21,200-21,800 MHz and 22,400-23,800 MHz and to operational fixed users in the segments 21,800-22,400 MHz and 23,000-23,600 MHz. Assignments may be made otherwise only upon a showing that interference free frequencies are not available in the normally assigned band segments.

* * *

(8) The maximum power for the local television transmission service in the 14.2-14.4 GHz band is +45 dBW except that operations are not permitted within 1.5 degrees of the geostationary orbit.

* * * * *

(d) Frequencies in the following bands are available for assignment to television STL stations in this service:

* * *
10,700 to 11,700 MHz (1), (6)
11,700 to 12,200 MHz (3)
13,200 to 13,250 MHz (2)
* * *

* * * * *

34. Section 101.815 is amended by revising paragraph (a)(5) to read as follows:

§ 101.815 Stations at temporary fixed locations.

(a) * * * * *

(5) Applications for such stations must comply with the provisions of § 101.21(f).

* * * * *

APPENDIX D - Proposed Rules

Part 101 of Chapter 1 of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 101 - FIXED MICROWAVE SERVICES

1. The authority citation for Part 101 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 303.

2. Section 101.5 is proposed to be amended by revising paragraph (b) to read as follows:

§ 101.5 Station authorization required.

* * * * *

(b) A separate application form must be filed electronically via ULS for each Digital Electronic Message Service (DEMS) Nodal Station. No license is required for a DEMS User Station or for Multiple Address System (MAS) remote and mobile stations. Authority for a DEMS Nodal Station licensee to serve a specific number of user stations to be licensed in the name of the carrier must be requested on FCC Form 601 filed for the DEMS Nodal Station. Authority for any number of MAS remotes and authority to serve MAS mobiles within a specified area will be included in the authority for the MAS fixed master stations.

* * * * *

3. Section 101.31 is proposed to be amended by revising paragraph (a)(2) and removing paragraphs (a)(3)-(5) and redesignating paragraph (a)(6) as (a)(3), and revising paragraphs (b)(1) and (b)(1)(vii) to read as follows:

§ 101.31 Temporary and conditional authorizations.

(a)(1) * * *

(a)(2) Applications for authorizations to operate stations at temporary locations under the provisions of this section shall be made upon FCC Form 601. Blanket applications may be submitted for the required number of transmitters. An application for authority to operate a fixed station at temporary locations must specify the precise geographic area within which the operation will be confined. The area specified must be defined as a radius of operation about a given state or states, latitude/longitude, or as a rectangular area bounded by upper and lower lines of latitude and longitude. Exception to this specific requirement may be made for exceptionally large areas, such as the continental United States. Sufficient data must be submitted to show the need for the proposed area of operation.

* * *

(b) *Conditional authorization.* (1) An applicant for a new point-to-point microwave radio station(s) or a modification of an existing station(s) in the 952.95-956.15, 956.55-959.75, 3,700-4,200; 5,925-6,425; 6,525-6,875; 10,550-10,680; 10,700-11,700; 11,700-12,200; 12,200-12,700; 12,700-13,200; 13,200-13,250; 17,700-19,700; and 21,200-23,600 MHz bands (see § 101.147 for specific service usage) may operate the proposed station(s) during the pendency of its applications(s) upon the filing of a properly completed formal application(s) that complies with subpart B of part 101 if the applicant certifies that the following conditions are satisfied:

* * * * *

(vii) The filed application(s) proposes to operate in the 21.2-23.6 GHz band on one or more of the frequency pairs 21.825/23.025 GHz, 21.875/23.075 GHz, 21.925/23.125 GHz or 21.975/23.175 for low power, limited coverage systems with an E.R.P. not greater than 55 dBm.

* * * * *

4. Section 101.101 is proposed to be amended by revising the table to read as follows:

§ 101.101 Frequency availability.

