# 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 nonsubstantive, 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 The purpose of this action is to update and clarify the Allocation Table, to remove obsolete and outdated provisions from the Commission's Rules, and to ensure that the Allocation Table and related rules are consistent with the Commission's decisions in recent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.

FOR FURTHER INFORMATION CONTACT: Tom Mooring, Office of Engineering and Technology, (202) 418–2450, e-mail: *Tom.Mooring@fcc.gov.* 

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 nonsubstantive, 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 The purpose of this action is to update and clarify the Allocation Table, as well as to remove obsolete and outdated provisions from the Commission's rules.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 nonsubstantive, 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 nonsubstantive, 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.

\* \* \*

#### 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) \* \* \* \* \* \*

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 2<sup>1</sup> (*i.e.*, the 50 States, the District of Columbia, the Caribbean insular areas,<sup>2</sup> and some of the Pacific insular areas).<sup>3</sup> The Federal Table is administered by NTIA<sup>4</sup> and the non-Federal Table is administered by the Federal Communications Commission (FCC).<sup>5</sup>

(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 allocations <sup>6</sup> in columns 4 and 5 of § 2.106 correspond to the terms in the ITU Radio Regulations.

(d) Format of the United States Table.

\*

\* \*

(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.

<sup>3</sup> 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.

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

<sup>5</sup> The Communications Act of 1934, as amended. <sup>6</sup> 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. \*

\* BILLING CODE 6712-01-P

\*

<sup>(5) \* \* \*</sup> 

<sup>&</sup>lt;sup>1</sup> See 2.104(b) for definitions of the ITU Regions. <sup>2</sup> 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.

International Table       Region 2 Table     Region 3 Table       5.57     Region 2 Table       ENCY AND TIME SIGNAL (20 kHz)     Region 3 Table       5.57     S.60       5.57     S.60       5.57     Region 3 Table       5.57     S.60       5.57     Region 3 Table       5.57     S.60       5.50     FXED       AND TIME RADIONAVIGATION     S.60       Fixed     72-84       5.60     Fixed       6.60     R440IONAVIGATION       5.60     Fixed       6.60     RADIONAVIGATION       5.60     Fixed       6.60     R440IONAVIGATION       5.60     Fixed       6.60     R446       6.60     R446       6.60     R446       6.60     R446       6.60     R446       6.60     R456       6.60     Fixed       6.60     Fixed       6.57     S.50       6.60     Fixed       6.60     Fixed       6.60     Fixed       6.60     Fixed       6.60     Fixed       6.60     Fixed       6.59     Fixed       6.51     Fixed	ZIN C12-0	0-275 kHz (VLF/LF)		Page 1
1 Table     Region 2 Table       0     84       0     0			United States Table	FCC Rule Part(s)
9 6deated) 6d MAVIGATION MAVIGATION 85 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 MARTIME MO		Federal Table	Non-Federal Table	
54 MAVIGATION 65 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 MARTIME M		Below 9 (Not Allocated)		
MAVIGATION ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 ME MOBILE 5.57 MARTINE RADIONAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 MARTIME RADIONAVIGATION 5.60 MARTIME RADIONAVIGATION 5.60 MARTIME MOBILE 5.57 MARTIME MOBI		5.53 5.54		
55     557       56     56       56     56       360     57       56     2005       370.90     70.91       0     70.72       58     70.90       MARTIME MOBILE 5.57     70.72       56     70.72       56     70.90       MARTIME MOBILE 5.57     70.90       56     70.90       MARTIME MOBILE 5.57     70.72       MARTIME MOBILE 5.57     70.72       60     5.59       MARTIME MOBILE 5.57     70.72       60     70.72       60     70.72       60     70.72       72.94     71.76       72.94     71.76       MARTIME MOBILE 5.57     70.72       65.9     70.72       65.9     70.72       MARTIME MOBILE 5.57     70.72       MARTIME MOBILE 5.57     70.72       MARTIME MOBILE 5.57     70.72       MARTIME MOBILE 5.57     559       MARTIME MOBILE 5.57     559       MARTIME MOBILE 5.57     550       MARTIME MOBILE 5.57     550       MARTIME MOBILE 5.57     550       60     70.72       759     70.72       759     750		9-14 RADIONAVIGATION US18		
ME MOBILE 5.57 56 005 MRE MOBILE 5.57 MRE MOBILE 5.57 MRE MOBILE 5.57 MARTEND MARTEND MARTEND MARTEND MARTIME MOBILE 5.57 MARTIME MOBILE 5.57 MA		JS294	111005	
56     0.05       0.015     DARD FREQUENCY AND TIME SIGNAL (20 kHz)       0     0       0 </td <td></td> <td>14-19.95 FIXED MARITIME MOBILE 5.57</td> <td>14-19.95 Fixed</td> <td></td>		14-19.95 FIXED MARITIME MOBILE 5.57	14-19.95 Fixed	
0 MRD FREQUENCY AND TIME SIGNAL (20 kHz) 0 MRE MOBILE 5.57 MARTINE MOBILE 5.57 NAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 MARTINE RADIONAVIGATION 5.60 Fixed MARTINE MOBILE 5.57 MARTINE MOBILE 5.57 MAR		JS294	US294	
0		19.95-20.05 STANDARD FREQUENCY AND TIME SIGNAL (20 kHz) IIS204	AE SIGNAL (20 kHz)	
ME MOBILE 5.57 S8 S8 S60 AVIGATION 5.60 FIXED MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S60 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S60 MARITIME MOBILE 5.57 MARITIME		20.05-59	20.05-59	
		FIXED MARITIME MOBILE 5.57	FIXED	
58     70-90       NAVIGATION 5.60     70-72       NAVIGATION 5.60     70-72       MARITIME MOBILE 5.57     70-72       MARITIME MOBILE 5.57     Radiolocation       5.60     Maritime mobile 5.57       MANUGATION 5.60     Maritime mobile 5.57       MANUGATION 5.60     Radiolocation       72-84     Fixed       MANUGATION 5.60     72-84       MANUGATION 5.60     72-84       MANUGATION 5.60     72-84       Fixed     MARITIME MOBILE 5.57       MANUGATION 5.60     72-84       Fixed     MARITIME MOBILE 5.57       MANUGATION 5.60     72-84       Fixed     MARITIME MOBILE 5.57       MANUGATION 5.60     Fixed       MANUGATION 5.60     Fixed       MARITIME MOBILE 5.57     Fixed       MARITIME MOBILE 5.57     Fixed       MARITIME MOBILE 5.57     Fixed		JS294	US294	
.58 NAVIGATION 5.60 FIXED NARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 Maritime mobile 5.57 S.50 Maritime MOBILE 5.57 NAVIGATION 5.60 MARITIME MOBILE 5.57 NAVIGATION 5.60 Fixed MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE		59-61 STANDARD FREQUENCY AND TIME SIGNAL (60 kHz) 115294	1E SIGNAL (60 kHz)	
58     70-90       NAVIGATION 5.60     FIXED       MARITIME MOBILE 5.57     RADIONAVIGATION 5.60       MARITIME RADIONAVIGATION     Maritime mobile 5.57       5.60     Maritime mobile 5.57       MARITIME RADIONAVIGATION     S.60       MARITIME MOBILE 5.57     Radiolocation       10.72     Radiolocation       5.60     ANUGATION 5.60       MARITIME MOBILE 5.57     S.57       MAVIGATION 5.60     Fixed       MAVIGATION 5.60     Fixed       MARITIME MOBILE 5.57     RADIONAVIGATION 5.60       MANUGATION 5.60     Fixed       MARITIME MOBILE 5.57     RADIONAVIGATION 5.60       MANUGATION 5.60     Fixed       MARITIME MOBILE 5.57     RADIONAVIGATION 5.60       FIXED     MARITIME MOBILE 5.57       MARITIME MOBILE 5.57     FIXED	<u>1</u>	31-70	61-70	
.58 NAVIGATION 5.60 FIXED MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.60 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 S.59 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57 MARITIME MOBILE 5.57		FIXED MARITIME MOBILE 5.57	FIXED	
NAVIGATION 5.60     70-90 FIXED     70-72 RADIONAVIGATION 5.60       MARITIME MOBILE 5.57     RADIONAVIGATION       MARITIME RADIONAVIGATION     Maritime mobile 5.57       MARITIME MOBILE 5.57     5.59       MARITIME MOBILE 5.57     5.59       MARITIME MOBILE 5.57     5.59       MARITIME MOBILE 5.57     72-84       MARITIME MOBILE 5.57     75-9		JS294	US294	
ME MOBILE 5.57 NAVIGATION 5.60 NAVIGATION 5.60 ME MOBILE 5.57	70-72 RADIONAVIGATION 5.60 Fixed Maritime mobile 5.57	70-90 FIXED MARITIME MOBILE 5.57 Radiolocation	70-90 FIXED Radiolocation	Private Land Mobile (90)
ME MOBILE 5.57 NAVIGATION 5.60 NAVIGATION 5.60 ME MOBILE 5.57				
NAVIGATION 5.60 IME MOBILE 5.57	12-84 FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60			
IME MOBILE 5.57	84-86 RADIONAVIGATION 5.60 Fixed			
IME MOBILE 5.57	Maritime mobile 5.57 5.59			
IONAVIGATION	86-90 FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60			
5.66 5.61 DS294		JS294	US294	

90-110 RADIONAVIGATION 5.62 Fixed			90-110 RADIONAVIGATION 5.62 US18	Aviation (87) Private Land Mobile (90)
5.64			US104 US294	
110-112 FIXED MARITIME MOBILE	110-130 FIXED MARITIME MOBILE	110-112 FIXED MARITIME MOBILE	110-130 FIXED MARITIME MOBILE	Maritime (80) Private Land Mobile (90)
RADIONAVIGATION 5.64	MARITIME RADIONAVIGATION 5.60	RADIONAVIGATION 5.60 5.64	Radiolocation	
112-115 RADIONAVIGATION 5.60	Radiolocation	112-117.6 RADIONAVIGATION 5.60		
115-117.6 RADIONAVIGATION 5.60		Fixed Maritime mobile		
Fixed Maritime mobile 6.64.6.66		5 A 5 65		
117.6-126 FIXED MARTIME MOBILE		117.6-126 FIXED MARITIME MOBILE		
Radionavigation 5.60 5.64		KADIONAVIGATION 5.60		
126-129 RADIONAVIGATION 5.60		126-129 RADIONAVIGATION 5.60		
		Maritime mobile		
129-130		129-130		
FIXED MARITIME MOBILE RADIONAVIGATION 5.60		FIXED MARITIME MOBILE RADIONAVIGATION 5.60		
5.64	5.61 5.64	5.64	5.64 US294	
130-148.5 FIXED MARITIME MOBILE 5.64.5.67	130-160 FIXED MARITIME MOBILE	130-160 FIXED MARITIME MOBILE RADIONAVIGATION	130-160 FIXED MARITIME MOBILE	Maritime (80)
148.5-255	5.64		294	
BROADCASTING	160-190 FIXED	160-190 FIXED Aeronautical radionavigation	160-190 FIXED FIXED MARITIME MOBILE 115294	
	190-200 AERONAUTICAL RADIONAVIGATION	Z	) AUTICAL RADIONAVIGATIC	Aviation (87)
5.68 5.69 5.70 255-283.5 BROADCASTING AERONAUTICAL	200-275 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	200-285 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	200-275 AERONAUTICAL RADIONAVIGATION US18 Aeronautical mobile US294	
KAUIUNAVIGATIUN				Page 2

Table of Frequency Allocations		275-20651	275-2065 kHz (LF/MF)	Page 3
	International Table		United Sta	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table Non-Federal Table	
(See previous page) 283.5-315 AERONAUTICAL RADIONAVIGATION	275-285 AERONAUTICAL RADIONAVICATION	(See previous page)	275-285 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	Aviation (87)
MARITIME RADIONAVIGATION (radiobeacons) 5.73	Aeronautical moune Maritime radionavigation (radiobeacons)		manume radionavigation (radiobeacons)	
5.72 5.74	285-315 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons)	N iobeacons) 5.73	285-325 MARITIME RADIONAVIGATION (radiobeacons) 5.73 Aeronautical radionavigation (radiobeacons)	
315-325 AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73 5.72 5.75	315-325 MARITIME RADIONAVIGATION (radiobeacons) 5.73 Aeronautical radionavigation	315-325 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73	US18 US294 US364	
325-405 Aeronautical Radionavigation	325-335 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Maritime radionavigation	325-405 AERONAUTICAL RADIONAVIGATION Aeronautical mobile	325-335 AERONAUTICAL RADIONAVIGATION (radiobeacons) Aeronautical mobile Maritime radionavigation (radiobeacons)	Aviation (87)
572	radiopeacons) 335-405 AERONAUTICAL RADIONAUTICAL Aeronautical mobile		USIB U2594 335-405 AERONAUTICAL RADIONAVIGATION (radiobeacons) US18 Aeronautical mobile US294	
405-415 RADIONAVIGATION 5.76 5.72	405.415 RADIONAVICATION 5.76 Aeronautical mobile		1405.415 RADIONAVIGATION 5.76 US18 Aeronautical mobile US294	Maritime (80) Aviation (87)
415-435 Maritime Mobile 5.79 Aeronautical Radionavigation 5.72	415-495 MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.80		415-435 MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION US294	
435-495 MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.72 5.82	5.77 5.78 5.82		435-495         435-495           MARITIME MOBILE 5.79 5.79A         AARITIME MOBILE 5.79 5.79A           Aeronautical radionavigation         5.82 US231 US294	
495-505 MOBILE (distress and calling) 5.83			495-505 MOBILE (distress and calling)  5.83	
505-526.5 MARITIME MOBILE 5.79 5.79A 5.84	505-510 MARITIME MOBILE 5.79	505-526.5 MARITIME MOBILE 5.79 5.79A	505-510 MARITIME MOBILE 5.79	Maritime (80)
AERONAUTICAL RADIONAVIGATION	510-525 MOBILE 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	5.84 AERONAUTICAL RADIONAVICATION Aeronautical mobile Land mobile	510-525 MARITIME MOBILE (ships only) 5.79A 5.84 AERONAUTICAL RADIONAVIGATION (radiobeacons) US18 US14 US225	Maritime (80) Aviation (87)
5.72				

53 54 8F 8F 8F 1606.5-1625 16 16 16 16 16 8F 16 8F 16 8R 17 8R 16 8R 17 8R 17 8R 16 8R 17 8R 16 8R 16 8R 17 8R 17 8R 17 8R 17 8R 17 8R 17 8R 17 8R 17 8R 17 8 8R 16 8R 17 8 8R 17 8 8R 17 8 8R 17 8 8R 17 8 8R 17 8 8R 17 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	NO		MOBILE US221 AERONAUTICAL RADIONAVIGATION (radiobeacons) US18 US239	ON (radiobeacons) US18	Private Land Mobile (90)
<u>.87A</u> -1625 IME MOBILE 5.90	STING	535-1606.5 BROADCASTING	535-1605	STING 8	Radio Broadcast (AM)(73) Alaska Fixed (80)
FIXED MARITIME MOBILE 5.90	1605-1625 BROADCASTING 5.89	1606.5-1800	1605-1615 MOBILE US221 G127	ring 5.89	Private Land Mobile (90)
LAND MOBILE	5.90	FIXEU MOBILE RADIOLOCATION RADIONAVIGATION	1615-1705		
-1635 OLOCATION	1625-1705 FIXED MOBILE BDOADCASTINC 5 00				
1635-1800 FIXED Ra MARITIME MORILE F. 90 5.5	Radiolocation 5.90		US299	US299 NG1 NG128	
1	1705-1800 FIXED MOBILE	<u>.</u>	1705-1800 FIXED MOBILE		Maritime (80) Private Land Mobile (90)
AE 5.92 5.96	RADIOLOCATION AERONAUTICAL RADIONAVIGATION	5.91	RADIOLOCATION LIS240		
1810 OLOCATION	1800-1850 AMATEUR	00 UR	1800-1900	1800-1900 AMATEUR	Amateur (97)
5.93 1810-1850 AMATEUR 5.08.5.00.5.100.5.101		NOBILE except aeronautical mobile mobile P. E. DIONAVIGATION			
	1850-2000 AMATFUD	Kadiolocation			
E except aeronautical mobile	MARIALON MOBILE except aeronautical mobile RADIOLOCATION RADIONAVIGATION		1900-2000 RADIOLOCATION		Private Land Mobile (90) Amateur (97)
5.92 5.96 5.103	5.102	5.97	US290		
aeronautical mobile (R)	2000-2065 FIXED MOBILE		2000-2065 FIXED MOBILE	2000-2065 MARITIME MOBILE NG19	Maritime (80)
2025-2045 FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104					
5.92 5.103			US340	US340	

\_

International Table           Region 1 Table         Region 2 Table           2045-2160         Region 2 Table           2045-2160         (See previous page)           FIXED         MARITIME MOBILE           AMARITIME MOBILE         2065-2107           MARITIME MOBILE         5.105           LAND MOBILE         5.106           5.92         2107-2170           Z160-2170         FIXED           RADIOLOCATION         MOBILE           5.93         5.107           Z170-2173.5         MOBILE           MARITIME MOBILE         2107-2170           Z170-2173.5         MOBILE           MOBILE         5.107           Z170-2173.5         MOBILE           MOBILE         2107-2170           Z173.5         MOBILE           S107-2173.5         MOBILE           ARTIME MOBILE         2107-2170           Z173.5-2190.5         MOBILE           MOBILE         2173.5-2190.5           MOBILE         2173.5-2190.5           S108 5.100 5.111         2194-2300           S190.5-2194         ANOBILE	Region 3 Table 5.105		United States Table	ECC Duilo Dart(c)
e E F CION CION CION S S S S S S S S S S S S S S S S S S S				I UC NUIS Lair()
OBILE E CION CION CION CION CION CION CION CION	5.105	Federal Table	Non-Federal Table	
OBILE E CION OBILE 65.110 5.110 5.1111 5.1111 5.1111 5.1111 5.1111 5.11111 5.11111111	5.105	(See previous page)		
Clion BILE 5.110 5.111 0BILE		2065-2107 MARITIME MOBILE 5.105		Maritime (80)
rion OBILE ess and calling) 5.110 5.111 OBILE		US296 US340		
OBILE s ess and calling) 5.110 5.111 OBILE		2107-2170 FIXED MOBILE	2107-2170 FIXED MOBILE except aeronautical	Maritime (80) Private I and Mohile (90)
OBILE 6 ess and calling) 6.110 6.111 OBILE		US340	mobile NG19 US340	
0.5 stress and calling) 9 5.110 5.111 4 MOBILE		2170-2173.5 MARITIME MOBILE (telephony)	2170-2173.5 MARITIME MOBILE	Maritime (80)
8 5.110 5.111 4 MOBILE		2173.5-2190.5 MOBILE (distress and calling)	2	Maritime (80)
4 MOBILE		5.108 5.109 5.110 5.111 US279 US340	JS340	Aviation (87)
		2190.5-2194 MARITIME MOBILE (telephony) US340	2190.5-2194 MARITIME MOBILE US340	Maritime (80)
E except aeronautical mobile (R) 103 5.112		2194-2495 FIXED MOBILE	2194-2495 FIXED MOBILE except aeronautical mobile NG19	Maritime (80) Private Land Mobile (90)
eronautical mobile (R) 5.113	13	115340	LI S 34D	
	NEV AND TIME SIGNAL (2500 HH-1)	2495-2505 2405-2505 STANDADD EDEOLIENCY AND TIME SUCANAL (2600 MIL)		
2501 DARD FREQUENCY AND TIME VAL (2500 kHz)	ואט זוואב אנאאר (באט גרוב)		NE SIGNAL (2000 KHZ)	
2501-2502 STANDARD FREQUENCY AND TIME SIGNAL Space research				
2502-2625 2502-2505 2502-2505 FIXED FIXED MOBILE except aeronautical mobile (R)	NCY AND TIME SIGNAL	US1 US340		
5.92         5.103         5.114         2505-2850           2625-2650         FIXED         FIXED           MARITIME MOBILE         MOBILE           MARITIME RADIONAVIGATION         6.02		2505-2850 FIXED MOBILE US285	2505-2850 FIXED MOBILE except aeronautical mobile US285	Maritime (80) Aviation (87) Private Land Mobile (90)
2650-2850 E1SE0 MOBILE except aeronautical mobile (R) 5.92 5.103		US340	US340	

