz, 2417–2450 MHz, 2700–2900 MHz, 3300–3500 MHz (except as provided by footnote US108), 5650–5925 MHz, and 9000–9200 MHz, the Federal radiolocation service is limited to the military services.

* * * * *

G6 Military tactical fixed and mobile operations may be conducted nationally on a secondary basis: (a) To the meteorological aids service in the band 403–406 MHz; and (b) To the radio astronomy service in the band 406.1–410 MHz. Such fixed and mobile operations are subject to local coordination to ensure that harmful interference will not be caused to the services to which the bands are allocated.

* * * * *

G127 Federal Travelers Information Stations (TIS) on 1610 kHz have coprimary status with AM Broadcast assignments. Federal TIS authorized as of August 4, 1994, preclude subsequent assignment for conflicting allotments.

* * * * *

G133 In the band 7190–7235 MHz, emissions to deep space are prohibited. Geostationary satellites in the space research service operating in the band 7190–7235 MHz shall not claim protection from existing and future stations in the fixed service and ITU Radio Regulation No. 5.43A does not apply.

PART 25—SATELLITE COMMUNICATION

■ 7. The authority citation for part 25 continues to read as follows:

Authority: 47 U.S.C. 701–744. Interprets or applies Sections 4, 301, 302, 303, 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

■ 8. Section 25.202 is amended by revising paragraph (a)(1) to read as follows:

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a)(1) *Frequency band.* The following frequencies are available for use by the fixed-satellite service. Precise frequencies and bandwidths of emission shall be assigned on a case-by-case basis. The Table follows:

Space-to-earth (GHz)	Earth-to-space (GHz)
3.65–3.7 ¹⁷	12 ¹⁹ 5.091–5.25
3.7–4.2 ¹	¹ 5.925–6.425
6.7–7.025 ¹²	¹ 12 ¹⁴ 12.75–13.25
10.7–10.95 ¹ 12	⁴ 12 ¹³ 13.75–14
10.95–11.2 ¹ 12 ¹²	⁵ 14–14.2
11.2–11.45 ¹ 12	14.2–14.5
11.45–11.7 ¹ 12 ¹²	12 ²⁰ 15.43–15.63
11.7–12.2 ³	⁹ 17.3–17.8
12.2–12.7 ¹³	¹⁸ 24.75–25.05
18.3–18.58 ¹ 10	¹ 18 ²⁵ 25.05–25.25
18.58–18.8 ⁶ 10 ¹¹	¹ 27.5–29.5
18.8–19.3 ⁷ 10	29.5–30
19.3–19.7 ⁸ 10	¹ 47.2–50.2
19.7–20.2 ¹⁰	
37.5–40 ¹⁵ 16	
40–42 ¹⁶	

¹ This band is shared coequally with terrestrial radiocommunication services.

² Use of this band by geostationary satellite orbit satellite systems in the fixed-satellite service is limited to international systems; *i.e.*, other than domestic systems.

³ Fixed-satellite transponders may be used additionally for transmissions in the broadcasting-satellite service.

⁴ This band is shared on an equal basis with the Government radiolocation service and grandfathered space stations in the Tracking and Data Relay Satellite System.

⁵ In this band, stations in the radionavigation service shall operate on a secondary basis to the fixed-satellite service.

⁶ The band 18.58–18.8 GHz is shared coequally with existing terrestrial radiocommunication systems until June 8, 2010.

⁷ The band 18.8–19.3 GHz is shared coequally with terrestrial radiocommunication services, until June 8, 2010. After this date, the sub-band 19.26–19.3 GHz is shared coequally with existing terrestrial radiocommunication systems.

⁸ The use of the band 19.3–19.7 GHz by the fixed-satellite service (space-to-Earth) is limited to feeder links for the mobile-satellite service.

⁹ The use of the band 17.3–17.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for broadcasting-satellite service, and the sub-band 17.7–17.8 GHz is shared coequally with terrestrial fixed services.

¹⁰ This band is shared coequally with the Federal Government fixed-satellite service.

¹¹ The band 18.6–18.8 GHz is shared coequally with the non-Federal Government and Federal Government Earth exploration-satellite (passive) and space research (passive) services.

¹² Use of this band by nongeostationary satellite orbit systems in the fixed-satellite service is limited to gateway earth station operations.

¹³ Use of this band by the fixed-satellite service is limited to nongeostationary satellite orbit systems.

¹⁴ Use of this band by NGSO FSS gateway earth station uplink operations is subject to the provisions of § 2.106 NG53.

¹⁵ Use of this band by the fixed-satellite service is limited to "gateway" earth station operations, provided the licensee under this Part obtains a license under Part 101 of this Chapter or an agreement from a Part 101 licensee for the area in which an earth station is to be located. Satellite earth station facilities in this band may not be ubiquitously deployed and may not be used to serve individual consumers.

¹⁶ The band 37.5–40.0 GHz is designated as being available for use by the fixed and mobile services and the band 40.0–42.0 GHz is designated as being available for use by the fixed-satellite service.