FREQUENCY BAND (MHz)	RADIO SERVICE				
	COMMON CARRIER (Part 101)	PRIVATE RADIO (Part 101)	BROADCAST AUXILIARY (Part 74)	OTHER (Parts 15, 21, 24, 25, 74, 78, & 100)	NOTES
* * *	* * *	* * *	* * *	* * *	* * *
2450 – 2500	CC	OFS	TV BAS	ISM	F/M/TF
* * *					
18,820-18,920	CC DEMS	OFS DEMS		SAT	
* * *					
19,160-19,210	CC DEMS	OFS DEMS		SAT	
* * *					

* * * * *

5. Section 101.107 is proposed to be amended by revising the table in paragraph (a) to read as follows:

§ 101.107 Frequency tolerance.

(a) * * *

Frequency (MHz)	FREQUENCY TOLERANCE (PERCENT)
928 to 929 (5)	0.0005
932 to 932.5	0.00015
932.5 to 935	0.00025
941 to 941.5	0.00015
941.5 to 944	0.00025
952 to 960 (5)	0.0005
1,850 to 1,990	0.002
2,110 to 2,200	0.001
2,450 to 2,500 (1)	0.001
3,700 to 4,200 (1)	0.005
5,925 to 6,875 (1)	0.005
10,550 to 11,700 (1)(2)	0.005
11,700 to 12,200 (1)	0.005
12,200 to 13,250 (4)	0.005
14,200 to 14,400	0.03
17,700 to 18,820 (2)(3)	0.003
18,820 to 18,920 (2)(3)	0.001
18,920 to 19,700 (2)(3)	0.003

Frequency (MHz)	FREQUENCY TOLERANCE (PERCENT)
928 to 929 (5)	0.0005
19,700 to 27,500 (4)(7)	0.001
27,500 to 28,350	0.001
29,100 to 29,250	0.001
31,000 to 31,300 (6)	0.001
31,300 to 40,000 (4)	0.03

(1) Applicable only to common carrier LTTS stations. Tolerance for 2450-2500 MHz is 0.005%. Beginning Aug. 9, 1975, this tolerance will govern the marketing of LTTS equipment and the issuance of all such authorizations for new radio equipment. Until that date new equipment may be authorized with a frequency tolerance of .03% in the frequency range 2,200 to 10,500 MHz and .05% in the range 10,500 MHz to 12,200 MHz, and equipment so authorized may continue to be used for its life provided that it does not cause interference to the operation of any other licensee.

(2) See subpart G of this part for the stability requirements for transmitters used in the Digital Electronic Message Service.

(3) Existing type accepted equipment with a frequency tolerance of ±0.03% may be marketed until December 1, 1988. Equipment installed and operated prior to December 1, 1988 may continue to operate after that date with a minimum frequency tolerance of ±0.03%. However, the replacement of equipment requires that the current tolerance be met.

(4) Applicable to private operational fixed point-to-point microwave only. For exceptions see § 101.147.

(5) For private operational fixed point-to-point microwave systems, with a channel greater than or equal to 50 KHz bandwidth, ±0.0005%; for multiple address master stations, regardless of bandwidth, ±0.00015%; for multiple address remote stations with 12.5 KHz bandwidths, ±0.00015%; for multiple address remote stations with channels greater than 12.5 KHz bandwidth, ±0.0005%.

(6) For stations authorized prior to March 11, 1997, transmitter tolerance shall not exceed 0.03%.

(7) The frequency tolerance for stations authorized on or before **[insert date 24 months after the rule becomes effective]** is 0.03%. Existing licensees and pending applicants on that date may continue to operate after that date with a frequency tolerance of 0.03%, provided that it does not cause harmful interference to the operation of any other licensee. For exceptions, see §101.147 and §101.507.

6. Section 101.109 is proposed to be amended by revising the table in paragraph (c) to read as follows:

§101.109 Bandwidth.

* * * * *

(c) * * *

Frequency Band (MHz)	Maximum Authorized Bandwidth
* * *	* * *
21,200 to 23,600	50 kHz /1/ /4/
* * *	* * *

* * * * *

7. Section 101.113 is proposed to be amended by revising the table in paragraph (a) to read as follows:

§ 101.113 Transmitter power limitations.