2850-3025 AERONAUTICAL MOBILE (R)		2850-3025 AERONAUTICAL MOBILE (R) 6-11-6-116-116-200		Aviation (87)
9.111 9.115 3025-3155 AERONAUTICAL MOBILE (OR)		3.111 3.113 U3263 U3340 3025.3155 AERONAUTICAL MOBILE (OR) UIS340		
3155-3200 FIXED MOBILE except aeronautical mobile (R) 5.116 5.117		3155-3230 FIXED MOBILE except aeronautical mobile (R)	3)	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)
3500-3750 AMATEUR 5.119	3500-3900 AMATEUR FIXED		3500-4000 AMATEUR	Amateur (97)
000 EUR E except aeronautical le (R)	OBILE			
AL MOBILE (OR)	3900-3950 AERONAUTICAL MOBILE BROADCASTING 2050 4000			
STING 5.122 5.125	5.126		US340	
4000-4063 FIXED MARITIME MOBILE 5.127 5.126		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)
				Page 6

\_

Table of Frequency Allocations		4438-8100 kHz (HF)	) kHz (HF)		Page 7
	International Table		United Sta	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
4438-4650 FIXED MOBILE except aeronautical mobile (R)	e (R)	4438-4650 FIXED MOBILE except aeronautical mobile	4438-4650 FIXED MOBILE except aeronautical mobile (R)	(R)	Maritime (80) Aviation (87)
			US340		Private Land Mobile (90)
4650-4700 AERONAUTICAL MOBILE (R)			4650-4700 AERONAUTICAL MOBILE (R) US282 US283 US340		Aviation (87)
4700-4750 AERONAUTICAL MOBILE (OR)			4700-4750 AERONAUTICAL MOBILE (OR) US340		
4750-4850 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	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)	(R)	Maritime (80) Private Land Mobile (90)
<b>BROADCASTING 5.113</b>			US340		
4850-4995 FIXED LAND MOBILE BROADCASTING 5.113				4850-4995 FIXED IIS340	Aviation (87) Private Land Mobile (90)
4995-5003 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	IME SIGNAL (5000 kHz)		4995-5005 STANDARD FREQUENCY AND TIME SIGNAL (5000 kHz)	ME SIGNAL (5000 kHz)	
5003-5005 STANDARD FREQUENCY AND TIME SIGNAL Space research	IME SIGNAL		US1 US340		
5005-5060 FIXED BROADCASTING 5.113			5005-5060 FIXED US340		Maritime (80) Aviation (87) Private Land Mobile (90)
5060-5250 FIXED Mobile except aeronautical mobile 5.133			5060-5450 FIXED Mobile except aeronautical mobile		Maritime (80) Aviation (87) Private Land Mobile (90)
5250-5450 FIXED MOBILE except aeronautical mobile	Ð		US212 US340 US381		Amateur (97)
5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5450-5480 AERONAUTICAL MOBILE (R)	5450-5480 FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	5450-5680 AERONAUTICAL MOBILE (R)		Aviation (87)
5480-5680 AERONAUTICAL MOBILE (R) 5.111 5.115			5.111 5.115 US283 US340		
5680-5730 AERONAUTICAL MOBILE (OR) 5.111 5.115			5680-5730 AERONAUTICAL MOBILE (OR) 5.111 5.115 US340		

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) US340	6 (R)	Maritime (80) Aviation (87) Private Land Mobile (90)
5900-5950 BROADCASTING 5.134 5.136			5900-5950 BROADCASTING 5.134 US340 US366		Radio Broadcast (HF)(73)
5950-6200 BROADCASTING			5950-6200 BROADCASTING US340		
6200-6525 Maritime Mobile 5.109 5.110 5.130 5.132 5.137	) 5.130 5.132		6200-6525 MARITIME MOBILE 5.109 5.110 5.130 5.132 US82 US296 US340	5.130 5.132 US82	Maritime (80)
6525-6685 AERONAUTICAL MOBILE (R)			6525-6685 Aeronautical Mobile (R) US283 US340		Aviation (87)
6685-6765 AERONAUTICAL MOBILE (OR)			6685-6765 AERONAUTICAL MOBILE (OR) US340		
6765-7000 FIXED MOBILE except aeronautical mobile (R) 5.138 5.138A 5.139	ile (R)		6765-7000 FIXED MOBILE except aeronautical mobile (R) 5.138 US340 US394	e (R)	ISM Equipment (18) Private Land Mobile (90)
7000-7100 AMATEUR AMATEUR-SATELLITE 5.140 5.141 5.141A			7000-7100 US340	7000-7100 AMATEUR AMATEUR-SATELLITE US340	Amateur (97)
7100-7200 AMATEUR 5.141A 5.141B 5.141C 5.142			7100-7300	7100-7300 AMATEUR	Radio Broadcast (HF)(73) Amateur (97)
7200-7300 BROADCASTING	7200-7300 AMATEUR 5.142	7200-7300 BROADCASTING	US340 US395	5.142 US340 US395	
7300-7400 BROADCASTING 5.134 5.143 5.143A 5.143B 5.143C 5.143D	.143D		7300-7400 BROADCASTING 5.134 US340 US366 US396		Radio Broadcast (HF)(73) Maritime (80) Private Land Mobile (90)
7400-7450 740 BROADCASTING FIX 5.143B 5.143C 740 7450-8100 FIXED MOBILE except aeronautical mobile (R)	7400-7450 FIXED MOBILE except aeronautical mobile (R) ile (R)	7400-7450 BROADCASTING 5.143A 5.143C	7400-8100 FIXED MOBILE except aeronautical mobile (R)	(R)	Radio Broadcast (HF)(73) Maritime (80) Aviation (87) Private Land Mobile (90)
5.143E 5.144			US340		Page 8

Table of Frequency Allocations		8100-13600 kHz (HF)	0 KHZ (HF)	Page 9
	International Table		United State	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table Non-Federal Table	
8100-8195 FIXED			8100-8195 FIXED	Maritime (80)
MARITIME MOBILE			MARITIME MOBILE US340	
8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145	5.132 5.145		8195-8815 MARITIME MOBILE 5.109 5.110 5.132 5.145 US82	Maritime (80)
5.111			5.111 US296 US340	Aviation (87)
8815-8965 AERONAUTICAL MOBILE (R)			8815-8965 AERONAUTICAL MOBILE (R)	Aviation (87)
			US340	
8965-9040 AERONAUTICAL MOBILE (OR)			8965-9040 AERONAUTICAL MOBILE (OR)	
			US340	
9040-9400 FIXED			9040-9400 FIXED HIS340	Maritime (80) Private Land Mobile (90)
DADD DEDD			03340 QAND.QSNN	
9400-9500 BROADCASTING 5.134 5.146			BROADCASTING 5.134 BROADCASTING 5.134 US346	Radio Broadcast (HF)(73)
9500-9900			9500-9900	
5.147			US340 US367	
9900-9995 FIXED			9900-9995 FIXED	Private Land Mobile (90)
			US34U	
9995-10003 STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz) 5.111	TIME SIGNAL (10000 kHz)		9995-10005 STANDARD FREQUENCY AND TIME SIGNAL (10000 kHz)	
10003-10005 STANDARD FREQUENCY AND TIME SIGNAL	TIME SIGNAL			
5,111			5.111 US1 US340	
10005-10100 AERONAUTICAL MOBILE (R)			10005-10100 AERONAUTICAL MOBILE (R) 6-111 11:5327 11:5340	Aviation (87)
3.111 10100-10150			10100-10150 10100-10150	
FIXED Amateur			US247 US340 US340	Amateur (97)
10150-11175				Driveto Lond Mahila (00)
PLIXED Mobile except aeronautical mobile (R)	e (R)		Mobile except aeronautical mobile (R)	
			US340	

11175-11275 AERONAUTICAL MOBILE (OR)	11175-11275 AERONAUTICAL MOBILE (OR) IIS340			
11275-11400 AERONAUTICAL MOBILE (R)	11275-11400 AERONUTICAL MOBILE (R)		Aviation (87)	
11400-11600 FIXED	05205 05340 11400-11600 FIXED		Private Land Mobile (90)	
11600-11650 BROADCASTING 5.134	USS40 11600-11650 BROADCASTING 5.134 HIS340 HIS346		Radio Broadcast (HF)(73)	
5.140 11650-12050 BROADCASTING 5.147	11660-12060 BROADCASTING IIS340 IIS367			
12050-12100 BROADCASTING 5.134 5.146	12050-12100 BROADCASTING 5.134 US340 US366			
12100-12230 FIXED	11100-12230 FIXED US340		Private Land Mobile (90)	
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	5.145 US82	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	13360-13410 RADIO ASTRONOMY US342		
13410-13570 FIXED Mobile except aeronautical mobile (R) 5.150	aeronautical mobile (R)	13410-13570 FIXED 5.150 US340	ISM Equipment (18) Private Land Mobile (90)	
13570-13600 BROADCASTING 5.134 5.151	13570-13600 BROADCASTING 5.134 US340 US366		Radio Broadcast (HF)(73)	
			Page 10	

\_

Table of Frequency Allocations		13600-19800 kHz (HF)	00 kHz (HF)		Page 11
	International Table		United States Table	s Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table Region 3 Table	Table	Federal Table	Non-Federal Table	
13600-13800 BROADCASTING			13600-13800 BROADCASTING		Radio Broadcast (HF)(73)
			US340		
13800-13870 BROADCASTING 5.134			13800-13870 BROADCASTING 5.134		
5.151			US340 US366		
13870-14000			13870-14000	13870-14000	
Mobile except aeronautical mobile (R)			Mobile except aeronautical mobile (R)	riacu.	
			US340	US340	
14000-14250 AMATEUR			14000-14350	14000-14250 AMATEUR	Amateur (97)
AMATEUR-SATELLITE				AMATEUR-SATELLITE	
				US340	
14250-14350 AMATEUR				14250-14350 AMATEUR	
5.152			US340	US340	
14350-14990 FIXED			14350-14990 FIXED	14350-14990 FIXED	Private I and Mohile (90)
Mobile except aeronautical mobile (R)			Mobile except aeronautical mobile (R)	112.340	
14000 15005			1/1000_16/10	U3340	
STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz)	: SIGNAL (15000 kHz)		STANDARD FREQUENCY AND TIME SIGNAL (15000 kHz)	SIGNAL (15000 kHz)	
5.111					
15005-15010 STANDARD FREQUENCY AND TIME SIGNAL Space research	SIGNAL		6.111 US1 US340		
15010-15100			15010-15100		
AERONAUTICAL MOBILE (OR)			AERONAUTICAL MOBILE (OR) US340		
15100-15600 BROADCASTING			15100-15600 BROADCASTING		Radio Broadcast (HF)(73)
			US340		
15600-15800 BROADCASTING 5.134			15600-15800 BROADCASTING 5.134		
5.146			US340 US366		
15800-16360 FIXED			15800-16360 FIXED		Private Land Mobile (90)
5.153			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 HIS296 HIS240	Maritime (80)
17410-17480 FIXED	17410-17480 FIXED	Private Land Mobile (90)
17480-17550 BROADCASTING 5.134	05340 17480-17550 BROADCASTING 5.134	Radio Broadcast (HF)(73)
5.146 17550-17900 BROADCASTING	US340 US366 17550-17900 BROADCASTING	
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 18052-18068 FIXED Snarce research	18030-18068 FIXED HIS340	Maritime (80) Private Land Mobile (90)
18068-18168 AMATEUR AMATEUR-SATELLITE 5.154	18068-18168 18068-18168 AMATEUR AMATEUR AMATEUR-SATELLITE US340 US340	Amateur (97)
18168-18780 FIXED Mobile except aeronautical mobile	18780	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 US340	Private Land Mobile (90)
19680-19800 MARITIME MOBILE 5.132	19680-19800 MARITIME MOBILE 5.132 US340	Maritime (80)
		Page 12

Table of Frequency Allocations 19800-26	19800-26950 kHz (HF)		Page 13
International Table	United States Table	ble	FCC Rule Part(s)
Region 1 Table Region 2 Table Region 3 Table		Non-Federal Table	
	19800-19990 FIXED US340		Private Land Mobile (90)
19990-19995 STANDARD FREQUENCY AND TIME SIGNAL Space research	19990-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz)	IAL (20000 kHz)	
9.111 19995-20010 STANDARD FREQUENCY AND TIME SIGNAL (20000 kHz) 5.111	5 111 IIS1 IIS340		
2010-21000 FIXED Mobile		20010-21000 FIXED US340	Private Land Mobile (90)
21000-21450 AMATEUR AMATEUR-SATELLITE	21450	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	US340		
21924-22000 AERONAUTICAL MOBILE (R)	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			Private Land Mobile (90)
23000-23200 FIXED Mobile except aeronautical mobile (R) 5.156	t aeronautical	23000-23200 FIXED US340	
23200-23350 FIXED 5.156A AERONAUTICAL MOBILE (OR)	23200-23350 AERONAUTICAL MOBILE (OR) US340		

\_\_\_\_

23350-24000	24890	23350-24890	
FIXEU MODII E automatical makila E 157		FIXED	Private Land Mobile (90)
MUBILE EXCEPT defortautical mobile 0.107	MUBILE except aeronautical mobile		
24UUU-2469U FIYEN			
LAND MOBILE	US340	US340	
24690-24990	24990	24890-24990	
		AMATEUR	Amateur (97)
AWAIEUK-SAIELLIE	1162340	AMAIEUK-SAIELLIIE	
24990-25005	24990-25010	0+000	
STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (25000 kHz)	E SIGNAL (25000 kHz)	
25005-25010 STANDADA FERRIFINOV AND TIME SIGNAL			
	US1 US340		
25010-25070 EryEn	25010-25070	25010-25070	Driveto Land Mehilo (00)
MOBILE except aeronautical mobile	US340	US340 NG112	ו וואמנכ במווח ואוסטווכ (סט)
25070-25210		25070-25210	
MARITIME MOBILE	MARIIIME MUBILE US82 US281 US296 US340	MARIIIME MOBILE US82 115281 115296 115340 NG112	Maritime (80) Private Land Mobile (90)
25210-25550	25210-25330	25210-25330	
FTXEU MORIE excent aeronautical mohile		LAND MUBILE	Private Land Mobile (90)
		US34U 21220 21110	
	2533U-2555U FIXED	2533U-2533U	
	MOBILE except aeronautical mobile		
		US340	
25550-25670 RADIO ASTRONOMY	25550-25670 RADIO ASTRONOMY US74		
	US342		
25670-26100 BROADCASTING	25670-26100 BROADCASTING		Radio Broadcast (HF)(73)
	US25 US340		Remote Pickup (74D)
26100-26175 MADITIME MOBILE E 132	26100-26175		Remote Pickup (74D)
	US25 US340		Maritime (80)
26175-27500			
ritkeu MOBILE except aeronautical mobile	UTESI	LAND MUBILE	Kemote Pickup (/4U) Low Power Auxiliary (74H)
	טנמנות	25480-26050	
	nt aeronautical mobilo	00007-00407	
	US340	US340	
5.150			Page 14

Table of Frequency Allocations		26.95-421	26.95-42 MHz (HF/VHF)		Page 15
	International Table		United S	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
(See previous page)	•		26.95-27.41	26.95-26.96 FIXED	ISM Equipment (18)
				5.150 US340	
				26.96-27.23 MOBILE except aeronautical mobile	ISM Equipment (18)
				5.150 US340	Personal Radio (95)
					ISM Equipment (18)
				it aeronautical mobile	Private Land Mobile (90) Personal Radio (95)
			27.41-27.54	27.41-27.54	
27.5-28 Meteorological aids				FIXED LAND MOBILE	Private Land Mobile (90)
FIXED			US340	US340	
MOBILE			27.54-28 FIXED MODILE	27.54-28	
			IIS298 IIS340	115298 115340	
28-29.7			28-29.89	28-29.7	
AMATEUR AMATEUR-SATELLITE				AMATEUR AMATEUR-SATELLITE	Amateur (97)
				US340	
29.7-30.005 FIXFD				29.7-29.8 LAND MOBILE	Private I and Mobile (90)
MOBILE				US340	
				29.8-29.89 FIXED	
			US340	US340	
			29.89-29.91	29.89-29.91	
			MOBILE		
			US340	US340	
			29.91-30	29.91-30 FIXED	
			US340	US340	
			30-30.56	30-30.56	
30.005-30.01 SPACE OPERATION (satellite identification)	entification)		FIXED MOBILE		
FIXED					
MUBILE SPACE RESEARCH					
30.01-37.5 EIVED					
MOBILE					
		•			

	30 EE 33	30 EC 33	
		30.30-32 FIXED	Drivate I and Mohile (90)
		LAND MOBILE	
		NG124	
		32-33	
	MOBILE		
		33-34	
		FIXED LAND MOBILE	Private Land Modile (90)
		NG124	
		34-35	
	MOBILE		
			Public Mobile (22)
		MUBILE	Private Land Mobile (90)
	36-37 FIXED MOBILE	36-37	
	US220	US220	
	37-37.5	37-37.5	
		LANU MUBILE NG124	Privare Lang Modie (90)
37.5-38.25		37.5-38	
FIXED MOBILE	Radio astronomy	LAND MOBILE	
modice Radio astronomy	115342	Nauru asu ununity	
		00342 N039 N0124	
		38-38.25 RADIO ASTRONOMY	
	MUBILE RADIO ASTRONOMY		
5.149	US81 US342	US81 US342	
38.25-39.986 FIXED		38.25-39	
MOBILE	MOBILE		
39.986.40.02		39-40 LAND MOBILE	Private Land Mobile (90)
		NG124	
MUBILE Space research			CM Equipment (10)
40.02-40.98	MOBILE		Private Land Mobile (90)
FIXED MOBILE			
5.150	5 150 11S210 11S220	5 150 LIS210 LIS220	
			Page 16

Table of Frequency Allocations		42-137	42-137 MHz (VHF)		Page 1/
	International Lable			United States Lable	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
40.98.41.015 FIXED MOBILE Space research 5.160.5.161			(See previous page)		
41.015-44					
FIXED MOBILE			42-46.6	42-43.69 FIXED LAND MOBILE NGT24 NGT41	Public Mobile (22) Private Land Mobile (90)
5.160 5.161				43.69-46.6	
44-47 FIXED				LAND MOBILE NG124_NG141	Private Land Mobile (90)
MUBILE 5.162 5.162A			46.6-47 FIXED MOBILE	46.6-47	
47-68 BROADCASTING	47-50 FIXED MOBILE	47-50 FIXED MOBILE	47-49.6	47-49.6 LAND MOBILE NG124	Private Land Mobile (90)
		BROADCASTING 5.162A	49.6-50 FIXED MOBILE	49.6-50	
_	50-54 AMATEUR 5.162A 5.166 5.167 5.168 5.170		50-73	50-54 AMATEUR	Amateur (97)
	54-68	<u> </u>		54-72	
031 5 153 5 154 5 150 5 150	BROADCASTING Fixed Mobile	FIXED MOBILE BROADCASTING		BRUADCASTING	Broadcast Radio (TV)(73)   LPTV, TV Translator/Booster (74G)   Low Power Auxiliary (74H)
5.171 5.171	5.172	5.162A			
68-74.8 FIXED MOBILE except aeronautical mobile	68-72 BROADCASTING Fixed Mobile	68-74.8 FIXED MOBILE			
	5.173			NG115 NG128 NG142 NG149	
	72-73 FIXED MOBILE			72-73 FIXED MOBILE	Public Mobile (22) Aviation (87) Private L and Mobile (90)
				NG3 NG49 NG56	Personal Radio (95)
	73-74.6 RADIO ASTRONOMY 5.178		73-74.6 RADIO ASTRONOMY US74 US246		
	74.6-74.8 FIXED MOBILE		74.6-74.8 FIXED MOBILE		Private Land Mobile (90)
5.149 5.174 5.175 5.177 5.179		5.149 5.176 5.179	US273		

74.8-75.2 AERONAUTICAL RADIONAVIGATION 5.180 5.181	Z		74.8-75.2 AERONAUTICAL RADIONAVIGATION 5.180		Aviation (87)
75.2-87.5 FIXED MOBILE except aeronautical mobile	75.2-75.4 FIXED MOBILE 5.179		75.2-75.4 FIXED MOBILE US273		Private Land Mobile (90)
	75.4-76 FIXED MOBILE	75.4-87 FIXED MOBILE	75.4-88	75,4-76 FIXED MOBILE NG3 NG49 NG56	Public Mobile (22) Aviation (87) Private Land Mobile (90) Personal Radio (95)
<u>5.175 5.179 5.184 5.187</u> 07 6.100	76-88 BROADCASTING Fixed Mobile 5 185	5.182 5.183 5.188 87-100 FIXED MOBILE BROADCASTING		142 NG149	Broadcast Radio (TV)(73) LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)
67.2700 BROADCASTING 5.190 100 100	88-100 BROADCASTING		88-108		Broadcast Radio (FM)(73) FM Translator/Booster (74L)
BROADCASTING 5.192 5.194			US93	US93 NG128	
108-117.975 AERONAUTICAL RADIONAVIGATION 5.197 5.197 A	Z		108-117.975 Aeronautical Radionavigation US93 US343		Aviation (87)
117.975-137 AERONAUTICAL MOBILE (R)			(117.975-121.9375) Aeronautical Mobile (R) 5.111 5.198 5.199 5.200 US26 US28	28	
			121.9375-123.0875	121.9375-123.0875 AERONAUTICAL MOBILE	
			5.198 US30 US31 US33 US80 US102 US213	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	128.8125-132.0125	
			5.198	AERONAUTICAL MOBILE (R) 5.198	
			132.0125-136 Aeronautical Mobile (R) 5 198 11526		
			136-137	136-137 AERONAUTICAL MOBILE (R)	
5.111 5.198 5.199 5.200 5.201 5.202 5.203 5.203A 5.203B	02 5.203 5.203A 5.203B		US244	US244	
					Page 18