¹⁷ FSS earth stations in this band must operate on a secondary basis to terrestrial radiocommunication services, except that the band is shared coequally between certain grandfathered earth stations and the terrestrial radiocommunication services.

¹⁸ Use of the band 24.75–25.25 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for space stations in the broadcasting-satellite service, and the sub-band 25.05–25.25 GHz is shared coequally with terrestrial fixed services.

¹⁹ See 47 CFR 2.106, footnotes 5.444A and US344, for conditions that apply to this band.

²⁰ See 47 CFR 2.106, footnotes 5.511C and US359, for conditions that apply to this band.

* * * * *

■ 9. Section 25.208 is amended by revising paragraph (n) to read as follows:

§ 25.208 Power flux density limits.

* * * * *

(n) The power-flux density at the Earth's surface produced by emissions from a space station in the fixed-satellite service (space-to-Earth), for all conditions and for all methods of modulation, shall not exceed the limits given in Table N. These limits relate to the power flux-density which would be obtained under assumed free-space conditions.

TABLE N.—LIMITS OF POWER-FLUX DENSITY FROM SPACE STATIONS IN THE BAND 6700–7075 MHz

Frequency band	Limit in dB (W/m ²) for angle of arrival (δ) above the horizontal plane			Reference bandwidth
	0°–5°	5°–25°	25°–90°	
6700–6825 MHz	– 137	– 137 + 0.5(δ – 5)	– 127	1 MHz.
6825–7075 MHz	– 154	– 154 + 0.5(δ – 5)	– 144	4 kHz.
	and	and	and	
	– 134	– 134 + 0.5(δ – 5)	– 124	1 MHz.

* * * * *

PART 73—RADIO BROADCAST SERVICES

■ 10. The authority citation for part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336, and 339.

■ 11. Sections 73.702 is amended by revising paragraphs (f)(1), (g)(1), and (g)(2)(i) to read as follows:

§ 73.702 Assignment and use of frequencies.

* * * * *

(f) * * *

(1) *Worldwide allocations.* In the ITU *Radio Regulations*, the following bands are allocated to the broadcasting service on a primary and exclusive basis throughout the world: 5900–6200 kHz, 7300–7350 kHz, 9400–9900 kHz, 11600–12100 kHz, 13570–13870 kHz, 15100–15800 kHz, 17480–17900 kHz, 18900–19020 kHz, 21450–21850 kHz, and 25670–26100 kHz.

* * * * *

(g) * * *

(1) *Worldwide allocations.* Until March 29, 2009, the band 7350–7400 kHz is allocated to the broadcasting and fixed services on a co-primary basis throughout the world. After March 29, 2009, the band 7350–7400 kHz is allocated to the broadcasting service on an exclusive basis throughout the world, except in the countries listed in 47 CFR

2.106, footnote 5.143C where the band 7350–7400 kHz continues to be allocated to the broadcasting and fixed services on a co-primary basis.

(2) * * * (i) Until March 29, 2009, the band 7100–7200 kHz is allocated to the amateur and broadcasting services on a co-primary basis in Region 1 and Region 3; however, during this transition period, the use of the band 7100–7200 kHz by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3. Where practical, requests for frequency assignments in the band 7100–7200 kHz shall be satisfied within the band 7200–7350 kHz. After March 29, 2009, the band 7100–7200 kHz is no longer allocated to the broadcasting service.

* * * * *

PART 74—EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

■ 12. The authority citation for part 90 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 307, 336(f), 336(h) and 554.

■ 13. Section 74.502 is amended by revising paragraph (a) to read as follows:

§ 74.502 Frequency assignment.

(a) Except as provided in NG30, broadcast auxiliary stations licensed as of November 21, 1984, to operate in the

band 942–944 MHz¹ may continue to operate on a co-equal, primary basis to other stations and services operating in the band in accordance with the Table of Frequency Allocations. These stations will be protected from possible interference caused by new users of the band by the technical standards specified in § 101.105(c)(2).

¹ **Note:** In addition to this band, stations in Puerto Rico may continue to be authorized on 942.5, 943.0, 943.5, 944.0 MHz in the band 942–944 MHz on a primary basis to stations and services operating in accordance with the Table of Frequency Allocations.

* * * * *

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

■ 14. The authority citation for part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

■ 15. Section 90.103 is amended by removing the entry "15,700 to 17,700" MHz and adding in its place the entry "15,700 to 17,300" MHz in the Radiolocation Service Frequency Table in paragraph (b) to read as follows:

§ 90.103 Radiolocation Service.

* * * * *

(b) Frequencies available. * * *

RADIOLOCATION SERVICE FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitation
* * * * *	* * * * *	* * * * *
Megahertz		
15,700 to 17,300 .....	.....do .....	.....do
* * * * *	* * * * *	* * * * *

* * * * *

■ 16. Section 90.242 is amended by revising paragraph (a)(3) to read as follows:

§ 90.242 Travelers' information stations.

(a) * * *

(3) Travelers' Information Stations will be authorized on a primary basis on 530 kHz and on a secondary basis to stations authorized on a primary basis in the band 535–1705 kHz.