(a) * * *

Frequency Band (MHz)	Maximum allowable EIRP (1)(2)

	Fixed (dBW)	Mobile (dBW)
* * *	* * *	* * *
10,550 to 10,600 (5)	+55	. . . .
10,600 to 10,680 (5)	+40	
* * *	* * *	* * *

* * * * *

8. Section 101.115 is proposed to be amended by removing paragraph (b) and redesignating paragraphs (c) through (g) as (b) through (f), and revising the table in redesignated paragraph (b) to read as follows:

§ 101.115 Directional antennas.

* * * * *

(b) * * *

Antenna Standards										
Frequency (MHz)	Category	Maximum beamwidth to 3 dB points[1] (included angle in degrees)	Minimum antenna gain (dBi)	Minimum radiation suppression to angle in degrees from centerline of main beam in decibels						
				5° to 10°	10° to 15°	15° to 20°	20° to 30°	30° to 100°	100° to 140°	140° to 180°
* * *										
6,525 to 6,875 [6]	A	1.5	n/a	26	29	32	34	38	41	49
	B	2.0	n/a	21	25	29	32	35	39	45
10,550 to 10,680 [7]	A	3.5	33.5	18	24	28	32	35	55	55
	B	3.5	33.5	17	24	28	32	35	40	45
* * *										
21,200 to 23,600[7, 11]	A	3.3	33.5	18	26	26	33	33	55	55
	B	3.3	33.5	17	24	24	29	29	40	50
* * *										

* * *

/7/ For stations authorized or pending on **[insert effective date]**, the minimum radiation suppression for Category B is 35 dB in the 10,550-10,680 MHz band and 36 dB in the 21,200-23,600 MHz band for discrimination angles from 100° to 180°.

* * * * *

9. Section 101.117 is proposed to be revised to read as follows:

§ 101.117 Antenna polarization.

Except as set forth herein, stations operating in the radio services included in this part are not limited as to the type of polarization of the radiated signal that may be employed. However, in the event interference in excess of permissible levels is caused to the operation of other stations as a result of employing other than linear polarization, the Commission may order a licensee to change its system polarization to mitigate the interference. No change in polarization may be made without prior authorization from the Commission. For LMDS systems, unless otherwise authorized, system operators

are permitted to use any polarization within its service area but only linear polarization for antennas located within 20 kilometers of the outermost edge of their service area.

10. Section 101.133 is proposed to be amended by adding paragraph (e) to read as follows:

§ 101.133 Limitations on use of transmitters.

* * * * *

(e) Licensees filing to change status from private operational fixed to common carrier shall file the appropriate tariff information required by Part 61 and FCC Form 601. We will not require a fee for FCC Form 601 if only for this purpose. Licensees filing to change status from common carrier to private operational fixed shall file FCC Form 601 without a fee if only for this purpose, provided they have complied with all other discontinuance requirements of Title II of the Act.

11. The first sentence in paragraph (a) of Section 101.135 is proposed to be revised to read as follows:

§ 101.135 Shared use of radio stations and the offering of private carrier service.

* * * * *

(a) Persons or governmental entities licensed to operate radio systems pursuant to subpart H of this part on any of the private radio frequencies set out in § 101.101 may share such systems with, or provide private carrier service to, any eligible entity for licensing under this part, regardless of individual eligibility restrictions, provided that the communications being carried are permissible under § 101.603. * * *

* * * * *

12. Section 101.139 is proposed to be amended by revising paragraph (a) and adding paragraph (g) to read as follows:

§ 101.139 Authorization of transmitters.

(a) Unless specified otherwise, transmitters used in the private operational fixed and common carrier fixed point-to-point microwave and point-to-multipoint services under this part must be a type that has been verified for compliance.

* * * * *

(g) After **[insert date 18 months after the effective date]**, the manufacture (except for export) or importation of equipment for operation in the 21,200-23,600 MHz band must meet:

(1) The 0.001% frequency tolerance requirement of §101.107(a); and

(2) For equipment employing digital modulation techniques, the minimum bit rate requirements of §101.141(a).