Table of Frequency Allocations		137-157.037	137-157.0375 MHz (VHF)		Parte 19
	International Table		United States Table		FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table Non-Federal Table	ral Table	
137-137.025 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.2084 5.209 SPACE RESEARCH (space-to-Earth)	-to-Earth) 208A 5.209		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)	-Earth) 19 US320	Satellite Communications (25)
Fixed Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.208			5.208		
137.025-137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth)	e-to-Earth)		137.025-137.175 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth)	-Earth)	
Prived Mobile-satellite (space-to-Earth) 5.208A 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.207 5.208	5.209		Mobile-satellite (space-to-Earth) US319 US320 5.208	:320	
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)	+Io-Earth) 208A 5.209		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)	-Earth) 19 US320	
Mobile except aeronautical mobile (R) 5.204 5.205 5.206 5.208			5.208		
137.825-138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth)	+to-Earth)		137.825-138 SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth)	-Earth)	
тика Mobile-satellite (space-to-Earth) 5.208A 5.209 Mobile except aeronautical mobile (R) 5.204 5.205 5.201 5.208	5.209		Mobile-satellite (space-to-Earth) US319 US320	320	
138-143.6 AERONAUTICAL MOBILE (OR)	138-143.6 FIXED	138-143.6 FIXED	138-144 [138-144]		
5.210 5.211 5.212 5.214	MOBILE RADIOLOCATION Space research (space-to-Earth)	MOBILE Space research (space-to-Earth) 5.207 5.213	MOBILE		
143.6-143.65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) 5.211.5.212.6.214	143.6-143.65 FIXED MOBILE RADIOLOCATION SPACE RESEARCH (space-to-Earth)				
1315.144 143.655.144 AERONAUTICAL MOBILE (OR)	143.65-144 FIXED MOBILE RADIOLOCATION Space research (space-to-Earth)				
+17'C 717'C 117'C 017'C		9.201 5.113	630		

144-146 AMATEUR AMATEUR-SATELLITE 5.216		144-148	144-146 AMATEUR AMATEUR-SATELLITE	Amateur (97)
146-148 FIXED MOBILE except aeronautical mobile (R)	146-148 AMATEUR AMATEUR FIXED MOBILE 5.217 5.217 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	148-149.9 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) US319 US320 US323 US325	148-149.9 MOBILE-SATELLITE (Earth-to-space) US319 US320 US323 US325	Satellite Communications (25)
5.218 5.219 5.221 5.21 5.218 5.228 5.22 149.9-150.05 MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B	5.218 5.219 5.221 09 5.224A	5.218 5.219 G30 5.218 5.219 149.9-150.05 MOBILE-SATELLITE (Earth-to-space) US319 US320 RADIONAVIGATION-SATELLITE	5.218 5.219 3ace) US319 US320	
5.220 5.222 5.223		5.223		
150.05-153 FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY	150.05-156.7625 FIXED MOBILE	150.05-150.8 FIXED MOBILE HISMA C30	150.05-150.8 LIS216	
		150 0 150 050	0.34.10 450.453.655	
		130.8-152.855 US216	150.8-152.855 FIXED LAND MOBILE NG4 NG51 NG112 US216 NG124	Public Mobile (22) Private Land Mobile (90) Personal Radio (95)
5.149 153-154 FIXE		152.855-156.2475	152.855-154 LAND MOBILE NG4	Remote Pickup (74D) Private Land Mobile (90)
MOBILE except aeronautical mobile (R) Meteorological aids			NG124	
154-156.7625 FIXED MOBILE except aeronautical mobile (R)			154-156.2475 FIXED LAND MOBILE NG112 5.226 NG117 NG124 NG148	Maritime (80) Private Land Mobile (90) Personal Radio (95)
5.226 5.227 156.7625-156.8375 MADITIME MODIL E (Aitervice and colline)	5.225 5.226 5.227	156.2475-157.0375		Maritime (80)
5.111 5.226		5.226 5.227 US77 US106 US107 US266	4	
	4			Page 20

Table of Frequency Allocations		157.0375-267 MHz (VHF)		Page 21
	International Table	United S	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table Region 3 Table	Federal Table	Non-Federal Table	
156.8375-174	156.8375-174	(See previous page)		
FIXED MOBILE except aeronautical mobile	FIXED MOBILE	157.0375-157.1875 MARITIME MOBILE US214	157.0375-157.1875	Maritime (80)
		5.226 US266 G109	5.226 US214 US266	Private Land Mobile (90)
		157.1875-161.575	157.1875-157.45 MOBILE except aeronautical mobile US266	Maritime (80) Aviation (87)
			5.226 NG111	Private Land Mobile (90)
			157.45-161.575 FIXED LAND MOBILE NG28 NG111 NG112	Public Mobile (22) Remote Pickup (74D)
			5.226 NG6 NG70 NG124 NG148 NG155	Maritime (80) Private Land Mobile (90)
		161.575-161.625	161.575-161.625 MARITIME MOBILE US77	Public Mobile (22) Maritime (80)
		5.226 US77	5.226 NG6 NG17	
		161.625-161.775	161.625-161.775 LAND MOBILE NG6	Public Mobile (22)
			5.226	Low Power Auxiliary (74H)
		161.775-162.0125	161.775-162.0125 MOBILE except aeronautical mobile US266 NG6	Public Mobile (22) Martitime (80)
		5.226 US266 US399	5.226 US399	Private Land Mobile (90)
		162.0125-173.2 FIXED US13 MOBILE	162.0125-173.2	Remote Pickup (74D) Maritime (80)
		5.226 US8 US11 US216 US300 US312 US399 G5	5.226 US8 US11 US13 US216 US300 US312 US399	L'IIVAIE LAIN MUUIE (30)
		173.2-173.4	173.2-173.4 FIXED Land mobile	Private Land Mobile (90)
		173.4-174 FIXED MOBILE	173.4-174	
5.226 5.229	5.226 5.230 5.231 5.232	G5		

174-223 BROADCASTING	174-216 BROADCASTING	174-223 FIXED	174-216	174-216 BROADCASTING	Broadcast Radio (TV)(73)
	Fixed Mobile	Mobile Broadcasting			LPTV, TV Translator/Booster (74G)
	5.234			NG115 NG128 NG142 NG149	LOW POWER AUXIIIALY (1411)
	216-220 FIXED MARITIME MOBILE Radiolocation 5.241		216-217 Fixed Land mobile Radiolocation 5.241 G2	216-219 FIXED MOBILE except aeronautical mobile	Maritime (80) Private Land Mobile (90) Personal Radio (95)
			US210 US229 217-220	US210 US229 NG173	
			Fixed Mobile	219-220 FIXED MOBILE except aeronautical mobile Amateur NG152	Maritime (80) Private Land Mobile (90) Amateur (97)
	5.242		US210 US229	US210 US229 NG173	
	220-225 AMATEUR FIXED PADBILE		220-222 FIXED LAND MOBILE Radiolocation 5.241 G2	220-222 FIXED LAND MOBILE	Private Land Mobile (90)
	Kaulolocation 3.24 I		US335	US335	
<u>5.235 5.237 5.243</u> 223-230 BROADCASTING Fixed Mobile		645	222-225 Radiolocation 5.241 G2	222-225 AMATEUR	Amateur (97)
	225-235 FIXED MOBILE	AERONAUTICAL RADIONAVIGATION Radiolocation	225-235 FIXED MOBILE	225-235	
5.243 5.246 5.247 230-235 FIXED MOBILE		5.250 230-235 FIXED MOBILE AERONAUTICAL RADIONAVIGATION			
5.247 5.251 5.252		5.250	G27		
235-267 FIXED MOBILE			235-267 FIXED MOBILE	235-267	
5.111 5.199 5.252 5.254 5.256 5.256A	256A		5.111 5.199 5.256 G27 G100	5.111 5.199 5.256	
					Page 22

Table of Frequency Allocations 267-410	267-410 MHz (VHF/UHF)		Page 23
International Table	United 5	United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table Region 3 Table	able	Non-Federal Table	
l (space-to-Earth)	267-322 FIXED MOBILE	267-322	
5.254 5.257			
272-273 SPACE OPERATION (space-to-Earth) FIXED MOBILE			
5.254 273-312 FIXED MOBILE			
5.254 3-3-3-4			
312-315 FIXED MOBILE Mobile-satellite (Earth-to-space) 5.254 5.255			
315-322 FIXED MOBILE			
5.254	G27 G100		
322-328.6 FIXED MOBILE RADIO ASTRONOMY	322-328.6 FIXED MOBILE	322-328.6	
5.149	US342 G27	US342	
328.6-335.4 AERONAUTICAL RADIONAVIGATION 5.258	328.6-335.4 AERONAUTICAL RADIONAVIGATION 5.258	ON 5.258	Aviation (87)
<u>5.259</u> 335.4.387 FIXED MOBILE	335.4-399.9 FIXED MOBILE	335.4-399.9	
5.254 387-390 FIXED			
MOBILE Mobile-satellite (space-to-Earth) 5.208A 5.254 5.255			
390-399.9 FIXED MOBILE			
5.254	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	US319 US320 60	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	E SIGNAL-SATELLITE (400.1 MHz)	
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 to-Earth)	400.15-401 METEOROLOGICAL AIDS (radiosonde) US70 MOBILE-SATELLITE (space-to- Earth) US319 US320 US324 SPACE RESEARCH (space-to-Earth) 5.263 Space operation (space-to-Earth)	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		5.264 401-402 METEOROLOGICAL AIDS (radiosonde) US70 SPACE OPERATION (space-to-Earth) Earth exploration-satellite	
Mobile except aeronautical mobile 402-403 METEOROLOGICAL AIDS EARTH EXPLORATION SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space)	METEOROLOGICAL-SATELLITE (Earth-to-space) US384 012-403 METEOROLOGICAL AIDS (fadfosonde) US70 (FARTH EXPLORATION-	tradur:u-space) Meteorological-satellite (Earth-to-space) US384 02-403 METEORLOGICAL AIDS (radiosonde) US70 (radiosonde) US70 Earth exploration-satellite	Personal Radio (95)
Fixed Mobile except aeronautical mobile 403-406 METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) US345 US384 403-406 METEOROLOGICAL AIDS (radiosonde) US70 US345 G6	(Earth-to-space) Meteorological-satellite (Earth-to-space) US345 US384 403-406 METEOROLOGICAL AIDS (radiosonde) US70 US345	
406-406.1 MOBILE-SATELLITE (Earth-to-space) 5.266 5.267 406.1-410	406.406.1 MOBILE-SATELLITE (Earth-to-space) 5.266 5.267 406.1-410	406.1.410	Martitime (80) Aviation (87) Personal Radio (95)
FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	FIXED US13 MOBILE RADIO ASTRONOMY US74 US117 G5 G6	RADIO ASTRONOMY US74 US13 US117	Private Land Mobile (90) Darie 24
			rage 24

Table of Frequency Allocations	410-698	410-698 MHz (UHF)		Page 25
	International Table	United	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table Region 3 Table	able	Non-Federal Table	
410-420 FIXED		410-420 FIXED US13	410-420	Private Land Mobile (90)
MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) 5.268	e) 5.268	MOBILE SPACE RESEARCH (space-to-space) 5.268	11513	
120 120		120 450	420.450	
420-430 FIXED MOBILE except aeronautical mobile		RADIOLOCATION US217 G2 G129	Amateur US7 NG135	Private Land Mobile (90) Amateur (97)
Radiolocation				
430-432 AMATEUR	430-432 RADIOLOCATION			
5 271 5 272 5 273 5 274 5 275	Amaren			
5.276 5.277	5.271 5.276 5.277 5.278 5.279			
432-438 AMATEUR	432-438 RADIOLOCATION			
Earth exploration-satellite (active) 5.279A	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	1			
5.271 5.273 5.274 5.275 5.276 5.277 5.283	5.271 5.276 5.277 5.278 5.279			
440-450 FIXED MODILE correct operational mobility				
Radiolocation		5.286 US7 US87 US230	5.282 5.286 US87 US217 US230	
5.269 5.2/0 5.2/1 5.284 5.285 5.286 460 465		US39/ G8	US39/	
430433 FIXED MOBILE		430-434 5 286 11587	430-434 LAND MOBILE 5 286 LISR7 NG112 NG124	Remote Pickup (74D) Low Power Auxiliary (74H) Drivate I and Mohile (90)
		454-456		
			MOBILE	Public Mobile (22) Maritime (80)
5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286D 5.286E 455.456	5.286C 5.286D 5.286E   455.456		NG12 NG112 NG148	
FIXED			LAND MOBILE	Remote Pickup (74D) Low Power Auxiliary (74H)
5.209 5.271 5.286A 5.286B 5.286C 5.286E	MUBILE-SATELLITE (FAITH-10- space) 5.286A 5.286B 5.286C 5.209 5.271 5.286A 5.286B 5.209			

456-459 FIXED			450-400	456-46U FIXED	Public Mobile (22)
MOBILE				LAND MOBILE	Maritime (80)
5.271 5.287 5.288					Private Land Inodie (30)
459-460 FIXED MODILE	459-460 FIXED MODILE	459-460 FIXED MOBILE			
5.209 5.271 5.286A 5.286B	MOBILE-SATELLITE (Earth-to- space) 5.286A 5.286B 5.286C	5.209 5.271 5.286A 5.286B			
5.286C 5.286E	5.209	5.286C 5.286E	5.28/ 5.288	5.28/ 5.288 NG112 NG124 NG148	
460-470 FIXED MOBILE			460-470   Meteorological-satellite (space-to-Earth)	460-462.5375 FIXED LAND MOBILE	Private Land Mobile (90)
Meteorological-satellite (space-to-Earth)	arth)		-	5.289 US201 US209 NG124	
				462.5375-462.7375 LAND MOBILE	Personal Radio (95)
				5.289 US201	
				462.7375-467.5375 FIXED LAND MOBILE	Private Land Mobile (90)
				5.287 5.289 US201 US209 US216 NG124	
				467.5375-467.7375 LAND MOBILE	Personal Radio (95)
				5.287 5.289 US201	
				467.7375-470 FIXED	Private Land Mobile (90)
5.287 5.288 5.289 5.290			5.287 5.288 5.289 US201 US209 US216	LANU MUBILE 5.288 5.289 US201 US216 NG124	
470-790	470-512	470-585	470-608	470-512	Public Mobile (22)
BROADCASTING	BROADCASTING	FIXED		FIXED	Broadcast Radio (TV)(73)
	Mobile	BROADCASTING		BROADCASTING	LC V, IV I RUISIAUN DOSKEI (740) Low Power Auxiliary (74H)
	5.292 5.293			NG66 NG115 NG128 NG142 NG149	Private Land Mobile (90)
	512-608	5.291 5.298		512-608	Broadcast Radio (TV)(73)
	BRUAUCASTING 5 297	FIXED		BRUADCASTING NG115 NG128 NG142 NG149	LPTV, TV Translator/Booster (74G) Low Power Auxiliary (74H)
	608-614 RADIO ASTRONOMY Mobile-satellite except aeronautical	MOBILE BROADCASTING RADIONAVIGATION	608-614 LAND MOBILE (medical telemetry and medical telecommand) RADIO ASTRONOMY US74	and medical telecommand)	Personal (95)
	mobile-satellite (Earth-to-space)	5.149 5.305 5.306 5.307 610-890	US246		
	614-806 BROADCASTING	FIXED MOBILE 5.317A BROADCASTING	614-698	614-698 BROADCASTING	Broadcast Radio (TV)(73) PTV TV Translator(Rooster (74G)
5.149 5.291A 5.294 5.296 5.300				NG115 NG128 NG142 NG149	Low Power Auxiliary (74H)
5.302 5.304 5.306 5.311 5.312	5.293 5.309 5.311	5.149 5.305 5.306 5.307 5.311			Page 26
		5.320			

Table of Frequency Allocations		698-941	698-941 MHz (UHF)		Pade 27
	International Table			United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
(See previous page)	(See previous page)	(Coo provious page)	608-800	608 763	
(acc historia hade)	(and mound and)	(ace hievions hade)		FIXED	Wireless Communications (27)
				MOBILE	Broadcast Radio (TV)(73)
				BROADCASTING	LPTV. TV Translator/Booster (74G)
				NG115 NG128 NG142 NG159	Low Power Auxiliary (74H)
				763-775	
				FIXED	LPTV, TV Translator/Booster (74G)
				MUBILE	Low Power Auxiliary (74H)
				NG115 NG128 NG142 NG158 NG159	
				775-793	
				FIXED	Wireless Communications (27)
				MUBILE RPOADCASTING	Broadcast Radio (TV)(73)
790-862				NICTTE NCTO NCTED	LPTV, TV TRANSIATOR/BOOSTER (740) Low Power Auxiliary (74H)
FIXED				793-805	
BROADCASTING				FIXED	LPTV. TV Translator/Booster (74G)
				MOBILE	Low Power Auxiliary (74H)
				NG115 NG128 NG142 NG158	Private Land Mobile (90R)
				NG159 one one	
				803-800 FIXED	Wireless Communications (27)
				MOBILE	LPTV, TV Translator/Booster (74G)
				BROADCASTING	Low Power Auxiliary (74H)
	000 000			NG115 NG128 NG142 NG159	
	806-890 FIXED			806-809 I AND MORII F	Drivate I and Mohile (00)
	MOBILE 5.317A			000 040	
	BROADCASTING			FIXED	Public Mobile (22)
				LAND MOBILE	Private Land Mobile (90)
				849-851 AERONAUTICAL MOBILE	Public Mobile (22)
				851-854	(mail sources and and
5.312 5.314 5.315 5.316 5.319 5 321				LAND MOBILE	Private Land Mobile (90)
9.341 862-890				854-894 EIVED	
FIXED					Prublic Moule (zz) Private Land Mobile (90)
MOBILE except aeronautical mobile 5 317A					
BROADCASTING 5.322					
5.319 5.323	5.317 5.318				
				US116 US268	

Federal Register / Vo	ol. 73, No. 88/	/Tuesday, May 6,	2008/Rules and	Regulations

890-942	890-902	890-942	890-902		
FIXED MOBILE except aeronautical mobile 5.317A	FIXED MOBILE except aeronautical mobile 5.317A	FIXED MOBILE 5.317A BROADCASTING		894-896 AERONAUTICAL MOBILE US116 US268	Public Mobile (22)
Radiolocation		Kauloucation		896-901 FIXED LAND MOBILE US116 US268	Private Land Mobile (90)
			50 USCOLL 245011	901-902 FIXED MOBILE	Personal Communications (24)
	902-928 902-928 FIXED Amateur Mobile except aeronautical mohile 5 3754		902-109 03209 04 902-928 RADIOLOCATION G59	902-928	ISM Equipment (18) Private Land Mobile (90) Amateur (97)
	Radiolocation 5.150 5.325 5.326		5.150 US218 US267 US275 G11	5.150 US218 US267 US275	
	928-942 FIXED MOBILE except aeronautical		928-932	928-929 FIXED US116 US268 NG120	Public Mobile (22) Private Land Mobile (90) Fixed Microwave (101)
	Radiolocation			929-930 FIXED LAND MOBILE US116 US268	Private Land Mobile (90)
				930-931 FIXED MOBILE US116 US268	Personal Communications (24)
			US116 US268 G2	931-932 FIXED LAND MOBILE US116 US268	Public Mobile (22)
			932-935 FIXED US268 G2	932-935 FIXED US268 NG120	Public Mobile (22) Fixed Microwave (101)
			935-941	935-940 FIXED LAND MOBILE US116 US268	Private Land Mobile (90)
				940.941 FIXED MOBILE	Personal Communications (24)
5.323	5.325	5.327	US116 US268 G2	US116 US268	Page 28