* * * * *

PART 97—AMATEUR RADIO SERVICE

■ 17. The authority citation for part 97 continues to read as follows:

Authority: 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–155, 301–609, unless otherwise noted.

■ 18. Section 97.301 is amended by revising the introductory text and the

tables in paragraphs (a), (d), and (e) to read as follows:

§ 97.301 Authorized frequency bands.

* * * * *

(a) For a station having a control operator who has been granted a Technician, Technician Plus, General, Advanced, or Amateur Extra Class operator license, who holds a CEPT radio amateur license, or who holds any class of IARP:

Wavelength band	ITU—Region 1	ITU—Region 2	ITU—Region 3	Sharing requirements see § 97.303 (Paragraph)
VHF	MHz	MHz	MHz	
6 m .....	.....	50–54	50–54	(a)
2 m	144–146	144–148	144–148	(a)
1.25 m .....	.....	219–220 .....	.....	(a), (e)
Do .....	.....	222–225 .....	.....	(a)
UHF	MHz	MHz	MHz	
70 cm	430–440	420–450	420–450	(a), (b), (f)
33 cm .....	.....	902–928 .....	.....	(a), (b), (g)
23 cm	1240–1300	1240–1300	1240–1300	(b), (h), (i)
13 cm	2300–2310	2300–2310	2300–2310	(a), (b), (j)
Do	2390–2450	2390–2450	2390–2450	(a), (b), (j)
SHF	GHz	GHz	GHz	
9 cm	3.4–3.475	3.3–3.5	3.3–3.5	(a), (b), (k), (l)
5 cm	5.650–5.850	5.650–5.925	5.650–5.850	(a), (b), (m)
3 cm	10.00–10.50	10.00–10.50	10.00–10.50	(a), (c), (i), (n)
1.2 cm	24.00–24.25	24.00–24.25	24.00–24.25	(a), (b), (i), (o)
EHF	GHz	GHz	GHz	
6 mm	47.0–47.2	47.0–47.2	47.0–47.2	(b), (c), (h), (k), (r) (p) (b), (c), (h), (k) (b), (c), (h), (k), (q) (k)
4 mm	76–81	76–81	76–81	
2.5 mm	122.25–123	122.25–123	122.25–123	
2 mm	134–141	134–141	134–141	
1 mm	241–250	241–250	241–250	
	above 275	above 275	above 275	

* * * * *

(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)
MF	kHz	kHz	kHz	
160 m	1810–1850	1800–2000	1800–2000	(a), (b), (c)
HF	MHz	MHz	MHz	
80 m	3.525–3.60	3.525–3.60	3.525–3.60	(a)
75 m .....	.....	3.80–4.00	3.80–3.90	(a)
40 m	7.025–7.125	7.025–7.125	7.025–7.125	(a)
Do .....	.....	7.175–7.300 .....	.....	(a)
30 m	10.10–10.15	10.10–10.15	10.10–10.15	(d)
20 m	14.025–14.150	14.025–14.150	14.025–14.150	
Do	14.225–14.350	14.225–14.350	14.225–14.350	
17 m	18.068–18.168	18.068–18.168	18.068–18.168	
15 m	21.025–21.200	21.025–21.200	21.025–21.200	
Do	21.275–21.45	21.275–21.45	21.275–21.45	
12 m	24.89–24.99	24.89–24.99	24.89–24.99	
10 m	28.0–29.7	28.0–29.7	28.0–29.7	

(e) For a station having a control operator who has been granted an operator license of Novice Class,

Technician Class, or Technician Plus Class:

Wavelength band	ITU—Region 1	ITU—Region 2	ITU—Region 3	Sharing requirements see § 97.303 (Paragraph)
HF	MHz	MHz	MHz	
80 m	3.525–3.60	3.525–3.60	3.525–3.60	(a)
40 m	7.025–7.075	7.025–7.100	7.025–7.075	
Do	7.100–7.125	7.100–7.125	7.100–7.125	(a), (t)
15 m	21.025–21.20	21.025–21.20	21.025–21.20	
10 m	28.0–28.5	28.0–28.5	28.0–28.5	
VHF	MHz	MHz	MHz	
1.25 m .....	.....	222–225 .....	.....	(a)
UHF	MHz	MHz	MHz	
23 cm	1270–1295	1270–1295	1270–1295	(h), (i)

■ 19. Section 97.303 is amended by revising paragraphs (b) and (r) to read as follows:

§ 97.303 Frequency sharing requirements.

* * * * *

(b) No amateur station transmitting in the 1900–2000 kHz segment, the 70 cm band, the 33 cm band, the 23 cm band, the 13 cm band, the 9 cm band, the 5 cm band, the 3 cm band, the 24.05–

24.25 GHz segment, the 76–77.5 GHz segment, the 78–81 GHz segment, the 136–141 GHz segment, and the 241–248 GHz segment shall cause harmful interference to, nor is protected from interference due to the operation of, the Federal radiolocation service.

* * * * *

(r) Authorization of the 76–77 GHz segment of the 4 mm band for amateur

station transmissions is suspended until such time that the Commission may determine that amateur station transmissions in this segment will not pose a safety threat to vehicle radar systems operating in this segment.

* * * * *

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