13. Section 101.141 is proposed to be amended by revising paragraphs (a) and (a)(1) to read as follows:

§ 101.141 Microwave modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 25.25 GHz must, with appropriate multiplex equipment, comply with the following additional requirements:

(1) * * *

NOTE to (a)(1): Stations authorized prior to December 1, 1988 may install equipment after that date with no minimum bit rate. Stations applied for or authorized prior to **[insert date 24 months after effective date]** in the 21.2-23.6 GHz band may install equipment after that date with no minimum bit rate.

* * * * *

14. Section 101.147 is proposed to be amended by removing the text and reserving paragraph (k) and revising paragraphs (a), the introductory text of (b), amending the last line of paragraph (r)(10), and revising paragraph (s) to read as follows:

§ 101.147 Frequency assignments.

(a) * * *

* * *
2,450-2,500 MHz /12/
* * *

Notes

/1/ Frequencies in this band are shared with control and repeater stations in the Public Mobile Services and with stations in the International Fixed Public Radiocommunication Services located south of 25° 30' north latitude in the State of Florida and U. S. possessions in the Caribbean area. Additionally, the band 2160-2162 MHz is shared with stations in the Multipoint Distribution Service.

* * *

/12/ Frequencies in this band are available for assignment to the common carrier and private-

operational fixed point-to-point microwave services.

* * *

/26/ Frequencies from 21.7-22.0 GHz and 22.9-23.2 GHz may be authorized for low power, limited coverage systems subject to the provisions of paragraph (s) of this section.

* * * * *

(b) Subsections 1 - 5 and Tables 1 - 7 pertain to Multiple Address System (MAS) frequencies and Subsection 6 and Tables 8 - 11 pertain to point-to-point frequencies. (The remainder of this introductory paragraph applies only to MAS frequencies except for; refer to Subsection 6 for point-to-point frequencies). Frequencies normally available for assignment in this service are set forth with applicable limitations in the following tables: 928-960 MHz Multiple address system (MAS) frequencies are available for the point-to-multipoint and point-to-point transmission of a licensee's products or services, excluding video entertainment material, to a licensee's customer or for its own internal communications. The paired frequencies listed in this section are used for two-way interrogate/response communications between a master station and remote stations. Each master station operating on these frequencies is required to serve a minimum of four separate active remote stations. Ancillary one-way communications on paired frequencies are permitted on a case-by-case basis. Ancillary communications between interrelated master stations are permitted on a secondary basis. The normal channel bandwidth assigned will be 12.5 kHz. EA licensees, however, may combine contiguous channels without limit or justification. Site-based licensees may combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification. When licensed for a larger bandwidth, the system still is required to use equipment that meets the $\pm$ 0.00015 percent tolerance requirement. (See § 101.107). Any bandwidth (12.5 kHz, 25 kHz or greater) authorized in accordance with this section may be subdivided into narrower bandwidths to create additional (or sub) frequencies without the need to specify each discreet frequency within the specific bandwidth. Equipment that is used to create additional frequencies by narrowing bandwidth (whether authorized for a 12.5 kHz, 25 kHz or greater bandwidth) will be required to meet, at a minimum, the $\pm$ 0.00015 percent tolerance requirement so that all subfrequencies will be within the emission mask. When using subfrequencies, licensees are subject to the construction requirement of one master and four remotes per authorized bandwidth (12.5 kHz, 25 kHz or greater). Systems licensed for frequencies in these MAS bands prior to August 1, 1975, may continue to operate as authorized until June 11, 1996, at which time they must comply with current MAS operations based on the 12.5 kHz channelization set forth in this paragraph. Systems licensed between August 1, 1975, and January 1, 1981, inclusive, are required to comply with the grandfathered 25 kHz standard bandwidth and channelization requirements set forth in this paragraph. Systems originally licensed after January 1, 1981, and on or before May 11, 1988, with bandwidths of 25 kHz and above, will be grandfathered indefinitely.