Table of Frequency Allocations		941-143	941-1435 MHz (UHF)		Page 29
	International Table		United	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
(See previous page)			941-944	941-944	Public Mobile (22)
942-960 FIXED	942-960 FIXED	942-960 FIXED	FIXED US268 US301 G2	FIXED US268 US301 NG30 NG120	Aural Broadcast Auxiliary (74E) Fixed Microwave (101)
MUBILE except aeronauucai mobile 5.317A BROADCASTING 5.322		BROADCASTING	944-960	944-960 FIXED	Public Mobile (22) Aural Broadcast Auxiliary (74E) Low Power Auxiliary (74H)
5.323		5.320		NG120	Fixed Microwave (101)
960-1164 AERONAUTICAL RADIONAVIGATION 5.328	DN 5.328		960-1164 AERONAUTICAL RADIONAVIGATION 5.328	328	Aviation (87)
1164-1215 AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B	ON 5.328 pace-to-Earth) (space-to-spac	e) 5.328B	US224 US400 1164-1215 AERONAUTICAL RADIONAVIGATION 5.328 RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space)	328 o-Earth) (space-to-space)	
5.328A			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)	: (active) pace-to-Earth) (space-to-spac	e) 5.328B 5.329 5.329A	1215-1240 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G56 (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			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	E (active) pace-to-Earth) (space-to-spac	e) 5.328B 5.329 5.329A	1240-1300 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G56 SPACE RESEARCH (active) 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	335A		5.332 5.335	5.282	
1300-1350 AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION-SATELLITE (Earth-to-space) 5.149 5.337A	DN 5.337 arth-to-space)		1300-1350 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation G2 IIS342	1300-1350 AERONAUTICAL RADIONAVIGATION 5.337 LIS342	Aviation (87)
1350-1400 FIXED MOBILE RADIOLOCATION	1350-1400 RADIOLOCATION		1350-1390 FIXED MOBILE RADIOLOCATION G2	1350-1390	
			5.334 5.339 US311 US342 G27 G114	5.334 5.339 US311 US342	

_	1390-1395	1390-1392	
		FIXED MOBILE except aeronautical mobile Fixed-satellite (Earth-to-space) US368	Wireless Communications (27)
		5.339 US311 US342 US351 US398	
		1392-1395 FIXED MOBILE except aeronautical mobile	
	5.339 US311 US342 US351 US398	5.339 US311 US342 US351 US398	
	1395-1400 LAND MOBILE (medical telemetry and medical telecommand)	dical telecommand)	Personal (95)
5.149 5.338 5.339 5.339A 5.149 5.334 5.339 5.339A	5.339 US311 US342 US351 US398		
1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	1400-1427 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	sive)	
5.340 5.341	5.341 US246		
10211201	1427 1420 E	1427 1420 E	
142/-1429 SPACE OPERATION (Earth-to-space) FIXED MORII F excent aeronautical mobile	LAND MOBILE (medical telemetry and medical telecommand) US350	1427-1423.5 LAND MOBILE (telemetry and telecommand) Fixed (telemetry)	Private Land Mobile (90) Personal (95)
5.341			
1452	5.341 US352 US398	5.341 US350 US352 US398	
FIXED FIXED ANDBILE except aeronautical mobile MOBILE 5.343	1429.5-1432	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	5.341 US350 US352 US398	
	1432-1435	1432-1435 FIXED MOBILE except aeronautical mobile	Wireless Communications (27)
	5.341 US361	5.341 US361	
5.339A 5.341 5.342 5.339A 5.341			Page 30

\_

Tabla of Eroniconov Allocations		1136 1660 A MU- (1145)	Mu- (1115)	Darro 21
I aris of Lieducity Allocatoris	International Table	1,0001-0041	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table Non-Federal Table	
(See previous page)	2			
1452-1492 FIXED	1452-1492 FIXED		MUBILE (aeronautical telemetry)	Aviation (87)
MOBILE except aeronautical mobile BROADCASTING 5.345 5.347	MOBILE 5.343 BROADCASTING 5.345 5.347			
BROADCASTING-SATELLITE 5.345 5.347 5.347A	BROADCASTING-SATELLITE 5.345 5.347 5.347A	347 5.347A		
5.341 5.342	5.341 5.344			
1492-1518 FIXED	1492-1518 FIXED	1492-1518 FIXED		
MOBILE except aeronautical mobile	MOBILE 5.343	MOBILE		
5.341 5.342	5.341 5.344	5.341		
1518-1525 FIXED	1518-1525 FIXED	1518-1525 FIXED		
MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348C	MOBILE 5.343 MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.348C	MOBILE MOBILE-SATELLITE (space-to-Earth) 5.348 5.348A 5.348B 5.348C		
5.341 5.342	5.341 5.344	5.341	5.341 US78	
1525-1530 SPACE OPERATION (space-to-Earth)	1525-1530 SPACE OPERATION (space-to-Earth)	1525-1530 SPACE OPERATION (space-to-Earth)	1525-1535 MOBILE-SATELLITE (space-to-Earth) US315 US380	Satellite Communications (25)
PIXED MOBILE-SATELLITE (space-to-Earth)	S.347A 5.351A	PIXED MOBILE-SATELLITE (space-to-Earth)		Maritime (80)
5.34/A 5.351A Earth exploration-satellite Mobile except aeronautical mobile 5.349	Earth exploration-satellite Fixed Mobile 5.343	5.34/A 5.351A Earth exploration-satellite Mobile 5.349		
5.341 5.342 5.350 5.351 5.352A 5.354	5.341 5.351 5.354	5.341 5.351 5.352A 5.354		
1530-1535	1530-1535			
SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.3474 5.351A 5.353A	SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A 5.353A Earth exploration-satellite	347A 5.351A 5.353A		
Earm exploration-satellite Fixed Mobile except aeronautical mobile	Fixed Mobile 5.343			
5.341 5.342 5.351 5.354	5.341 5.351 5.354		5.341 5.351	
1535-1559 MOBILE-SATELLITE (space-to-Earth) 5.347A 5.351A	47A 5.351A		1535-1559 MOBILE-SATELLITE (space-to-Earth) US308 US309 US315 US380	Satellite Communications (25) Maritime (80)
5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A 5.359 5.362	5.357 5.357A 5.359 5.362A		5.341 5.351 5.356	Aviation (87)
1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-1	1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.329A		1559-1610 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space)	Aviation (87)
5.341 5.362B 5.362C 5.363			5.341 US208 US260 US343	

ions (25)				ions (25)		ions (25)						Page 32
Satellite Communications (25) Aviation (87)				Satellite Communications (25) Maritime (80)	Aviation (87)	Satellite Communications (25) Aviation (87)						
1610-1610.6 MOBILE-SATELLITE (Earth-to-space) US319 US380 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) 5.341 5.364 5.366 5.367 5.368 5.372 US208	Ibiu Ibi 13.8 MOBILE-SATELITE (Earth-to-space) US319 US380 RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) 5.341 5.364 5.366 5.367 5.368 5.372 US208 US342	1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) US319 US380 AERONAUTICAL RADIONAVIGATION US260 RADIODETERMINATION-SATELLITE (Earth-to-space) Mobile-satellite (space-to-Earth)	5.341 5.364 5.365 5.366 5.367 5.368 5.372 US208	1626.5-1660 MOBILE-SATELLITE (Earth-to-space) US308 US309 US315 US380	5.341 5.351 5.375	1660-1660.5 MOBILE-SATELLITE (Earth-to-space) US308 US309 US380 RADIO ASTRONOMY	5.341 5.351 US342	1660.5-1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive)			5 341 IIS246	
1610-1610.6 5.351A 5.351A AERONAUTICAL RADIONAVIGATION Radiodetermination-satellite (Earth-to-space) 5.368 5.359 5.372 5.368 5.366 5.367	1610.0-1013.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION Radiodetermination-satellite (Earth-to-space) 5.149 5.341 5.355 5.359 5.364 5.366 5.367 5.369 5.372	1613.8-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION Mobile-satellite (space-to-Earth) 5.347A Radiodetermination-satellite (Earth-to-space)	5.341 5.355 5.359 5.364 5.365 5.366 5.367 5.368 5.369 5.372									
1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-SATELLITE (Earth-to-space) 5.371 5.364 5.366 5.367 5.368 5.370 5.372	1610.5-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION RADIODETERMINATION- SATELLITE (Earth-to-space) 5.149 5.341 5.366 5.367 5.368 5.370 5.372	16138-1626.5 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION RADIODETERMINATION-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	351A	A 5.359 5.362A 5.374 5.375 5.376	351A	A			348C 5.379B 5.379C		
1610-1610.6 MOBILE-SATELLITE (Earth-to-space) 5.351A AERONAUTICAL RADIONAVIGATION 5.361 5.368 5.369 5.371 5.376 5.367 5.368 5.369 5.371 5.372	16101-1613.8 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY AERONAUTICAL RADIONAVIGATION 5.149 5.341 5.355 5.359 5.363 5.364 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 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	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	1660-1660.5 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY	5.149 5.341 5.351 5.354 5.362A 5.376A	1660.5-1668 RADIO ASTRONOMY SPACE RESEARCH (passive) Eived	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)	Mobile except aeronautical mobile 5 149 5 341 5 379 5 3794 5 379D	

	1668.4-2200	1668.4-2200 MHz (UHF)		Page 33
International Table		United Sta	United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
1668.4-1670 METEOROLOGICAL AIDS		H1668.4-1670 METEOROLOGICAL AIDS (radiosonde) PADIO ASTDONIOMY 11574	le)	
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		5.341 US99 US342		
1670-1675 METEOROLOGICAL AIDS FIXED		1670-1675	1670-1675 FIXED MOBILE except aeronautical	Wireless Communications (27)
METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE 5.380			mobile	
MUBILE-SALELLITE (EARTH-10-Space) 5.348C 5.379B 5.341 5.379D 5.379E 5.380A		5.341 US211 US362	5.341 US211 US362	
1675-1690 METEOROLOGICAL AIDS		METEOROLOGICAL AIDS (radiosonde)	le)	
TIAED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341			du <del>c</del> -lu-Ealurj	
1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) (space-to-Earth)	space-to-Earth)			
Mobile except aeronautical mobile 5.289 5.341 5.382 5.289 5.341 5.382		5.289 5.341 US211		
L-SATELLITE (sp onautical mobile	1700-1710 FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	1700-1710 FIXED G118 METEOROLOGICAL-SATELLITE (space-to-Earth)	1700-1710 METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed	
5.289 5.341	5.289 5.341 5.384	5.289 5.341	5.289 5.341	
1710-1930 FIXED MOBILE 5.380 5.384A 5.388A 5.388B		1710-1755	1710-1755 FIXED MOBILE	Wireless Communications (27)
		5.341 US311 US378 1755-1850 F1X5ED	5.341 US311 US378 1755-1850	
		MUBILE SPACE OPERATION (Earth-to-space) G42		

			1		
970 -E 5.388A 5.388B	1930-1970 FIXED MOBILE 5.388A 5.388B Mobile-satellite (Earth-to-space)	1930-1970 FIXED MOBILE 5.388A 5.388B			RF Devices (15) Personal Communications (24) Fixed Microwave (101)
980 E 5.388A 5.388B	9.388	0.300			
5.388 1000 2010				NG177	
FIXED MOBILE MOBILE SATELLITE (Earth-to-space) 5.351A 5.388 5.3898 5.389F	) 5.351A			2000-2020 MOBILE-SATELLITE (Earth-to-space) US380	Satellite Communications (25)
	2010-2025 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5 388 5 390C 5 389F 5 390	2010-2025 FIXED MOBILE 5.388A 5.388B 5.388		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-to-space) (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)	2025-2110 FIXED NG118 MOBILE 5.391	TV Auxiliary Broadcasting (74F) Cable TV Relay (78) Local TV Transmission (101J)
SPACE RESEARCH (Earth-to-space) (space-to-space) 5.392	) (space-to-space)			5.392 US90 US222 US346 US347 US393	
2110-2120 FIXED MOBILE 5.388A 5.388B SPACE RESEARCH (deep space) (Earth-to-space) 5.388	arth-to-space)			2110-2120 FIXED MOBILE US252	Public Mobile (22) Wireless Communications (27) Fixed Microwave (101)
2120-2160 FIXED MOBILE 5.388A 5.388B <u>5.388</u> 2160-2170 FIXED MOBILE 5.388A 5.388B	2120-2160 FIXED MOBILE 5.388A 5.388B Mobile-satellite (space-to-Earth) 5.388 2160-2170 FIXED MOBILE SATELLITE (space-to-Earth) MOBILE -SATELLITE (space-to-Earth)	2120-2170 FIXED MOBILE 5.388A 5.388B	000	2120-2180 FIXED MOBILE	
5.388 5.392A 5.388 5.3 2170-2200 FIXED MOBILE MOBILE SATELLITE (space-to-Earth) 5.351A 5.380 5.3805 5.3805 5.302A	5.388 5.389C 5.389E 5.390	5.388		NG153 NG178 2180-2200 MOBILE-SATELLITE (space-to-Earth) US380 NG168	Satellite Communications (25)
17760 0.3000 N.2001 N.2001					Page 34

Table of Frequency Allocations	SU	2200-2655	2200-2655 MHz (UHF)		Page 35
	International Table		United States Table	tes Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	ble	Non-Federal Table	
2200-2290 SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (s FIXED MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space)	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) MOBILE (line-of-sight only) MOBILE (line-of-sight only) MOBILE (line-of-sight only) MOBILE (line-of-sight only) SPACE RESEARCH (space-to-Earth) (space-to-space)	2200-2290	
5.392			5.392 US303	US303	
2290-2300 FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	l mobile 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	2300-2450 FIXED MOBILE			2300-2305 Amateur	Amateur (97)
Amateur Radiolocation	RADIOLOCATION Amateur		2305-2310	2305-2310 FIXED MOBILE except aeronautical mobile RADIOLOCATION Amateur	Wireless Communications (27) Amateur (97)
			US338 G122	US338	
			320 US339 cation G2	20 E US339 CASTING-SATELLITE 	Wireless Communications (27) Aviation (87)
			US327	5.396 US327	
			2320-2345 Fixed Radiolocation G2 US327	2320-2345 BROADCASTING-SATELLITE 5.396 LIS327	Satellite Communications (25)
		<u>.</u>	2345-2360	2345-2360	
			339 on G2	IS339 STING-SATELLITE SATION	Wireless Communications (27) Aviation (87)
			390 E US276 LOCATION G2 G120	2360-2390 2360-2390 MOBILE US276	Aviation (87)

Federal Register/Vol. 73, No. 88/Tuesday, May 6, 2008/Rules and Regulations

			2390-2395 MODIL F 115-376	2390-2395	Aviation (87)
				MOBILE US276	Amateur (97)
			2395-2400 G122	2395-2400 AMATEUR	Amateur (97)
			2400-2417	2400-2417 AMATEUR	ISM Equipment (18)
			5.150 G122	5.150 5.282	Amateur (97)
			2417-2450 Radiolocation G2	2417-2450 Amateur	
5.150 5.282 5.395	5.150 5.282 5.393 5.394 5.396		5.150 G124	5.150 5.282	
2450-2483.5	2450-2483.5		2450-2483.5	2450-2483.5	ISM Equipment (18)
FIXEU MORII F	FIXED   MOBILE			MOBILE	TV Auxiliary Broadcasting (74E)
Radiolocation	RADIOLOCATION			Radiolocation	Private Land Mobile (90)
5.150 5.397	5.150 5.394		5.150 US41	5.150 US41	Fixed Microwave (101)
2483.5-2500 FIXED	2483.5-2500 FIXED	2483.5-2500 FIXED	2483.5-2500 MOBILE-SATELLITE (space-to- E-abl) 112310 112300 112301	2483.5-2495 MOBILE-SATELLITE (space-to- Ecath) 115240 115260	ISM Equipment (18)
MOBILE MOBILE-SATELLITE (snace-to-Farth) 5.351A	MUBILE MOBILE-SATELLITE (space-to-Earth) 5.351A	MUBILE MOBILE-SATELLITE (space-to-Earth) 5.351A RADIOI OCATION	RADIODETERMINATION-SATELLITE (space-to-Earth) 5.398	RADIODETERMINATION-SATEL- LITE (space-to-Earth) 5.398	Satellite Communications (25)
Radiolocation	RADIODETERMINATION-	Radiodetermination-satellite (space-to-Earth)		5.150 5.402 US41 NG147	
	5.398 5.398 RADIOLOCATION	9.398 2		2495-2500 FIXED	ISM Equipment (18)
				MOBILE except aeronautical mobile MOBILE-SATELLITE (snace-to-	Satellite Communications (25)
				Earth) US319 US380	Wireless Communications (27)
5 150 5 271 5 207 5 208				LITE (space-to-Earth) 5.398	
5.399 5.400 5.402	5.150 5.402	5.150 5.400 5.402	5.150 5.402 US41	5.150 5.402 US41 US391 NG147	
2500-2520 FIXED 5.409 5.410 5.411	2500-2520 FIXED 5.409 5.411		2500-2655	2500-2655 FIXED US205	Wireless
MOBILE except aeronautical mobile 5.384A	FIXED-SATELLITE (space-to-Earth)   MOBILE except aeronautical mobile	h) 5.415 le 5.384A		MOBILE except aeronautical mobile	Communications (27)
MOBILE-SATELLITE (space-to Farth) 5.351A 5.403	MOBILE-SATELLITE (space-to-Earth	arth) 5.351A 5.403			
5.405 5.407 5.412 5.414	5.404 5.407 5.414 5.415A				
2520-2655	2520-2655	2520-2535			
FIXED 5.409 5.410 5.411 MOBILE except aeronautical	FIXED 5.409 5.411	FIXED 5.409 5.411 FIXED-SATELLITE (space-to-Earth) 5.415			
mobile 5.384A RPOANCASTING.SATELLITE	(space-to-Earth) 5.415	MOBILE except aeronautical mobile 5.384A			
5.413 5.416	mobile 5.384A	5.403 5.415A			
	BKUADUCASTING-SATELLITE 5.413 5.416	2535-2655			
		RIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A			
5.339 5.403 5.405 5.412		BROADCASTING-SATELLITE 5.413 5.416			
5.417C 5.417D 5.418B 5.418C	5.339 5.403 5.417C 5.417D 5.418B 5.418C	5.339 5.417A 5.417B 5.417C 5.417D 5.418B 5.418C 5.418D 5.418A 5.418B 5.418C	5.339 US205	5.339	
					Page 36

Table of Frequency Allocations		2655-4990 MHz (UHF/SHF)	4z (UHF/SHF)		Page 37
-	International Table			United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
2655-2670 FIXED 5.409 5.410 5.411 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.3474 5.413 5.415 Earth exploration-satellite (passive) Radio astronomy Space research (passive) 5.149 5.412 5.420 5.149 5.412 5.420 2670-2690 FIXED 5.409 5.411 MOBILE except aeronautical mobile 5.384A MOBILE except aeronautical mobile	2655-2670 FIXED 5.409 5.411 FIXED 5.409 5.411 (space-to-Earth) 5.415 MOBILE except aeronautical mobile (space-to-Earth) 5.416 5.384A BROADCASTING-SATELLITE 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive) 5.149 5.420 5.347A 5.149 5.420 5.347A 5.149 5.415 (space-to-Earth) 5.347A 5.415 (space-to-Earth) 5.347A 5.415 (space-to-Earth) 5.347A 5.415 (space-to-Earth) 5.347A 5.415 (space-to-Earth) 5.347A 5.415 (space-to-Earth) 5.347A 5.415 MOBILE except aeronautical mobile 5.384 MOBILE except aeronautical mobile 5.384 MOBILE except aeronautical mobile 5.384 MOBILE except aeronautical mobile 5.387 MOBILE except aeronautical mobile 5.387 MOBILE except aeronautical mobile 5.387 MOBILE except aeronautical mobile 5.387 MOBILE except aeronautical mobile	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) 5.149 5.420 5.149 5.420 5.149 5.420 5.149 5.420 5.149 5.420 5.149 5.420 5.140 5.411 FIXED 5.409 5.411 FIXED 5.409 5.411 FIXED 5.409 5.411 FIXED 5.405 Space research (passive) 5.384 MOBILE except aeronautical mobile 5.384 MOBILE SATELLITE (Earth-to- space) 5.351A 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 5.419 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) 5 340 5 422	(passive)		2690-2700 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) IIS246	(passive)	
2700-2900 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	N 5.337		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 5.42/			5.42/ US44 US316	5.42/ US316	
3100-3300 RADIOLOCATION Earth exploration-satellite (active) Space research (active)			s 100-3300 RADIOLOCATION G59 Earth exploration-satellite (active) Space research (active)	3 100-3300 Earth exploration-satellite (active) Space research (active) Radiolocation	Private Land Mobile (90)
5.149 5.428			US342	US342	

3300-3400 RADIOLOCATION	3300-3400 RADIOLOCATION	3300-3400 RADIOLOCATION	3300-3500 RADIOLOCATION US108 G2	3300-3500 Amateur	Private Land Mobile (90)
	Amateur Fixed Mobile	Amateur			Amaleur (97)
5.149 5.429 5.430	5.149 5.430	5.149 5.429			
3400-3600 FIXED FIXED.SATELLITE (snare-to-Farth)	3400-3500 FIXED FIXED-SATELLITE (snare-tn-Farth)				
Mobile Radiolocation	Amateur Mobile				
	Radiolocation 5.433				
	3500-3700		3500-3650	3500-3600	
5.431			RADIOLOCATION G59	Radiolocation	Private Land Mobile (90)
3600-4200 FIXED FIXED-SATELLITE (space-to-Earth)	FIXEU-SALELLILE (space-to-Earth) MOBILE except aeronautical mobile Radiolocation 5.433		AERONAULICAL RADIONAVIGATION (ground-based) G110	3600-3650 FIXED-SATELLITE (space-to-Earth) US245	
MODILE			US245 2650 2700	Kadiolocation	
			3650-3700	3650-3700 FIXED FIXED-SATELLITE (space-to-Earth) NG169 NG185	Satellite Communications (25) Private Land Mobile (90)
	5.435		US348 US349	MOBILE except aeronautical mobile US348 US349	
	3700-4200		3700-4200	3700-4200	
	FIXED			41	International Fixed (23)
	MOBILE except aeronautical mobile			r i AED-SATELLITE (Space-to-Editi) NG180	Communications (25) Fixed Microwave (101)
4200-4400 AERONAUTICAL RADIONAVIGATION 5.438	0N 5.438		4200-4400 AERONAUTICAL RADIONAVIGATION	z	Aviation (87)
5.439 5.440			5.440 US261		
4400-4500 FIXED MOBILE			4400-4500 FIXED MOBILE	4400-4500	
4500-4800 FIXED			4500-4800 FIXED	4500-4800 FIXEN_SATELLITE (seases to Fasth)	
FIXED-SATELLITE (space-to-Earth) 5.441	5.441		MOBILE	5.441 US245	
MOBILE			US245		
4800-4990 FIXED MORILE 5 442			4800-4940 FIXED MORII F	4800-4940	
Radio astronomy			US203 US342	US203 US342	
		<u> </u>	4940-4990	4940-4990	
				FIXED MOBILE except aeronautical mobile	Private Land Mobile (90)
5.149 5.339 5.443			5.339 US311 US342 G122	5.339 US311 US342	
					Page 38

Table of Frequency Allocations	4990-	4990-5925 MHz (SHF)		Page 39
International Table	ll Table	United Sta	United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table	ole Region 3 Table	Federal Table	Non-Federal Table	
4990-5000 FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive)		4990-5000 RADIO ASTRONOMY US74 Space research (passive)		
5.149		US246		
5000-5010 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space)		5000-5010 AERONAUTICAL RADIONAVIGATION US260 RADIONAVIGATION-SATELLITE (Earth-to-space)	(260 Space)	Aviation (87)
5.367		5.367 US211 US344		
5010-5030 AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.328B 5.443B	ace-to-space) 5.328B 5.443B	5010-5030 AERONAUTICAL RADIONAVIGATION US260 RADIONAVIGATION-SATELLITE (space-to-Eaith) (space-to-space) 5.443B	.260 -Earth) (space-to-space) 5.443B	
5.367		5.367 US211 US344		
5030-5150 AERONAUTICAL RADIONAVIGATION		5030-5250 AERONAUTICAL RADIONAVIGATION US260	5030-5150 AERONAUTICAL RADIONAVIGATION US260	Satellite Communications (25) Aviation (87)
5.367 5.444 5.444A			5.367 5.444 5.444A US211 US344	
5150-5250 AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B			5150-5250 AERONAUTICAL RADIONAVIGATION US260 FIXED-SATELLITE (Earth-to-space) FIATD 115744	RF Devices (15) Satellite Communications (25) Aviation (87)
5.446 5.447 5.447B 5.447C		5.367 5.444 US211 US307 US344	5.447C US211 US307	
5250-5255 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION		5250-5255 EARTH EXPLORATION-SATELLITE (active)	5250-5255 Earth exploration-satellite (active) Radiolocation	RF Devices (15) Private Land Mobile (90)
SPACE RESEARCH 5.447D MOBILE except aeronautical mobile 5.446A 5.447F		RADIOLOCATION G59 SPACE RESEARCH (active) 5.447D	Space research	
5.447E 5.448 5.448A		5.448A		
5255-5350 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) MOBILE except aeronautical mobile 5.446A 5.447F		525-5350 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH (active)	525-5350 Earth exploration-satellite (active) Radiolocation Space research (active)	
5.447E 5.448 5.448A		5.448A	5.448A	
5350-5460 EARTH EXPLORATION-SATELLITE (active) 5.449B SPACF RESEAPCH (active) 5.448C		5350-5460 EARTH EXPLORATION-SATELLITE (active) 5.448B	5350-5460 AERONAUTICAL RADIONAVIGATION 5.449	Aviation (87) Private I and Mohile (90)
AERONAUTICAL RADIONAVIGATION 5.449 RADIOLOCATION 5.448D		SPACE RESEARCH (active) AERONAUTICAL RADIONAVIGATION 5.449	Earth exploration-satellite (active) 5.448B Space research (active)	
		RADIOLOCATION G56	Radiolocation	
		US390 G130	US390	

Control Contro Control Control Control Control Control Control Control Contr	5460-5470 RADIONAVIGATION 5.449 EARTH EXPLORATION SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION 5.448D 5.448B	ctive)		5460-5470 RADIONAVIGATION 5.449 US65 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION G56 5.448B US49 G130	5460-5470 RADIONAVICATION 5.449 US65 Earth exploration-satellite (active) Space research (active) Radiolocation 5.448B US49	Maritime (80) Aviation (87) Private Land Mobile (90)
Revolution/Unication         Same setup         <	5470-5570 MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5.4 EARTH EXPLORATION-SATELLITE (a SPACE RESEARCH (active) RADIOLOCATION 5.450B 5.448B 5.450 5.451	446A 5.450A Ictive)		5470-5570 MARITIME RADIONAVIGATION US65 EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (active) RADIOLOCATION G56 5.44BB 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)
5.451         5.452         5.452         5.452         5.452         15.50         5.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.50         15.452         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.453         15.150         15.282         15.15         15.475         15.15         15.453         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.282         15.150         15.150         15.150         15.150         15.150         15.150         15.150         15.150         15.	5570-5650 MARITIME RADIONAVIGATION MOBILE except aeronautical mobile 5. RADIOLOCATION 5.450B	446A 5.450A		5570-5600 MARITIME RADIONAVIGATION US65 RADIOLOCATION G56 US50 G131 5600-5650 MARITIME RADIONAVIGATION US65 MARITIME RADIONAVIGATION US65 MARITIME RADIONAVIGATION US65 RADIOLOCATION G56	5570-5600 Maritime Radionavigation US65 Radiolocation US50 5600-5650 Maritime Radionavigation US65 Maritime Radionavigation US65 Radiolocation	
830         572-5830           833         572-5830           SATELITE (Earth-to-space)         572-5830           Amateur         2-SATELITE (Earth-to-space)           Amateur         5.150         5.455           5.415         5.455         5.455           5.415         5.455         5.455           5.415         5.455         5.455           5.415         5.455         5.455           5.415         5.455         5.455           5.415         5.455         5.455           5.416         5.150         5.455           850         5830-5850         5830-5850           850         5830-5855         5830-5855           850         5.150         5.455           5.455         5.455         5.455           850         5.455         5.455           850-5925         5850-5925         5850-5925           850-5925         5850-5925         5850-5925           850-5925         5850-5925         5850-5925           850-5925         5850-5925         5850-5925           850-5925         5850-5925         5850-5925           85150         5455         5450	5.450 5.451 5.452 5650-5725 MOBILE except aeronautical mobile 5.4 RADIOLOCATION Amateur Space research (deep space) 5.287 5.451 5.453 5.454 5.455	446A 5.450A		2.422 USOU G131 5650-5925 RADIOLOCATION G2	3.492 U530 5650-5830 Amateur	RF Devices (15) ISM Equipment (18) Amateur (97)
ur-satellite (space-to-Earth) 5.451 5.455 5.456 5.150 5.453 5.455 5.850-5925 5.455 5.455 5.456 5.150 5.453 for the second seco		5725-5830 RADIOLOCATION Amateur 5.150 5.453 5.455 5830-5850 RADIOLOCATION Amateur Amateur-satellite (space-to-Earth)			5.150 5.282 5830-5850 Amateur Amateur-satellite (space-to-Earth)	
5.150 5.150	satellite (space-to-Earth) 151 5.453 5.455 5.456 5 ATELLITE (Earth-to-space)	5.150 5.453 5.455 5850-5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Amateur Radiolocation	5850-5925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Radiolocation		5.150 5850-5925 FIXED-SATELLITE (Earth-to-space) US245 MOBILE NG160 Amateur	ISM Equipment (18) Private Land Mobile (90) Personal Radio (95) Amateur (97)
		5.150	5.150	5.150 US245	5.150	Page 40

Table of Frequency Allocations 5925-80	5925-8025 MHz (SHF)		Page 41
International Table		United States Table	FCC Rule Part(s)
Region 1 Table   Region 2 Table   Region 3 Table	Federal Table	Non-Federal Table	
ITE (Earth-to-sp	5925-6425	5925-6425 FIXED NG41 FIXED-SATELLITE (Earth-to-space) NG181	International Fixed (23) Satellite Communications (25) Fixed Microwave (101)
MOBILE	6425-6525	6425-6525 FIXED-SATELLITE (Earth-to-space) MOBILE	TV Broadcast Auxiliary (74F) Cable TV Relay (78)
	5.440 5.458	5.440 5.458	Fixed Microwave (101)
	6525-6700	6525-6700 FIXED FIXED-SATELLITE (Earth-to-space)	Fixed Microwave (101)
5.149 5.440 5.458	5.458 US342	5.458 US342	
6700-7075 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE	6700-7125	6700-6875 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 5.458 5.4580 5.4582	Satellite Communications (25) Fixed Microwave (101)
		3.438 3.438A 3.438B 687F 7075	
		00.9-7023 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) NG172 MOBILE NG171	TV Broadcast Auxiliary (74F) Cable TV Relay (78)
5.458 5.458A 5.458B 5.458C		5.458 5.458A 5.458B	
7075-7145 FIXED MOBILE		7075-7125 FIXED NG118 MOBILE NG171	
	5.458	5.458	
5.458 5.459	7125-7145 FIXED 5.458 G116	7125-7190	
7145-7235 FIXED MOBILE SDAFE DESEADECH (Farth-In-senare) 5,460	7145-7190 FIXED SPACE RESEARCH (deep space) (Farhtio-snace) LIS262		
	5.458 G116	5.458 US262	
	7190-7235 FIXED SPACE RESEARCH (Earth-to-space) G133	7190-7235	
5.458 5.459	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	7300 SATELLITE (space-to-Earth) _E-SATELLITE (space-to-Earth)	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)		
	G117		
7750-7850 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B MOBILE except aeronautical mobile	7750-7850 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B		
7850-7900 FIXED MOBILE except aeronautical mobile	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		
194 <u>6</u>	G11/		Page 42

Table of Frequency Allocations		8025-10000 MHz (SHF)		Page 43
	International Table		United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table Region 3 Table	able Federal Table	Non-Federal Table	
8025-8175 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED	ITE (space-to-Earth)	8025-8175 EARTH EXPLORATION-SATELLITE (space-to-Earth)	8025-8400	
FIXED.SATELLITE (Earth-to-space) MOBILE 5.463	(e)	FIXED FIXED-SATELLITE (Earth-to-space) Mobile-satellite (Earth-to-space) (no airborne transmissions)		
5.462A		US258 G117		
8115-8215 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED	ITE (space-to-Earth)	8175-8215 EARTH EXPLORATION-SATELLITE (space-to-Earth)		
FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463	ce) : (Earth-to-space)	FIXED FIXED RETEOROLOGICAL-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	ITE (space-to-Earth) ce)	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	US258	
8400-8500 FIXED MOBILE except aeronautical mobile SCACE DESELADCH (served to Earth) 5,465,5,466	ile arth 5 466	8400-8450 FIXED SPACE RESEARCH (deep space) (space-to-Earth)	8400-8450 Space research (deep space) (space-to-Earth)	
JEACE REJEARCII (Jpace-IC-E		8450-8500 FIXED SPACE RESEARCH (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) 5.468 5.469 5.469A	.ITE (active)	8550-8650 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH (active)	8550-8650 Earth exploration-satellite (active) Radiolocation Space research (active)	
		a		

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	9000-9200 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation G2	9000-9200 AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation	
5.471		US48	
9200-9300 RADIOLOCATION MARITIME RADIONAVIGATION 5.472	9200-9300 MARITIME RADIONAVIGATION 5.472 Radiolocation US110 G59	9200-9300 MARITIME RADIONAVIGATION 5.472 Radiolocation US110	Maritime (80) Private Land Mobile (90)
5.473 5.474	5.474	5.474	
<u>3300-9500</u> RADIONAVIGATION 5.476 Radiolocation	9300-9500 RADIONAVIGATION 5.476 US66 Radiolocation US51 G56 Meteorological aids	9300-9500 RADIONAVIGATION 5.476 US66 Radiolocation US51 Meteorological aids	Maritime (80) Aviation (87) Private Land Mobile (90)
5.427 5.474 5.475	5.427 5.474 US67 US71	5.427 5.474 US67 US71	
9500-9900 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)	ATELLITE	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	
			Page 44

\_

Table of Frequency Allocations		10-14.2 GHz (SHF)	z (SHF)		Page 45
changes ( faileshart i la alan i	International Table			United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
10-10.45 FIXED MOBILE RADIOLOCATION	10-10.45 RADIOLOCATION Amateur	10-10.45 FIXED MOBILE RADIOLOCATION	10-10.45 RADIOLOCATION G32	10-10.45 Amateur Radiolocation	Private Land Mobile (90) Amateur (97)
Amateur	5 479 5 480	Amateur 5.479	5.479 US58 US108	5.479 US58 US108 NG42	
10.45-10.5 RADIOLOCATION Amateur Amateur-satellite			10.45-10.5 RADIOLOCATION G32	10.45-10.5 Amateur Amateur-satellite Radiolocation	
5.481			US58 US108	US58 US108 NG42 NG134	
10.5-10.55 FIXED	10.5-10.55 FIXED MOBIL E		10.5-10.55 RADIOLOCATION		Private Land Mobile (90)
MUBILE Radiolocation			US59		
10.55-10.6 FIXED MOBILE except aeronautical mobile Badiolocation			10.55-10.6	10.55-10.6 FIXED	Fixed Microwave (101)
T0.6-10.68 T0.6-10.68 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation	(passive)		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) 5.340 5.483	: (passive)		10.68-10.7 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246 US355	E (passive)	
10.7-11.7 FIXED FIXED-SATELLITE (space-to-Earth) 5.441 5.484A (Earth-to-space) 5.484 Earcent aeronautical mobile MOBILE except aeronautical mobile		5.441 5.484A	10.7-11.7 US211	10.7-11.7 FIXED FIXED-SATELLITE (space-to- Earth) 5.441 US211 US355 NG104 NG182	Satellite Communications (25) Fixed Microwave (101)
11.7-12.5 FIXED MOBILE except aeronautical mobile BROADCASTING-SATELLITE BROADCASTING-SATELLITE	11.7-12.1 FIXED 5.486 FIXED 5.486 FIXED 5.484A Mobile except aeronautical mobile 5.485 5.488 12.1-12.2 FIXED-SATELLITE (space-to-Earth) 5.484A 5.484	11.7-12.2 FIXED MOBILE except aeronautical mobile BROADCASTING-SATELLITE BROADCASTING-SATELLITE	11.7-12.2	11.7-12.2 FIXED-SATELLITE (space-to- Earth) NG143 NG145 NG183 6 400 MC194	Satellite Communications (25)
	0.400 0.400 0.40A	0.40/ 0.40/N 0.49Z		+01 DA1 00+.6	

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 BRCADCASTING 5.4845 5.487	12.2-12.75	12.2-12.7 FIXED BROADCASTING-SATELLITE 5.4874.5.488.5.490	Satellite Communications (25) Fixed Microwave (101)
FIX:D-12.15 FIXED-SATELLITE (space-to- Earth) 5.484A (Earth-to-space)		FIXED-SATELLITE (space-to-Earth) FIXED-SATELLITE (space-to-Earth) 5.484A MOBILE except aeronautical mobile BROADCASTING-SATELLITE		12.7.12.75 12.7.12.75 FIXED NG118 FIXED-SATELLITE (Earth-to-space) MOBILE	TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)
3-494 3-495 3-490 12.75-13.25 FIXED FIXED-SATELLITE (Earth-to-space) 5.441 MOBILE Space research (deep space) (space-to-Earth)	5.441 -to-Earth)		12.75-13.25 US251	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)
13.25-13.4 EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active)	(active) DN 5.497		13.25-13.4 EARTH EXPLORATION- SATELLITE (active) AERONAUICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 6.4080	13.25-13.4 AERONAUTICAL RADIONAVIGATION 5.497 Earth exploration-satellite (active) Space research (active)	Aviation (87)
3.4.900 J.4.97 13.4-13.75 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space)	: (active) satellite (Earth-to-space)		13.4-13.75 EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION G59 SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.501B	13.4-13.75 Earth exploration-satellite (active) Radiolocation Space research Standard frequency and time signal-satellite (Earth-to-space)	Private Land Mobile (90)
5.490 5.500 5.501 5.502 13.75-14 FIXED-SATELLITE (Earth-to-space) 5.484A Earth exploration-satellite Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research 5.400 5.501 5.501 5.503	5.484A satellite (Earth-to-space)		13.75-14 RADIOLOCATION G59 Standard frequency and time signal-satellite (Earth-to-space) Space research US337 US356 US357	13.75-14 FIXED-SATELLITE (Earth-to-space) US337 Standard frequency and time signal-satellite (Earth-to-space) Space research Radiolocation US356 US357	Satellite Communications (25) Private Land Mobile (90)
14-14.25 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504C 5.506A Space research	5.457A 5.457B 5.484A 5.506 5.506B 04C 5.506A		14-14.2 Space research	14-14.2 FIXED-SATELLITE (Earth-to-space) NG183 Mobile-satellite (Earth-to-space) Space research	Satellite Communications (25)
5.504A 5.505					Page 46

\_

Table of Frequency Allocations		14.2-17.7 GHz (SHF)	GHz (SHF)		Page 47
	International Table		United	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
(See previous page)			14.2-14.4	14.2-14.47	
14.25-14.3 FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5. RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.506A 5.508A Space research	7A 5.457B 5.484A 5.506 5.506B 5.508A			FIXEU-SATELLITE (Earth-to-space) NG183 Mobile-satellite (Earth-to-space)	Satellie communications (25)
5.504A 5.505 5.508 5.509					
14.3.14.4 FIXED 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 Radionavigation-satellite	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	14.3-14.4 FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.484A 5.506 5.506B MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) 5.506A 5.509A Radionavigation-satellite			
5.504A	D.204A	0.304M	74 A 7 A 7		
14,4-14,47 FIXED FIXED	70 E 1670 E 1810 E 506 E 506B		14.4- 14.4/   Fixed   Mobilo		
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			14.47-14.5 Fixed	14.47-14.5 FIXED-SATELLITE (Earth-to-space)	
FIXED-SALELLILE (Earth-to-space) 5.45/A 5.45/B 5.484A 5.500 5.500B MOBILE except aeronautical mobile	2000.0 000.0 A844 3.400 A10		MODILE	Mobile-satellite (Earth-to-space)	
Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.509A Radio astronomy	5.506A 5.509A				
5.149 5.504A			US203 US342	US203 US342	
14.5-14.8 FIXED FIXED-SATELLITE (Earth-to-space) 5.510 MORII F	0		14.5-14.7145 FIXED Mobile Space research	14.5-14.8	
Space research			14.7145-14.8 MOBILE		
			Fixed Space research		
14.8-15.35 FIXED MOBILE			14.8-15.1365 MOBILE SPACE RESEARCH Fixed	14.8-15.1365	
Space research			US310	US310	
			15.1365-15.35 FIXED	15.1365-15.35	
			SPACE RESEARCH Mobile		
5.339			5.339 US211	5.339 US211	

25468

15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	passive)		15.35-15.4 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)	TE (passive)	
5.340 5.511 15.4-15.43 AERONAUTICAL RADIONAVIGATION			US246 15.4-15.43 AERONAUTICAL RADIONAVIGATION US260	TION US260	Aviation (87)
5.511D 15.43-15.63 FIXED-SATELLITE (Earth-to-space) 5.511A AERONAUTICAL RADIONAVIGATION	.511A		US211 15.43-15.63 AERONAUTICAL RADIONAVIGATION US260	15.43-15.63 FIXED-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION US260	Satellite Communications (25) Aviation (87)
<u>5.511C</u> 15.63-15.7			5.511C US211 US359 15.63-15.7	5.511C US211 US359	
AERONAU LICAL RADIONAVIGATION 6.6110	~		AERUNAU IILAL KAUJUNAVIGALIUN US200 115211		
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 16.6-17.1 RADIOLOCATION Space research (deep space) (Earth-to-space) 5.512 5.513	-space)		16.6-17.1 RADIOLOCATION G59 Space research (deep space) (Earth-to-space)		
3.312 3.315 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)	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	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 5.516 Radiolocation	17.3-17.7 Radiolocation US259 G59	17.3-17.7 FIXED-SATELLITE (Earth-to-space) US271 BROADCASTING-SATELLITE US402 NG163	Satellite Communications (25)
5.514	5.514 5.515 5.517	5.514	US402 G117	US259	
					Page 48