* * *

(k) [Reserved]

* * * * *

(r) * * * * *

(10) * * * Such operations are available to private and common carriers and are subject to the following requirements for the low power transmitting devices:

* * *

(s) *21,200 to 23,600 MHz*: 50 MHz authorized bandwidth.

(1) 2.5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21601.25	22801.25
21603.75	22803.75
21606.25	22806.25
21608.75	22808.75
21611.25	22811.25
21613.75	22813.75
21616.25	22816.25
21618.75	22818.75
21621.25	22821.25
21623.75	22823.75
21626.25	22826.25
21628.75	22828.75
21631.25	22831.25
21633.75	22833.75
21636.25	22836.25
21638.75	22838.75
21641.25	22841.25
21643.75	22843.75
21646.25	22846.25
21648.75	22848.75
21651.25	22851.25
21653.75	22853.75
21656.25	22856.25

21658.75	22858.75
21661.25	22861.25
21663.75	22863.75
21666.25	22866.25
21668.75	22868.75
21671.25	22871.25
21673.75	22873.75
21676.25	22876.25
21678.75	22878.75
21681.25	22881.25
21683.75	22883.75
21686.25	22886.25
21688.75	22888.75
21691.25	22891.25
21693.75	22893.75
21696.25	22896.25
21698.75	22898.75
21701.25 /1/	22901.25 /1/
21703.75 /1/	22903.75 /1/
21706.25 /1/	22906.25 /1/
21708.75 /1/	22908.75 /1/
21711.25 /1/	22911.25 /1/
21713.75 /1/	22913.75 /1/
21716.25 /1/	22916.25 /1/
21718.75 /1/	22918.75 /1/
21721.25 /1/	22921.25 /1/
21723.75 /1/	22923.75 /1/
21726.25 /1/	22926.25 /1/
21728.75 /1/	22928.75 /1/
21731.25 /1/	22931.25 /1/
21733.75 /1/	22933.75 /1/
21736.25 /1/	22936.25 /1/
21738.75 /1/	22938.75 /1/
21741.25 /1/	22941.25 /1/
21743.75 /1/	22943.75 /1/
21746.25 /1/	22946.25 /1/
21748.75 /1/	22948.75 /1/
21751.25 /1/	22951.25 /1/
21753.75 /1/	22953.75 /1/
21756.25 /1/	22956.25 /1/
21758.75 /1/	22958.75 /1/
21761.25 /1/	22961.25 /1/
21763.75 /1/	22963.75 /1/
21766.25 /1/	22966.25 /1/

21768.75 /1/ ..... 22968.75 /1/
21771.25 /1/ ..... 22971.25 /1/
21773.75 /1/ ..... 22973.75 /1/
21776.25 /1/ ..... 22976.25 /1/
21778.75 /1/ ..... 22978.75 /1/
21781.25 /1/ ..... 22981.25 /1/
21783.75 /1/ ..... 22983.75 /1/
21786.25 /1/ ..... 22986.25 /1/
21788.75 /1/ ..... 22988.75 /1/
21791.25 /1/ ..... 22991.25 /1/
21793.75 /1/ ..... 22993.75 /1/
21796.25 /1/ ..... 22996.25 /1/
21798.75 /1/ ..... 22998.75 /1/
22301.25 ..... 23501.25
22303.75 ..... 23503.75
22306.25 ..... 23506.25
22308.75 ..... 23508.75
22311.25 ..... 23511.25
22313.75 ..... 23513.75
22316.25 ..... 23516.25
22318.75 ..... 23518.75
22321.25 ..... 23521.25
22323.75 ..... 23523.75
22326.25 ..... 23526.25
22328.75 ..... 23528.75
22331.25 ..... 23531.25
22333.75 ..... 23533.75
22336.25 ..... 23536.25
22338.75 ..... 23538.75
22341.25 ..... 23541.25
22343.75 ..... 23543.75
22346.25 ..... 23546.25
22348.75 ..... 23548.75
22351.25 ..... 23551.25
22353.75 ..... 23553.75
22356.25 ..... 23556.25
22358.75 ..... 23558.75
22361.25 ..... 23561.25
22363.75 ..... 23563.75
22366.25 ..... 23566.25
22368.75 ..... 23568.75
22371.25 ..... 23571.25
22373.75 ..... 23573.75
22376.25 ..... 23576.25

22378.75	23578.75
22381.25	23581.25
22383.75	23583.75
22386.25	23586.25
22388.75	23588.75
22391.25	23591.25
22393.75	23593.75
22396.25	23596.25
22398.75	23598.75

/1/ These frequencies may be assigned to low power systems, as defined in subsection (8) of this paragraph.

(2) 5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21602.5	22802.5
21607.5	22807.5
21612.5	22812.5
21617.5	22817.5
21622.5	22822.5
21627.5	22827.5
21632.5	22832.5
21637.5	22837.5
21642.5	22842.5
21647.5	22847.5
21652.5	22852.5
21657.5	22857.5
21662.5	22862.5
21667.5	22867.5
21672.5	22872.5
21677.5	22877.5
21682.5	22882.5
21687.5	22887.5
21692.5	22892.5
21697.5	22897.5
21702.5 /1/	22902.5 /1/
21707.5 /1/	22907.5 /1/
21712.5 /1/	22912.5 /1/
21717.5 /1/	22917.5 /1/

21722.5 /1/	22922.5 /1/
21727.5 /1/	22927.5 /1/
21732.5 /1/	22932.5 /1/
21737.5 /1/	22937.5 /1/
21742.5 /1/	22942.5 /1/
21747.5 /1/	22947.5 /1/
21752.5 /1/	22952.5 /1/
21757.5 /1/	22957.5 /1/
21762.5 /1/	22962.5 /1/
21767.5 /1/	22967.5 /1/
21772.5 /1/	22972.5 /1/
21777.5 /1/	22977.5 /1/
21782.5 /1/	22982.5 /1/
21787.5 /1/	22987.5 /1/
21792.5 /1/	22992.5 /1/
21797.5 /1/	22997.5 /1/
22302.5	23502.5
22307.5	23507.5
22312.5	23512.5
22317.5	23517.5
22322.5	23522.5
22327.5	23527.5
22332.5	23532.5
22337.5	23537.5
22342.5	23542.5
22347.5	23547.5
22352.5	23552.5
22357.5	23557.5
22362.5	23562.5
22367.5	23567.5
22372.5	23572.5
22377.5	23577.5
22382.5	23582.5
22387.5	23587.5
22392.5	23592.5
22397.5	23597.5

/1/ These frequencies may be assigned to low power systems, as defined in subsection (8) of this paragraph.

(3) 10 MHz bandwidth channels:

TRANSMIT	RECEIVE

(receive) (MHz)	(transmit) (MHz)
21205	22405
21215	22415
21225	22425
21235	22435
21245	22445
21255	22455
21265	22465
21275	22475
21285	22485
21295	22495
21305	22505
21315	22515
21325	22525
21335	22535
21345	22545
21355	22555
21365	22565
21375	22575
21385	22585
21395	22595
21405	22605
21415	22615
21425	22625
21435	22635
21445	22645
21455	22655
21465	22665
21475	22675
21485	22685
21495	22695
21505	22705
21515	22715
21525	22725
21535	22735
21545	22745
21555	22755
21565	22765
21575	22775
21585	22785
21595	22795
21605 /1/	22805 /1/