Table of Frequency Allocations		17.7-23.6 GHz (SHF)	SHz (SHF)		Page 49
Compton in oran	International Table		Unite	United States Table	FCC Rule Part(s)
Region 1 Table Region	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
.ITE (space-to-Earth) 1-to-space) 5.516	17.7-17.8 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.516	.ITE (space-to-Earth) -to-space) 5.516	17.7-17.8	17.7-17.8 FIXED FIXED-SATELLITE (Earth-to-space) US271	Satellite Communications (25) TV Broadcast Auxiliary (745)
MOBILE BROADCAS Mobile 5.51	BROADCASTING-SALELLIE Mobile 5.518 5.515 5.517	MOBILE	US401	US401 NG144	Cable TV Relay (78) Fixed Microwave (101)
17.8-18.1 17.8-18.1 FIXED-S/ 5.484A MORILE	17.8-18.1 17.8-18.1 FIXED-SATELLITE (space-to-Earth) 5.484A (Earth-to-space) 5.516 5.081 F	1	17.8-18.3 FIXED-SATELLITE (space-to-Earth) G117	17.8-18.3 FIXED	TV Broadcast Auxiliary (74F) Cable TV Relay (78) Fixed Microwave (101)
18.1-18.4			5.519 US334	5.519 US334 NG144	
FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B (Earth-to-space) MOBILE 5.519 5.521	A 5.516B (Earth-to-space) 5.520		18.3-18.6 FIXED-SATELLITE (space-to-Earth) G117	18.3-18.6 FIXED-SATELLITE (space-to-Earth) NG164	Satellite Communications (25)
18.4-18.6 FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B MOBILF	A 5.516B		US334	US334 NG144	
3 EXPLORATION-SATELLITE	18.6-18.8 EARTH EXPLORATION-SATELLITE	18.6-18.8 EARTH EXPLORATION-SATELLITE	18.6-18.8 EARTH EXPLORATION-	18.6-18.8 EARTH EXPLORATION-SATELLITE	
	(passive) XFD		SATELLITE (passive) FIXED-SATELLITE (space-to-	(passive) FIXED-SATELLITE (space-to-Earth)	
SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth) 5.516B 5.522B	SATELLITE (space-to-Earth)	Earth) US255 G117 SPACE RESEARCH (passive)	US255 NG164 SPACE RESEARCH (passive)	
MOBILE except aeronautical mobile   MOBIL Space research (passive)   SPACE	MOBILE except aeronautical mobile SPACE RESEARCH (passive)	MOBILE except aeronautical mobile Space research (passive)			
5.522A 5.522C 5.522A	Α	5.522A	US254 US334	US254 US334 NG144	
.ITE (space-to-Earth)	B 5.523A		18.8-20.2 FIXED-SATELLITE (space-to-Earth) G117	18.8-19.3 FIXED-SATELLITE (space-to-Earth) NG165	
MOBILE 19.3-19.7 FIXED EVED SATELLITE (snared-to-Earth) (Farth-In-snared) 5.523R 5.523C		5 523D 5 523E		US334 NG 144 19.3-19.7 FIXED FIXED-SATELLITE (space-to-Earth)	Satellite Communications (25) TV Broadcast Auxiliary
MOBILE				NG166 US334 NG144	(74F) Cable TV Relay (78) Fixed Microwave (101)
arth)	19.7-20.1 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B	19.7-20.1 FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B		19.7-20.1 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)	Satellite Communications (25)
Mobile-satellite (space-to-Earth) MUBIL 5.524 5.524	MUBILE-SATELLITE (Space-to-Earth) 5.524 5.525 5.526 5.527 5.528 5.529	Mobile-satellite (space-to-carut) 5.524		5.525 5.526 5.527 5.528 5.529 US334	
0.2 )-SATELLITE (space-to-Earth) 1 F-SATFI I ITF (snace-to-Earth)				20.1-20.2 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)	
5.524 5.525 5.526 5.527 5.528			US334	5.525 5.526 5.527 5.528 US334	

=

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 20.2-21.2 (Space-to-Earth) MOBILE-SATELLITE signal-s (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		
21.2-21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE		21.2-21.4 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE	ive)	Fixed Microwave (101)
SPACE RESEARCH (passive)		SPACE RESEARCH (passive) US263		
21.4-22 FIXED MOBILE 5.347A 5.530 S.347A 5.530	21.4-22 FIXED MOBILE BROADCASTING-SATELLITE 5.347A 5.530 5.531	21.4.22 FIXED MOBILE		
22-22.21 FIXED MOBILE except aeronautical mobile		22-22.21 FIXED MOBILE except aeronautical mobile		
5.149		US342		
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)	(ve)	
5.149 5.532		US263 US342		
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		Satellite Communications (25) Fixed Microwave (101)
5.149		US342		
23.55-23.6 FIXED MOBILE		23.55-23.6 FIXED MOBILE		Fixed Microwave (101)
				Page 50

Table of Frequency Allocations		23.6-30 GHz (SHF)	ihz (SHF)		Page 51
	International Table		United St	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
23.6-24 FADER OF ATION SATELLITE (2000) AND	(acciuc)		23.6-24 EADTH EVDI ODATIONI SATELI LITE (massium)	(nascino)	
EARTH EAFLORATION-SATELLITE RADIO ASTRONOMY	(avisebul)		RADIO ASTRONOMY US74	(avice b)	
SPACE RESEARCH (passive)			SPACE RESEARCH (passive)		
5.340			US246		
24-24.05			24-24.05	24-24.05	1011 [
AMATEUR-SATELLITE				AWATEUR-SATELLITE	Amateur (97)
5.150			5.150 US211	5.150 US211	
24.05-24.25			24.05-24.25 DADIOLOCATION CE0	24.05-24.25 Amateur	ISM Equipment (18)
Amateur Earth ovaloration satellito (antiuo)			Earth exploration-satellite (active)	Earth exploration-satellite (active)	Private Land Mobile (90)
Ealut exprovation - satemite (active)			5 150 5	Kauovauvi 6.160	
3.130 24 25 24 45	24 25 24 AE	24 25 24 AE	3.130 24.25.24.45	3.130 24 25 24 AE	
z4.25-z4.43 FIXED	24.63-24.43 RADIONAVIGATION	24.25-24.49 RADIONAVIGATION FIXED MODILE	CH: 47-07-147	2423-24.43 FIXED	Fixed Microwave (101)
	01 17 01 01		01 IF 01 0F		
24.45-24.75 FIXED INTER-SATELLITE	24.45-24.65 INTER-SATELLITE RADIONAVIGATION	24.45-24.65 FIXED INTER-SATELLITE	24.45-24.05 INTER-SATELLITE RADIONAVIGATION		Satellite Communications (25)
		MOBILE RADIONAVIGATION			
	5.533	5.533	5.533		
	24.65-24.75 INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)	24.65-24.75 FIXED INTER-SATELLITE MOBILE 5.533	24.65-24.75 INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)	h-to-space)	
24.75-25.25	24.75-25.25	24.75-25.25	24.75-25.05	24.75-25.05	
FIXED	FIXEU-SALELLILE (Earth-to-space) 5.535	FIXEU FIXED-SATELLITE (Earth-to-space) 5.535	KADIUNAVIGATIUN	FIXEU-SALELLILE (Earth-to-space) NG167 RADIONAVIGATION	Satellite Communications (25) Aviation (87)
		MOBILE	25.05-25.25	25.05-25.25 FIXED	Satellite Communications (25)
				FIXED-SATELLITE (Earth-to-space) NG167	Fixed Microwave (101)
25.25-25.5			25.25-25.5	25.25-25.5	
FIXED INTER-SATELLITE 5.536 MODILE			FIXEU INTER-SATELLITE 5.536 MORII F	Inter-satellite 5.536 Standard frequency and time signal-catellite (Farth-to-space)	
Mourt Standard frequency and time signal-satellite (Earth-to-space)	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) 5.536A	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 US258	
27-27.5 FIXED SATELLITE 5.536 INTER-SATELLITE (Earth-to-space) INTER-SATELLITE 5.536 5.537 MOBILE	27-27.5 FIXED INTER-SATELLITE 5.536 MOBILE	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	27.5-30	27.5-29.5 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	Satellite Communications (25) Fixed Microwave (101)
5.538 5.540 28.5-29.1 FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.516B 5.523A 5.539 MOBILE 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     29.5-29.9     29.5-29.9       29.5-29.9     Earth-to-space)     29.5-29.9       FIXED-SATELLITE (Earth-to-space)     FIXED-SATELLITE (Earth-to-space)       5.484A     5.516B     5.539       5.484A     5.516B     5.539       5.484A     5.516B     5.539       Earth exploration-satellite     5.484A       (Earth-to-space)     5.484A       6.516B     5.539       Earth exploration-satellite     (Earth-to-space)       (Earth-to-space)     5.541       Mobile-satellite (Earth-to-space)     5.541       Mobile-satellite (Earth-to-space)     5.541       6.525     5.521       5.520     5.541		29.5-29.9 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) 5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	Satellite Communications (25)
84A 5.516B 5.539 b) 5.541 5.543		29.9-30 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space)	
5.525 5.526 5.527 5.338 5.540 5.542		5.50.0 120.0 020.0 020.0	Page 52

Table of Frequency Allocations		30-39.5 (	30-39.5 GHz (EHF)		Page 53
	International Table		United States Table	es Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
30-31 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth) 5.542	<ul> <li>satellite (space-to-Earth)</li> </ul>		30-31 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth) G117	30-31 Standard frequency and time signal-satellite (space-to-Earth)	
31-31.3 FIXED 5.543A MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research 5.544 5.545	satellite (space-to-Earth)		31-31.3 Standard frequency and time signal-satellite (space-to-Earth)	31-31.3 FIXED MOBILE Standard frequency and time signal-satellite (space-to-Earth)	Fixed Microwave (101)
31.3-31.5 31.3-31.5 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	: (passive)		USCIT USSME 31.3-31B EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive)	ssive)	
31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile	31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile			
5.149 5.546	5.340	5.149	US246		
31.8.32 FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.5478 5.548	space-to-Earth)		31.8-32.3 RADIONAVIGATION US69 SPACE RESEARCH (deep space) (space-to-Earth) US262	31.8-32.3 SPACE RESEARCH (deep space) (space-to-Earth) US262	
32-32.3 FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	space-to-Earth)				
32.347 5.347C 5.346 32.3.33 FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547 5.547D 5.548			0.000 0.000	11200 0400	Aviation (87)
33-33.4 FIXED 5.547A RADIONAVIGATION 5.547 5.547E			33-334 RADIONAVIGATION US69 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	TION EARCH (deep space) ace) US262 G117	34.2-34.7 Radiolocation Space research (deep space) (Earth-to-space) US262 US360	
34.7-35.2 RADIOLOCATION Space research 5.550 5.549		34.7-35.5 Radiolocation	-
35.2-35.5 METEOROLOGICAL AIDS RADIOLOCATION 5.549	US360 G117	US360	
35.5.36 METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 6.640, 6.640,	35.5-36 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 112360 C117	35.5-36 Earth exploration-satellite (active) Radiolocation Space research (active)	
36-37 26-37 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149	36.37 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) US263 US342	ssive)	
37-37.5 FIXED MOBILE SPACE RESEARCH (space-to-Earth)	ARCH (space-to-Earth)	37-37-5 FIXED MOBILE	
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 ANCED-SATELLITE (space-to-Earth) MOBILE	Satellite Communications (25)
38-39.5 FIXED FIXED-SATELLITE (space-to-Earth)	38.38.6 FIXED MOBILE		
MOBILE Earth exploration-satellite (space-to-Earth) 5.547	38.6-39.5	38.6-39.5 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE NG175	Satellite Communications (25) Fixed Microwave (101)
			Page 54

Table of Frequency Allocations		39.5-50.2	39.5-50.2 GHz (EHF)		Page 55
	International Table		United St	United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table	Table	Region 3 Table	Federal Table	Non-Federal Table	
.ITE (space-to-Earth) 5. .LLITE (space-to-Earth) rt-satellite (space-to-Ear			39.5-40 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) US382	39.5-40 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE NG175	Satellite Communications (25) Fixed Microwave (101)
5.547			G117	US382	
40-40.5 EARTH EXPLORATION-SATELLITE (Earth-to-space) FIXED FIXED-SATELLITE (space-to-Earth) 5.516B MOBILE MOBILE SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth)	Jace)		40.40.5 EARTH EXPL ORATION- SATELLITE (Earth-to-space) FISELLITE (Earth-to-space) MOBILE-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (Earth-to-space) Earth exploration-satellite (space-to-Earth) G117	40-40.5 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)	Satellite Communications (25)
40.5-41 40.5-41 40.5-41 FIXED 40.5-41 FIXED FIXED SATELLITE (space-to-Earth) FIXED-SATELLITE BROADCASTING BROADCASTING BROADCASTING BROADCASTING BROADCASTING BODIe Mobile Mobile satellite (st	40.5-41 FIXED FIXED-SATELLITE (space-to- Earth) 5.516B BROADCASTING-SATELLITE BROADCASTING-SATELLITE Mobile-satellite (space-to-Earth)	40.5-41 FIXED FIXED-SATELLITE (space-to- Earth) BROADCASTING BROADCASTING-SATELLITE Mobile	40.5-41 FIXED-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth)	40.5-41 FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Fixed Mobile Mobile-satellite (space-to-Earth)	
5.547 5.547		5.547	US211 G117	US211	
41-42.5 FIXED FIXED-SATELLITE (space-to-Earth) 5.516B BROADCASTING BROADCASTING-SATELLITE Mobile			41-42.5	41-42 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE US211	
				42-42.5 Fixed Mobile Broadcasting Broadcasting-satellite	
5.547 5.551F 5.551H 5.551I			US211	US211	
42.5-43.5 FIXED			42.5-43.5 FIXED	42.5-43.5 RADIO ASTRONOMY	
FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY			FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile RADIO ASTRONOMY		
5.149 5.547			US342	US342	

43.5-47 Mobile 5.553 Mobile-Satellite Radionavigation Radionavigation-Satellite		43.5-45.5 FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) G117	43.5-45.5	
		45.5-46.9 MOBILE MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION-SATELLITE 5.554		RF Devices (15)
		7 .E .E-SATELLITE (Earth-to-space) NAVIGATION-SATELLITE	46.9-47 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION-SATELLITE	
5.554			5.554	
47-47.2 AMATEUR AMATEUR-SATELLITE		47-48.2	47-47.2 AMATEUR AMATEUR-SATELLITE	Amateur (97)
47.2-47.5 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE	552		47.2-48.2 FIXED US297 MOBILE	Satellite Communications (25)
.9 SATELLITE (Earth-to-space) (space-to-Earth) 5.516B	47.5-47.9 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MORI			
5.554A MOBILE				
47.9-48.2 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE	552			
9.332A 48.248.54 FIXED FIXED-SATELLITE (Earth-to-space) F.5522 (space-to-Earth) 5.5168 5.5548 5.558 MOBILE	48.2-50.2 FIXED MOBILE MOBILE	48.2-50.2 FIXED FIXED-SATELLITE (Earth-to-space) US297 MOBILE US264	297	
48.54.49.44 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE				
5.149 5.340 5.555	5.149 5.340 5.555	5.555 US342		
I				Page 56

Table of Frequency Allocations		20.1	50.2-71 GHz (EHF)		
	International Table		United Sta	United States Table	FCC Rule Part(s)
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
49.44-50.2 FIXED FIXED-SATELLITE (Earth-to-space) 5.552 (space-to-Earth) 5.516B 5.554 5.555B MORII F	(See previous page)		(See previous page)		
50.2-50.4 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	E (passive)		50.2-50.4 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)	ssive)	
<u>5.340</u> 50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Mobile-satellite (Earth-to-space)			US246 50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) G117	50.4-51.4 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space)	
51.4-52.6 FIXED MOBILE 5.547 5.556			51.4-52.6 FIXED MOBILE		
52.6-54.25 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	E (passive)		52.6-54.25 EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) US246	ssive)	
54.25-55.78 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive)	E (passive)		54.25-55.78 EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive)	ssive)	
5.5.905 55.78-569 EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	E (passive)		55.78-56.9 EARTH EXPLORATION-SATELLITE (passive) FIXED US379 INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) US263 US353	ssive)	
56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.558A MOBILE 5.558 SPACE RESEARCH (passive)	E (passive)		56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE G128 MOBILE 5.558 SPACE RESEARCH (passive)	56.9-57 EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE 5.558 SPACE RESEARCH (passive)	

1 00 1	ET E0 3		
97-96.4 ARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)	sive)	RF Devices (15)
FIXED TITER-SATELLITE 5.556A	FIXED INTER-SATELLITE 5.556A		
MUBILE 5:558 SPACE RESEARCH (passive)	MUBILE 5.558 SPACE RESEARCH (passive)		
5.547 5.557	US263		
58.2-59 EARTH EXPLORATION-SATELLITE (passive)	58.2-59 EARTH EXPLORATION-SATELLITE (passive)	sive)	
FIXED MOBILE	FIXED MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.54/ 5.556	US353 US354		
59-59.3 ERTH EXPLORATION-SATELLITE (passive)	59-59.3 EARTH EXPLORATION-SATELLITE	59-59.3 EARTH EXPLORATION-SATELLITE	
TIAEU INTER-SATELLITE 5.556A		(passive) FIXED	
MOBILE 5.558	INTER-SATELLITE 5.556A	MOBILE 5.558	
RADIOLOCATION 5.559 SPACE RESEARCH (passive)	MUBILE 5.338 RADIOLOCATION 5.559	KAUIULULATIUN 5.359 SPACE RESEARCH (passive)	
	SPACE RESEARCH (passive)		
		US353	
59.3-64 FIXED	59.3-64 FIVED	59.3-64 EIVEN	DE Douisoos (1E)
INTER-SATELLITE	SATELLITE	MOBILE 5.558	ISM Equipment (18)
MOBILE 5.558 RADIOI OCATION 5.559	MOBILE 5.558 RADIOLOCATION 5.559	RADIOLOCATION 5.559	
5.138	5.138 US353	5.138 115353	
64-65		64-65	
FIXED INTED SATELLITE	FIXED NTEP SATELLITE	FIXED MOBILE averant according to the file	
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	ואוסטורב בעיפטו מבוטוממורמו וווטטווב	
5.547 5.556			
65-66 EARTH EXPLORATION-SATELLITE	EXPLORATION-SATELLITE	65-66 EARTH EXPLORATION-SATELLITE	
FIXED		FIXED	
MOBILE EPECTATION SPACE PESCERATION SPACE PESCEARCE	SPACE RESEARCH	MOBILE except aeronautical mobile SDACF DESEADCH	
5.547			
66-71 Mirros Garrinar		66-71	
INTER-SALELLIE MOBILE 5.553 5.558	MUBILE 3.333 5.338 MOBILE-SATELLITE	INTER-SATELLITE MOBILE 5.553 5.558	
MOBILE-SATELLITE		MOBILE-SATELLITE	
RADIONAVIGATION RADIONAVIGATION-SATELLITE	KADIUNAVIGATIUN-SATELLITE		
5.554	5.554	5.554	
			Page 58

International Table	>		United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table	
71-74		71-74		
				Fixed Microwave (101)
FIXEU-SATELLITE (Space-to-carth)		FIXED-SALELLI E (Space-to-Earth)		
MOBILE-SATELLITE (space-to-Earth)		MOBILE-SATELLITE (space-to-Earth)		
		US389		
74-76		74-76	74-76	
		FIXED	FIXED	
FIXEU-SATELLITE (Space-10-Eatur) MOBILE		RINEU-SALELLILE (SPACE-10-EALU) MORILE	FIAEU-SATELLITE (Space-tu-Eatur)   MORIFE	
RECALCASTING		Snace research (snace-to-Earth)	BROADCASTING	
BROADCASTING-SATELLITE			BROADCASTING-SATELLITE	
Space research (space-to-Earth)			Space research (space-to-Earth)	
5.559A 5.561		US389	US389	
76-77.5		76-77.5	76-77	
RADIO ASTRONOMY		RADIO ASTRONOMY	RADIO ASTRONOMY	RF Devices (15)
RADIOLOCATION		RADIOLOCATION	RADIOLOCATION	Amateur (97)
Amateur Amateur catallito		bpace researcn (space-to-Earin)	Ruareur Space recoarch (coaco to Earth)	
Milateur -satellite Snare research (snare-in-Farth)			bace research (space-to-calin)	
			U3342	
				Amatour (07)
			RADIOLOCATION	
			Amateur	
			Amateur-satellite	
E 140		1115242	ppace research (space-to-rain)	
0.143 77 E 70		21000	100012 77 J 77	
		Dadio astronomy	01.0-10 MATEHD	
AWAI EUK AMATELIP.SATELLITE		Radio asilononity Snare research (snare-tn-Farth)	AMATEUR AMATEUR-SATEUITE	
AWAI EUR-SAI ELLI E Dodio octronomu		bhare research (share-to-calm)	Dadio astronomu	
Kaulu asu u luu lu Segen recearch (reased to Farth)			Reduct astronomy Space recearch (space to Farth)	
State research (space-to-carnit)		115242	110.212	
0.149 01.05		02342	U3342	<del></del>
10-13 DADIOLOCATION			10-13 RADIO ASTRONOMV	
Amaterir		RADIOI OCATION		
Amateur-satellite		Space research (space-to-Earth)	Amateur	
Radio astronomy			Amateur-satellite	
Space research (space-to-Earth)			Space research (space-to-Earth)	
5.149 5.560		5.560 US342	5.560 US342	
79-81		79-81	79-81	<del>.</del>
RADIO ASTRONOMY		RADIO ASTRONOMY	RADIO ASTRONOMY	
RADIOLOCATION		Earling Control (2000 10 Forth)	RADIOLOCATION	
Amateur estalita		phace research (space-to-Eann)	Annateur Amateur-sateilite	
Aniateur-bateine Snara research (snare-tn-Faith)			Spare recearch (spare-to-Farth)	
		115342		
5.149		US342	US342	

81-84 FIXED FIXED.SATELLITE (Earth-to-space)	81-84 FIXED FIXED SATELLITE (Earth-to-space) US297		Fixed Microwave (101)
MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) 5 140 5 661 A	MUBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) LIS342 1IS388 1IS389		
84.86 FIXED FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149	84-86 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY US342 US388 US389		
86-92 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5-340	86-92 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY US74 SPACE RESEARCH (passive) US246		
92-94 FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	92-94 Fixed Mobile Radio Astronomy Radiolocation US342 US388		RF Devices (15) Fixed Microwave (101)
94-94.1 EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy	IRATION- active) ON VRCH (active)	94.94.1 RADIOLOCATION Radio astronomy 5.562A	RF Devices (15)
94.1-95 FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	94.1-95 Fixed Mobile Radio Astronomy Radiolocation US342 US388		RF Devices (15) Fixed Microwave (101)
95-100 FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE	95-100 FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION-SATELLITE 5.554_115342		
0.149 0.004	31000 1000		Page 60

International Table         Chind States         FCC Rule Part(s)           Tegeno 1 2 fab         Regin 2 fable         Feenal Table         FCC Rule Part(s)           LUTE (passive)         Regin 2 fable         Feenal Table         Feenal Table         FCC Rule Part(s)           LUTE (passive)         Regin 2 fable         Feenal Table         Feenal Table         FCC Rule Part(s)           Statu 2246         Rest Reproduction Science         Science         FCC Rule Part(s)         FCC Rule Part(s)           Science         Rest Reproduction Science         Science         FCC Rule Part(s)         FCC Rule Part(s)           Science         Rest Reproduction Science         Rest Reproduction Science         FCC Rule Part(s)         FCC Rule Part(s)           Science         Rest Reproduction Science         Science         Science         FCC Rule Part(s)           Science         Rest Reproduction Science         Science         Science         FCC Rule Part(s)           Science         Rest Reproduction Science         Science         Science         FCR Rule Part(Reproduction Science)           Science         Rest Reproduction Science         Science         Science         FCR Rule Part(Science)           LUTE (passive)         Science         Science         Science         FCR Rule Rule Rule Part(Scie	Table of Frequency Allocations		100-155.	100-155.5 GHZ (EHF)			rage of
Titale         Tegino 2 Table         Regino 3 Table         Non-Federal Table           CERTICH (passie)         Regino 2 Table         100-100         Non-Federal Table           SETROMONY USA         PADO 100 SATELLITE (passie)         PADO 100 SATELLITE (passie)         Mon-Federal Table           SETROMONY         SATE REPLOANTONS AT ELLITE (passie)         SATE REPLOANTONS AT ELLITE (passie)         SATE REPLOANTONS AT ELLITE (passie)           SETROMONY         SATE REPLOANTON SATELLITE (passie)         SATE REPLOANTONS AT ELLITE (passie)         SATE REPLOANTONS AT ELLITE (passie)           SETROMONY         SATE REPLOANTONS AT ELLITE (passie)         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           SETROMONY         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           SETROMONY         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           SETROMONY         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           SETRONONY         SATE REPLOANTONNY USA         REPLOANTONNY USA         SATE REPLOANTONNY USA           SETRONONY         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           SETRORONON         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA         SATE REPLOANTONNY USA           S		International Table		Uni	ed States Table	FCC Rule Part(s)	
EPCIOATION-SATELITE (passive)         ENCINE CONTROLOW SATELITE (passive)           EVERCOMONS         ENCINE CONTROLOWS UST         ENCINE CONTROLOWS UST           RESERRCH (passive)         5341 USZ46         ENCINE CONTROLOWS UST           RESERRCH (passive)         5341 USZ46         ENCINE CONTROLOWS           ASTRONOMY         ENCINE CONTROLOWS         5341 USZ46           ASTRONOMY         ENCINE CONTROL         2341 USZ46           ASTRONOMY         ESCRONOMY         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL           RESERVER (passive)         5341 USZ47         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL           RESERVER (passive)         5341 USZ47         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL           RESERVER (passive)         5341 USZ46         ENCINE CONTROL	Region 1 Table	Region 2 Table	Region 3 Table	Federal Table	Non-Federal Table		
art     5.341 US246       art control     5.341 US246       art control     102-105       art control     103-105       art control     103-1000       art control     103-1000 <td< td=""><td>100-102 EARTH EXPLORATION-SATE RADIO ASTRONOMY SPACF RFSFARCH (nassive)</td><td>LLITE (passive)</td><td></td><td>100-102 EARTH EXPLORATION-SATELLIT RADIO ASTRONOMY US74 SPACE RESEARCH (passive)</td><td>E (passive)</td><td></td><td></td></td<>	100-102 EARTH EXPLORATION-SATE RADIO ASTRONOMY SPACF RFSFARCH (nassive)	LLITE (passive)		100-102 EARTH EXPLORATION-SATELLIT RADIO ASTRONOMY US74 SPACE RESEARCH (passive)	E (passive)		
SETRONOMY     102-105       FKED     MOBILE       ASTRONOMY     541105342       MOBILE     RADIO ASTRONOMY       Sa1     531105542       Sa1     105-105       Sa1     105-105       Sa1     105-105       Sa1     105-105       Sa1     105-105       Sa1     105-105       MOBILE     RODIO ASTEONOMY       RESERRONOM     531       Sa1     105-118       Sa1     105-118       Sa1     105-118       Sa2     105-105       Sa1     105-118       Sa2     115-1425       Sa1     105-118       Sa2     552B       Sa1     115-1425       RESERACH (passive) 5.562B     552B       Sa1     112-1425       RESERACH (passive) 5.562B     534       Sa1     112-1425       RESERACH (passive) 5.562B     541       <	5.340 5.341			5.341 US246			
SETROIOMY         MOBILE BATTONOMY         MOBILE BATTONOMY         MOBILE BATTONOMY           3.31         STROIOMY         5.31 (13542)         5.628           3.31         Stronomy         5.31 (13542)         5.628           3.31         MOBILE         MOBILE         MOBILE           2.31         MOBILE         2.31 (13542)         5.628           3.31         MOBILE         MOBILE         MOBILE           3.31         MOBILE         MOBILE         MOBILE         MOBILE           3.31         MOBILE         MOBILE         MOBILE         MOBILE           3.31         MOBILE         MOBILE         MOBILE         MOBILE <td>102-105 FIYEN</td> <td></td> <td></td> <td>102-105 FIXED</td> <td></td> <td></td> <td></td>	102-105 FIYEN			102-105 FIXED			
341     5341 US342       55     105-1035       55     FIXENOMY       55     FXENOMY       56     FXENOMY       57     FXENOMY	MOBILE PADIO ASTRONOMY			MOBILE RADIO ASTRONOMY			
105-108.5     105-108.5       EXERCION MORLE     MOBLE       RATENDAMY     RATENDAMY       RATENDAMY     RATENDAMY       RATENDAMY     RATENDAMY       RATENDAMY     RATENDAMY       RATENDAMY     SADI ASTRONOMY       RATENDAMY     SADI ASTRONOMY       RATENDAMY     SADI ASTRONOMY       RATENDAMY     SATENDAMY       RESERRCH (passive)     S.341 USZ46       RATENDAMY     SATENDAMY       RESERRCH (passive)     S.341 USZ46       RATENDAMY     S.341 USZ41       RATENDAMY     S.562B       RATENDAMY     S.662B       RATENDAMY	5.149 5.341			5.341 US342			
EXERCICI (passive) 5.562B MODIN RESERRCI (passive) 5.562B SAED MODIN RESERRCI (passive) 5.562B SAED SAED STRONOMY RESERRCI (passive) 5.562B SAED SAED STRONOMY RESERRCI (passive) 5.562B SAED STRONOMY US74 RESERRCI (passive) 5.562B SAED STRONOMY US74 RESERRCI (passive) 5.562B SAED SAED STRONOMY US74 RESERRCI (passive) 5.562B SAED SAED SAED STRONOMY US74 RESERRCI (passive) 5.562B SAED SAED SAED SAED STRONOMY US74 RESERRCI (passive) 5.562B SAED SAED SAED SAED SAED SAED SAED SAED	105-109.5 EIVED			105-109.5 FIXED			
KRCH (passive) 5.562B     552B       EARCH (passive) 5.562B     5.31 USA2       CDRATION SATELUTE (passive)     5.321 USA2       CDRATION SATELUTE (passive)     5.321 USA2       EARCH (passive)     5.321 USA2       CDRATION SATELUTE (passive)     5.321 USA2       EARCH (passive)     5.321 USA2       COROMY     5.31 USA2       EARCH (passive)     5.328       SA     FUED       ROUOMY     5.31 USA2       FILL     FUED       ROUOMY     5.31 USA2       FUED     FUED       ROUOMY     5.52B       SA     111.8-11.4.2       FUED     FUED       ROUOMY     5.562B       SA     111.8-11.4.2       FUED     FUED       ROUOMY     5.562B       SA     5.562B       SA     5.562B       SA     5.562B       ROUOMY     5.562B       EARCH (passive)     5.562B       ROUOMY     5.562B       ROUOMY     5.562B       EARCH (passive)     5.							
ICRATION SATELUTE (passive)     5.341 US342       LORATION SATELUTE (passive)     103.5111.8       ERRINE ROLRATION SATELUTE (passive)     EARTH EVORATION SATELUTE (passive)       ERRINE PROBATION SATELUTE (passive)     5.341 US345       ERRINE PROBATION SATELUTE (passive)     5.341 US346       S     111.8-11.4.25       S     111.8-11.4.25       RONOMY     5.341 US346       S     111.8-11.4.25       RONOMY     5.562B       CRACH (passive)     5.562B       S     3.341 US346       CORATION SATELUTE (passive)     5.562B       RONOMY     5.341 US346       CORATION SATELUTE (passive)     5.562B       RONOMY     5.341 US346       CORATION SATELUTE (passive)     5.562B       RACH (passive)     5.362B       CORATION SATELUTE (passive)     5.362B       CORATION SATELUTE (passive)     5.341 US246       CORATION SATELUTE (passive)     5.341 US216       ELITE 5.66CC     SPACE RESERRCH (passive)       SC     SPACE RESERRCH (passive)       SC     SPACE RESERRCH (passive)       SC     SPACE RESERRCH (passive)	SPACE RESEARCH (passive)	5.562B		SPACE RESEARCH (passive) 5.5	52B		
118     108-5-1118       AETROLOMATION SATELUTE (passive)     EXPLORATION SATELUTE (passive)       AETROLOM     EXPLORATION SATELUTE (passive)       AETROLOM     EXPLORATION SATELUTE (passive)       AETROLOM     Scart US246       .341     105246       .341     118-114.25       AETROLOM     Scart US246       .341     118-114.25       AETROLOM     Scart US246       .341     S	5.149 5.341			5.341 US342			
EXPLORATION-SATILLITE (passive) EXPLORATION-SATILLITE (passive) EXPLORATION USA RESEARCH (passive) 3.31 1.12.5 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.4.25 1.11.8-11.6	109.5-111.8				· · · · · · · · · · · · · · · · · · ·		
REERACH (passive) 31 31 31 32 31 425 REERACH (passive) 331 US246 STRCNOMY EXERCIONATION SATELLITE (passive) 5562B S331 US246 REERACH (passive) 5562B S331 US342 S41 US34 S41 US245 EXPLORATION SATELLITE (passive) 5562B S41 US245 EXPLORATION SATELLITE (passive) 5562B S41 US245 EXPLORATION SATELLITE (passive) 531 US245 EXPLORATION SATELLITE (passive) 531 US245 EXPLORATION SATELLITE (passive) 531 US245 EXPLORATION SATELLITE (passive) 531 US245 EXPLORATION SATELLITE (passive) 5562C S41 US245 EXPLORATION SATELLITE (passive) 531 US24 S41 US245 S41 US245 S41 US24 S41 US245 S41 US24 S41	EARTH EXPLORATION-SATE	LLI I E (passive)		EARTH EXPLORATION-SATELLIT	E (passive)		
31     5.341 US246       112.5     FIXE       112.5     FIXE       112.5     FIXE       ASTRONOMY     SATRONOMY       RASTRONOMY     MORE       ASTRONOMY     MORE       ASTRONOMY     SATRONOMY       RESEARCH (passive) 5.562B     5.562B       ASTRONOMY     SPACE RESEARCH (passive) 5.562B       ASTRONOMY     SPACE RESEARCH (passive) 5.562B       ASTRONOMY     SATRONOMY       ASTRONOMY     SPACE RESEARCH (passive)       ASTRONOMY     SATRUNOSATELLITE (passive)       ASTRONOMY     SATRUNOSATELLITE (passive)       ASTRONOMY     SATRUNOSATELLITE (passive)       ASTRONOMY     SATELLITE (passive)	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)			
14.25     11.18-114.25       FIXED     FIXED       ASTRONOMY     EREE       ASTRONOMY     EREE       ASTRONOMY     EREERCH (passive) 5.562B       ASTRONOMY     EREERCH (passive) 5.562B       .341     END       .16     ET42-116       ASTRONOMY     ERECERCH (passive) 5.562B       .341     EXERCH (passive) 5.562B       .341     EXERCH (passive) 5.562B       .341     ET42-116       FTORATION-SATELUTE (passive)     EACH (passive)       ASTRONOMY     EXERCH (passive)       ASTRONOMY     EXERCH (passive)       ASTRONOMY     EXERCH (passive)       ASTRONOMY     EACH (PASSIVE)       RESEARCH (passive)     5.341 US245       EXERCH (passive)     5.341 US211       EXERCH (passive)     EACH (passive)       SATELUTE (passive)     5.341 US211       EXERCH (passive)     5.341 US211       EXERCH (passive)     5.341 US211	5.340 5.341			5.341 US246			
RXED         MOBILE           ASTRONOMY         ASTRONOMY           ASTRONOMY         RADIO ASTRONOMY           RESEARCH (passive) 5.562B         5.362B           .341         113.25116           RATRONOMY         5.341 US342           .341         114.25-116           RATRONOMY         5.341 US342           .341         114.25-116           RATRONOMY         S.341 US342           ASTRONOMY         5.341 US346           ASTRONOMY         S.341 US346           ASTRONOMY         S.341 US246           RESEARCH (passive)         5.341 US246           ASTELUTE (passive)         Inter.12.25           RATH EXPLORATION.SATELUTE (passive)         Inter.12.25           ASTELUTE 5.65C         RARTH EXPLORATION.SATELUTE (passive)           .341         Inter.225           RESEARCH (passive)         Inter.225           RESEARCH (passive)         SATELUTE 5.65C           RESEARCH (passive)         Inter.225           RESEARCH (passive)         Inter.2	111.8-114.25			111.8-114.25			
ASTRONOMY     ASTRONOMY       6.341     S.321       5.341     S.341 US342       5.341     US342       AFRDHATION-SATELLITE (passive)     5.341 US342       AFRDOMY     STRONOMY       051     114.25-116       ASTRONOMY     SATELLITE (passive)       0.5341     114.25-116       ASTRONOMY     SATELLITE (passive)       0.5341     S.341 US74       5.341     SATELLITE (passive)       5.341     S.341 US74       5.341     SATELLITE (passive)       5.341     S.341 US215       H EXPLORATION-SATELLITE (passive)       5.56C     ERESEARCH (passive)       5.56C     SPACE RESEARCH (passive)       5.56C     SPACE RESEARCH (passive)       5.321     SSATELLITE (passive)       5.325     EARTH EXPLORATION-SATELLITE (passive)       5.325     SPACE RESEARCH (passive)       6.3341 US211     S.3341 US211       5.331     S.3341 US211	FIXED			FIXED MOBILF			
E RESEARCH (passive) 5.562B     SPACE RESEARCH (passive) 5.562B       5.341     5.341 US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US342       5.341     US343       5.341     US343       5.341     US344       5.341     US346       6.341     US346       6.341     US346       6.341     US346       6.341     US346       10.98     116-122.25       ALELUTE (passive)     5.562C       ERESEARCH (passive)     5.562C       ERESEARCH (passive)     5.562C       ERESEARCH (passive)     5.562C       FESEARCH (passive)     5.562C       6.571     SPACE RESEARCH (passive)       6.562C     SPACE RESEARCH (passive)       6.562C <td>RADIO ASTRONOMY</td> <td></td> <td></td> <td>RADIO ASTRONOMY</td> <td></td> <td></td> <td></td>	RADIO ASTRONOMY			RADIO ASTRONOMY			
5.341     5.341     US342       5.116     114.25-116       H EXPLORATION-SATELLITE (passive)     114.25-116       ASTRONOMY     EARTH EXPLORATION-SATELLITE (passive)       0.457 MOUNY     EARTH EXPLORATION-SATELLITE (passive)       0.531     0.531       0.531     114.25-116       10.98     EARTH EXPLORATION-SATELLITE (passive)       0.91     5.341       0.92     5.341       0.93     5.341       0.94     116-122.55       10.116     5.562C       E RESEARCH (passive)     116-122.55       A H EXPLORATION-SATELLITE (passive)     115-122.55       A H EXPLORATION-SATELLITE (passive)     115-122.55       A H EXPLORATION-SATELLITE (passive)     116-122.55       A H EXPLORATION-SATELLITE (passive)     115-125<	SPACE RESEARCH (passive)	5.562B		SPACE RESEARCH (passive) 5.5	32B		
5.116     114.25-116       H EXPLORATION-SATELLITE (passive)     EARTH EXPLORATION-SATELLITE (passive)       0 ASTRONOMY     UST       0 ASTRUNO     SPACE RESEARCH (passive)       0 ASTRUNO     SPACE RESEARCH (passive)       0 ASTILITE 5.562C     SPACE RESEARCH (passive)       0 ASTILITE 5.562C     SPACE RESEARCH (passive)       0 ASTILITE 5.562C     SPACE RESEARCH (passive)       0 ASTILUTE 5.562C     SPACE RESEARCH (passive)       0 ASTILUTE 5.562C     SPACE RESEARCH (passive)       0 ASTIL     SPACE RESEA	5.149 5.341			5.341 US342			
H EXPLORATION-SATELLITE (passive) 0 ASTRONOMY 0 ASTRONOMY 0 ASTRONOMY 0 ASTRONOMY 0 3 AT US24 0 3 AT US246 1 16-12225 1 16-1225 1 16-125 1 16	114.25-116			114.25-116			
E.RESEARCH (passive)     E.RESEARCH (passive)       6.341     5.341       9.08     5.341       H EXPLORATION-SATELLITE (passive)     116-122.25       H EXPLORATION-SATELLITE (passive)     116-122.25       E RESEARCH (passive)     Inter-SATELLITE (passive)       5.341     176-122.25       E RESEARCH (passive)     Inter-SATELLITE (passive)       5.122.25     EARTH EXPLORATION-SATELLITE (passive)       5.341     SPACE RESEARCH (passive)       5.341     5.341       5.341     US211       5.341     US211	EARTH EXPLORATION-SATE RADIO ASTRONOMY	LLIIE (passive)		RADIO ASTRONOMY US74	e (passive)	<del> </del>	
5.341     5.341     US246       19.38     13.341     US246       H EXPLORATION-SATELLITE (passive)     116-122.25     EARTH EXPLORATION-SATELLITE (passive)       F ESEARCH (passive)     INTER-SATELLITE 5.562C     SPACE RESEARCH (passive)       5.122.25     SPACE RESEARCH (passive)     Inter-score       6.562C     SPACE RESEARCH (passive)     Inter-score       5.341     5.341     US211       5.341     5.138<	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)			
19.98     116-122.25       H EXPLORATION-SATELLITE (passive)     116-122.25       E EXPLORATION-SATELLITE (passive)     INTER-SATELLITE 5.562C       E RESEARCH (passive)     INTER-SATELLITE 5.562C       SPACE RESEARCH (passive)     SPACE RESEARCH (passive)       5.122.25     SPACE RESEARCH (passive)       E RESEARCH (passive)     SPACE RESEARCH (passive)       5.341     5.341 US211	5.340 5.341			5.341 US246			
R EXPLORATION-SATELLITE (passive) : SATELLITE 5.662C E RESEARCH (passive) 3.122.25 H EXPLORATION-SATELLITE (passive) E RESEARCH (passive) 5.138 5.341 US211 5.138 5.341 US211	116-119.98			116-122.25	T (	ISM For immond (10)	
E RESEARCH (passive) 3-122.25 H EXPLORATION-SATELLITE (passive) E RESEARCH (passive) 5.341	EAKIH EXPLUKATIUN-SATE	LLIIE (passive)		INTER-SATFILITE 5 562C	e (passive)		
3-122.25 H EXPLORATION-SATELLITE (passive) & SATELLITE 5.562C E RESEARCH (passive) 5.341	SPACE RESEARCH (passive)			SPACE RESEARCH (passive)		<del>30170,</del>	
25 LORATION-SATELLITE (passive) LLITE 5,562C LEARCH (passive)	5.341						
LUKATION-SATELLITE (passive) ELLITE 5.562C EARCH (passive)	119.98-122.25						
EARCH (passive)	INTER-SATELLITE 5.562C	LLIIE (passive)					
	SPACE RESEARCH (passive)					- No.	
	5.138 5.341			5.138 5.341 US211			

		FIXED	
INTER-SATELLITE MOBILE 5.558 Amateur	INTER-SATELLITE MOBILE 5.558	INTER-SATELLITE MOBILE 5.558 Amateur	Amateur (97)
	5.138	5.138	
	123-130 FIXED-SATELLITE (space-to-Earth)		
	MOBILE-SATELLITE (space-to-Earth)		
ELLTE	RADIONAVIGATION-SATELLITE		
omy 5.562U	kadio astronomy		
0.148 0.004 130-134	3.334 U3211 U3342 130-134		
EXPLORATION-SATELLITE (active) 5.562E	EARTH EXPLORATION-SATELLITE (active) 5.562E	active) 5.562E	
SATELLITE	INTER-SATELLITE		
MOBILE 5.558	MOBILE 5.558		
	5.562A US342		
	134-136	134-136	
	Radio astronomy	AMATEUR	Amateur (97)
AMATEUR-SATELLITE Radio astronomy		AIMA I EUK-SA I ELLI I E Radio astronomy	
	136-141	136-141	
RADIO ASTRONOMY PADIOLOCATION	RADIO ASTRONOMY RADIOI OCATION	RADIO ASTRONOMY RADIOI OCATION	
		Amateur	
ur-satelite		Amateur-satellite	
	US342	US342	
141-148.5 Erven	141-148.5   EIVED		
	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
	US342		
	148.5-151.5		
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY 11574	passive)	
passive)	SPACE RESEARCH (passive)		
	US246		
56.5	151.5-155.5 FIVED		
FIXEU MORI F	r i xeu Mobil E		
STRONOMY	RADIO ASTRONOMY RADIOI OCATION		
	US342		
			Page 62

in the second seco			Inited States Table			
	International Ladie		nuitea		FUC KUIE PAR(S)	
Region 1 Table	Region 2 Table	Region 3 Table	Federal Table Non-Federal Table	able		
155.5-158.5			155.5-158.5			
EARTH EXPLORATION-SATELLITE (passive) 5.562F	LLITE (passive) 5.562F		EARTH EXPLORATION-SATELLITE (passive) 5.562F			
			I FIXEU MORII F			
SPACE RESEARCH (passive) 5.562B	5.562B		SPACE RESEARCH (passive) 5.562B			
5.149 5.562G			5.562G US342			
158.5-164			158.5-164			
FIXED			FIXED			
FIXED-SATELLITE (space-to-Earth)	Earth)		FIXED-SATELLITE (space-to-Earth)			
MOBILE-SATELLITE (space-to-Earth)	)-Earth)		MOBILE-SATELLITE (space-to-Earth)	<u></u>		
			US211			
164-167			164-167			
EARTH EXPLORATION-SATELLITE (passive)	LLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
RADIO AS I KUNUMY SPACE RESEARCH (nassive)			RADIO ASTRONOMY US/4			
5.340 227 474 r			1 US246			
10/-1/4.5 FIXFD			10/-1/4.5   FIXED			
FIXED-SATELLITE (space-to-Earth)	Earth)		FIXED-SATELLITE (space-to-Earth)			
INTER-SATELLITE			INTER-SATELLITE			
MUBILE 5.558			MUBILE 5.558			
5.149 5.562D			US211 US342			
174.5-174.8 civen			174.5-174.8 Elver			
FIAED INTED-SATELLITE			I NTED SATELLITE			
MOBILE 5.558			MOBILE 5.558			
174.8-182			174.8-182			
EARTH EXPLORATION-SATELLITE (passive)	LLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
INTER-SATELLITE 5.562H			INTER-SATELLITE 5.562H			
JEAUE NEJEANUI (Jassive)			JE ACE NEGEARON (passive)			
EARTH EXPLORATION-SATELLITE (passive)	(LLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
RADIO ASTRONOMY	<del>,</del>		RADIO ASTRONOMY			
SPACE RESEARCH (passive)			SPACE RESEARCH (passive)			
5.340			US246			
185-190			185-190			
EARTH EXPLORATION-SALELLITE (passive)	LLIIE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
SPACE RESEARCH (passive)			SPACE RESEARCH (passive)			
190-191.8			190-191.8			
EARTH EXPLORATION-SATELLITE (passive)	LLITE (passive)		EARTH EXPLORATION-SATELLITE (passive)			
SPAUE RESEARUN (passive)			DANCE REDEARCH (DASSIVE)			
E 240			LICOAR			

191.8-200	191.8-200
Fixed	FIXED
Inter-Satellite	INTER-SATELLITE
Mobile 5.558	MOBILE 5.558
Mobile-Satellite	MOBILE-SATELLITE
Radionavigation	RADIONAVIGATION
Radionavigation-Satellite	RADIONAVIGATION-SATELLITE
5.149 5.341 5.554	5.341 5.554 US211 US342
200-209	200-209
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)
RADIO ASTRONOMY	RADIO ASTRONOMY US74
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)
5.340 5.341 5.563A	5.341 5.563A US246
209-217 FIXED MOBILE RADIO ASTRONOMY 5.149 5.341	209-217 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY 5.341 US342
217-226 FIXED 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	226-231.5
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)
RADIO ASTRONOMY	RADIO ASTRONOMY
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)
5.340	US246
231.5-232	231.5-232
FIXED	FIXED
MOBILE	MOBILE
Radiolocation	Radiolocation
232-235	232-235
FIXED	FIXED
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
MOBILE	MOBILE
Radiolocation	Radiolocation
235-238	235-238
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)
5.563A 5.563B	5.563A 5.563B
	Page 64

Table of Frequency Allocations	238-1000 GHz (EHF)		Page 65
national Table		United States Table	FCC Rule Part(s)
Region 1 Table Region 2 Table Region 3 Table	able	Non-Federal Table	
238-240 FIXED	238-240		
FIXED: SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MUBILE RADIOI OCATION	MUBILE RADIOI OCATION		
RADIONAVIGATION RADIONAVIGATION-SATELLITE	RADIONAVIGATION RADIONAVIGATION-SATELLITE		
240-241 EryEn	240-241 EIVED		
MOBILE RADIOLOCATION	MOBILE		
241-248 RADIO ASTRONOMY RADIOI OCATION	WY	241-248 RADIO ASTRONOMY RADIOL OCATION	ISM Equipment (18) Amateur (97)
Amateur Amateur-satellite		Amateur Amateur-satellite	
5.138 5.149	342	.138 US342	
248-250 AMATEUR AMATEUR-SATELLITE Radio astronomy	my	248-250 AMATEUR AMATEUR-SATELLITE Radio astronomy	Amateur (97)
5.149	US342	18342	
250-252 EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	2 EXPLORATION-SATELLITE (p ASTRONOMY US74 RESEARCH (passive)	ssive)	
5.340 5.563A	5.563A US246		
252-265 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY	252-265 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY		
RADIONAVIGATION RADIONAVIGATION-SATELLITE	RADIONAVIGATION RADIONAVIGATION-SATELLITE		
5.149 5.554	5.554 US211 US342		
265-275 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	265-275 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE		
RADIO ASTRONOMY 5.149 5.563A	RADIO ASTRONOMY 5.563A US342		
275-1000 (Not allocated)	275-1000 (Not allocated)		Amateur (97)
5.565	5.565		

BILLING CODE 6712-01-C

25486

International Footnotes

\* \* \* \* \*

5.155 *Additional allocation:* in Armenia, Azerbaijan, Belarus, Bulgaria, the Russian

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  $(\theta)$ , without the consent of the affected administration:

 $-174 \text{ dB}(\text{W/m}^2)$  in a 4 kHz band for  $0^\circ \le \theta$  $< 5^{\circ}$ 

 $-174 + 0.5 (-5) dB(W/m_2)$  in a 4 kHz band for  $5^{\circ} \le \theta < 25^{\circ}$ 

 $-164 \text{ dB}(\text{W/m}_2)$  in a 4 kHz band for  $25^\circ \leq$  $\theta \le 90^{\circ}$ 

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. \* \*

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.

\* \* \*

\*

#### United States (US) Footnotes \*

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

(ď) 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  $(64^{\circ})$ °17' N, 149°10' W); Concrete, ND (48°43' N, 97°54' W); and Otis AFB, MA (41°45' N, 70°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°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-bycase 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 explorationsatellite, 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)  $-154 \text{ dBW/m}^2$  for angles of arrival above the horizontal plane ( $\delta$ ) of 0° to 5° (b)  $-154 + 0.5(\delta - 5) \text{ dBW/m}^2$  for  $\delta$  of  $5^{\circ}$ to 25°, and

(c)  $-144 \text{ dBW/m}^2$  for  $\delta$  of  $25^\circ$  to  $90^\circ$ . 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:

<sup>&</sup>lt;sup>6</sup> 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 meteorologicalsatellite service, such stations shall be protected from harmful interference from other applications of the Earth explorationsatellite service. The power flux-density produced at the Earth's surface by any space station in this band shall not exceed -152dBW/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, pulseranging 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-bycase 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).

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 Lake Kickapoo (Archer City), TX Jordan Lake (Wetumpka), AL	33°32′47″ N, 98°45′46″ W	216.983 MHz	150 km (93.2 miles). 250 km (155.3 miles). 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,
Fort Stewart, GA	106°59′50″ W 31°58′36″ N,
Hawkinsville, GA	081°30′34″ W 32°17′20″ N.
Red River, AR	083°32′10″ W 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
	0010110 10

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). \* \* \*

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.

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).

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.

\*

\*

\*

\*

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  $39^{\circ}$  N and  $42^{\circ}$  N and longitudes  $103^{\circ}$  W and  $108^{\circ}$  W.

\* \* \* \* \* \* 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.

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.

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.

\*

\*

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.

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/m<sup>2</sup> 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 mobilesatellite (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-bycase 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:

 $\begin{array}{ccc} -124 \ \mathrm{dB}(\mathrm{W/m^2} & \mathrm{for} \ 0^\circ < \theta \le 5^\circ \\ -124 + (\theta - 5)/2 \ \mathrm{dB}(\mathrm{W/m^2}) & \mathrm{for} \ 5^\circ < \theta \le 9 \end{array}$ 

 $\begin{array}{c} 25^{\circ} \\ -114 \ dB(W/m^2) \qquad \mbox{for } 25^{\circ} < \theta \leq 90^{\circ} \end{array}$ 

where  $\theta$  is the angle of arrival of the radiofrequency 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 Base- line 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 be-
	tween 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.

#### \* \*

US315 In the bands 1530-1544 MHz and 1626.5-1645.5 MHz, maritime mobilesatellite 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.

\* \*

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.

\* \*

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)  $-115 \text{ dB}(W/m^2)$  for angles of arrival above the horizontal plane ( $\check{\delta}$ ) between 0° and 5°.

(2)  $-115 + 0.5(\delta - 5) \text{ dB}(\text{W/m}^2)$  for  $\delta$ between 5° and 25°, and

(3)  $-\,105$  dB(W/m²) for  $\delta$  between  $25^\circ$  and  $90^{\circ}$ 

(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)  $-115 - X dB(W/m^2)$  for  $\delta$  between 0° and 5°,

 $(2) - 115 - X + ((10 + X)/20)(\delta - 5)$  $dB(W/m^2)$  for  $\delta$  between 5° and 25°, and

(3)  $-105 \text{ dB}(\text{W/m}^2)$  for  $\delta$  between 25° and  $90^{\circ}$ ; where X is defined as a function of the number of satellites, n, in an NGSO constellation as follows:

For  $n \le 288$ , 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 caseby-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. Âdditionally, 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.

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 Gz\* 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).

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.

\*

\*

\*

US346 Except as provided for below and by US222, Federal use of the band 2025-2110 MHz by the space operation service (Earthto-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 coequal, primary basis with non-Federal operations:

Facility	Coordinates
Naval Satellite Control Network, Prospect Harbor, ME New Hampshire Tracking Station, New Boston AFS, NH Eastern Vehicle Check-out Facility & GPS Ground Antenna & Monitoring Station, Cape Canaveral, FL Buckley AFB, CO Colorado Tracking Station, Schriever AFB, CO Kirtland AFB, NM Camp Parks Communications Annex, Pleasanton, CA Naval Satellite Control Network, Laguna Peak, CA Vandenberg Tracking Station, Vandenberg AFB, CA Hawaii Tracking Station, Kaena Pt, Oahu, HI	42°56′52″ N, 071°37′36″ W 28°29′09″ N, 080°34′33″ W 39°42′55″ N, 104°46′36″ W 38°48′21″ N, 104°31′43″ W 34°59′46″ N, 106°30′28″ W 37°43′51″ N, 121°52′50″ W 34°06′31″ N, 119°03′53″ W 34°49′21″ N, 120°30′07″ 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 noninterference 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, nongeostationary 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		79°50′23″	825
		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 Owens Valley, CA Pie Town, NM St. Croix, VI		118°16′37″ 108°07′09″	241 1207 2371 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 nongeostationary 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 (spaceto-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.

\* \* \* \*

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.

\* \* \* \*

State

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 fixedsatellite service is limited to feeder links for

Location

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-ofband 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:

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.

\* \* \* \*

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.

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

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.

\* \* \* \*

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. \* \* \* \* \* \*

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.

\* \* \* \*

\* \* \*

#### Non-Federal Government (NG) Footnotes

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.

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).

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 nongeostationary 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  $0^{\circ}$  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.

\*

\* \* \* \*

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-tospace) 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)
$\begin{array}{c} 3.65 - 3.7  {}^{17} \\ 3.7 - 4.2  {}^{1} \\ 6.7 - 7.025  {}^{12} \\ 10.7 - 10.95  {}^{112} \\ 10.95 - 11.2  {}^{12}  {}^{12} \\ 11.2 - 11.45  {}^{112} \\ 11.45 - 11.7  {}^{12}  {}^{12} \\ 11.7 - 12.2  {}^{3} \\ 12.2 - 12.7  {}^{13} \\ 18.3 - 18.58  {}^{110} \\ 18.58 - 18.8  {}^{6}  {}^{10}  {}^{11} \\ 18.58 - 18.8  {}^{6}  {}^{10}  {}^{11} \\ 18.8 - 19.3  {}^{7}  {}^{10} \\ 19.3 - 19.78  {}^{10} \\ 19.7 - 20.2  {}^{10} \\ 37.5 - 40  {}^{15}  {}^{16} \\ 40 - 42  {}^{16} \\ \end{array}$	${}^{12} {}^{19} 5.091 - 5.25$ ${}^{1} 5.925 - 6.425$ ${}^{112} {}^{14} 12.75 - 13.25$ ${}^{4} {}^{12} 13.75 - 14$ ${}^{5} 14 - 14.2$ ${}^{14} .2 - 14.5$ ${}^{12} {}^{20} 15.43 - 15.63$ ${}^{9} 17.3 - 17.8$ ${}^{18} 24.75 - 25.05$ ${}^{118} 25.05 - 25.25$ ${}^{127.5 - 29.5}$ ${}^{29.5 - 30}$ ${}^{1} 47.2 - 50.2$

<sup>1</sup> This band is shared coequally with terrestrial radiocommunication services.

<sup>2</sup>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.

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

<sup>4</sup>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.

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

<sup>6</sup>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.

<sup>8</sup> 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.

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

<sup>10</sup>This band is shared coequally with the Federal Government fixed-satellite service.

<sup>11</sup>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.

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

<sup>13</sup>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.

<sup>15</sup>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.

<sup>16</sup>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.

<sup>18</sup>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.

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

<sup>20</sup> 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.

Frequency band	Limit in dB (W/m <sup>2</sup> ) for angle of arrival ( $\delta$ ) above the horizontal plane				
riequency band	0°–5°	5°–25°	25°–90°	bandwidth	
6700–6825 MHz 6825–7075 MHz	- 137 - 154 and	$\begin{array}{c} -137 + 0.5(\delta\!-\!5) \\\ -154 + 0.5(\delta\!-\!5) \\\ \text{and} \end{array}$	- 127 - 144 and	1 MHz. 4 kHz.	
		$-134 + 0.5(\delta - 5)$		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 MHz<sup>1</sup> 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).

<sup>1</sup> 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	*	*	*
* 5,700 to 17,300	*	*	* 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 2 m 1.25 m Do	144–146	50–54 144–148 219–220 222–225	50–54 144–148	(a) (a) (a), (e) (a)
UHF	MHz	MHz	MHz	
70 cm 33 cm 23 cm 13 cm Do	430–440 1240–1300 2300–2310 2390–2450	420-450 902-928 1240-1300 2300-2310 2390-2450	420–450 1240–1300 2300–2310 2390–2450	(a), (b), (f) (a), (b), (g) (b), (h), (i) (a), (b), (j) (a), (b), (j)
SHF	GHz	GHz	GHz	
9 cm 5 cm 3 cm 1.2 cm	3.4–3.475 5.650–5.850 10.00–10.50 24.00–24.25	3.3–3.5 5.650–5.925 10.00–10.50 24.00–24.25	3.3–3.5 5.650–5.850 10.00–10.50 24.00–24.25	
EHF	GHz	GHz	GHz	
6 mm 4 mm 2.5 mm 2 mm 1 mm	47.0–47.2 76–81 122.25–123 134–141 241–250 above 275	47.0–47.2 76–81 122.25–123 134–141 241–250 above 275	47.0–47.2 76–81 122.25–123 134–141 241–250 above 275	(b), (c), (h), (k), (r) (p) (b), (c), (h), (k) (b), (c), (h), (k), (q) (k)

\* \* \* \* \*

(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         7.025–7.125         10.10–10.15         14.025–14.150         14.225–14.350         18.068–18.168         21.025–21.200         21.275–21.45         24.89–24.99         28.0–29.7	3.525-3.60         3.80-4.00         7.025-7.125         7.175-7.300         10.10-10.15         14.025-14.150         14.225-14.350         18.068-18.168         21.025-21.200         21.275-21.45         24.89-24.99         28.0-29.7	3.525-3.60         3.80-3.90         7.025-7.125         10.10-10.15         14.025-14.150         14.225-14.350         18.068-18.168         21.025-21.200         21.275-21.45         24.89-24.99         28.0-29.7	(a) (a) (a) (d)

(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 40 m Do 15 m 10 m	3.525–3.60 7.025–7.075 7.100–7.125 21.025–21.20 28.0–28.5	3.525–3.60 7.025–7.100 7.100–7.125 21.025–21.20 28.0–28.5	3.525–3.60 7.025–7.075 7.100–7.125 21.025–21.20 28.0–28.5	(a) (a), (t)
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.

\* \* \* \*

[FR Doc. E8–9341 Filed 5–5–08; 8:45 am] BILLING CODE 6712–01–P