21615 /1/ ..... 22815 /1/
21625 /1/ ..... 22825 /1/
21635 /1/ ..... 22835 /1/
21645 /1/ ..... 22845 /1/
21655 /1/ ..... 22855 /1/
21665 /1/ ..... 22865 /1/
21675 /1/ ..... 22875 /1/
21685 /1/ ..... 22885 /1/
21695 /1/ ..... 22895 /1/
21705 /1//2/ ..... 22905 /1//2/
21715 /1//2/ ..... 22915 /1//2/
21725 /1//2/ ..... 22925 /1//2/
21735 /1//2/ ..... 22935 /1//2/
21745 /1//2/ ..... 22945 /1//2/
21755 /1//2/ ..... 22955 /1//2/
21765 /1//2/ ..... 22965 /1//2/
21775 /1//2/ ..... 22975 /1//2/
21785 /1//2/ ..... 22985 /1//2/
21795 /1//2/ ..... 22995 /1//2/
21805 /2/ ..... 23005 /2/
21815 /2/ ..... 23015 /2/
21825 /2/ ..... 23025 /2/
21835 /2/ ..... 23035 /2/
21845 /2/ ..... 23045 /2/
21855 /2/ ..... 23055 /2/
21865 /2/ ..... 23065 /2/
21875 /2/ ..... 23075 /2/
21885 /2/ ..... 23085 /2/
21895 /2/ ..... 23095 /2/
21905 /2/ ..... 23105 /2/
21915 /2/ ..... 23115 /2/
21925 /2/ ..... 23125 /2/
21935 /2/ ..... 23135 /2/
21945 /2/ ..... 23145 /2/
21955 /2/ ..... 23155 /2/
21965 /2/ ..... 23165 /2/
21975 /2/ ..... 23175 /2/
21985 /2/ ..... 23185 /2/
21995 /2/ ..... 23195 /2/
22005 23205
22015 23215
22025 23225
22035 23235
22045 23245

22055 23255
22065 23265
22075 23275
22085 23285
22095 23295
22105 23305
22115 23315
22125 23325
22135 23335
22145 23345
22155 23355
22165 23365
22175 23375
22185 23385
22195 23395
22205 23405
22215 23415
22225 23425
22235 23435
22245 23445
22255 23455
22265 23465
22275 23475
22285 23485
22295 23495
22305 /1/ ..... 23505 /1/
22315 /1/ ..... 23515 /1/
22325 /1/ ..... 23525 /1/
22335 /1/ ..... 23535 /1/
22345 /1/ ..... 23545 /1/
22355 /1/ ..... 23555 /1/
22365 /1/ ..... 23565 /1/
22375 /1/ ..... 23575 /1/
22385 /1/ ..... 23585 /1/
22395 /1/ ..... 23595 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ These frequencies may be assigned to low power systems, as defined in subsection (8) of this paragraph.

(4) 20 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21210	22410
21230	22430
21260	22460
21280	22480
21310	22510
21330	22530
21360	22560
21380	22580
21410	22610
21430	22630
21460	22660
21480	22680
21510	22710
21530	22730
21560	22760
21580	22780
21610 /1/	22810 /1/
21630 /1/	22830 /1/
21660 /1/	22860 /1/
21680 /1/	22880 /1/
21710 /1//2/	22910 /1//2/
21730 /1//2/	22930 /1//2/
21760 /1//2/	22960 /1//2/
21780 /1//2/	22980 /1//2/
21810 /2/	23010 /2/
21830 /2/	23030 /2/
21860 /2/	23060 /2/
21880 /2/	23080 /2/
21910 /2/	23110 /2/
21930 /2/	23130 /2/
21960 /2/	23160 /2/
21980 /2/	23180 /2/
22010	23210
22030	23230
22060	23260
22080	23280
22110	23310
22130	23330
22160	23360

22180	23380
22210	23410
22230	23430
22260	23460
22280	23480
22310 /1/	23510 /1/
22330 /1/	23530 /1/
22360 /1/	23560 /1/
22380 /1/	23580 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ These frequencies may be assigned to low power systems, as defined in subsection (8) of this paragraph.

(5) 30 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21235	22435
21285	22485
21335	22535
21385	22585
21435	22635
21485	22685
21535	22735
21585	22785
21635 /1/	22835 /1/
21685 /1/	22885 /1/
21735 /1//2/	22935 /1//2/
21785 /1//2/	22985 /1//2/
21835 /2/	23035 /2/
21885 /2/	23085 /2/
21935 /2/	23135 /2/
21985 /2/	23185 /2/
22035	23235
22085	23285
22135	23335
22185	23385
22235	23435

22285	23485
22335 /1/	23535 /1/
22385 /1/	23585 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ These frequencies may be assigned to low power systems, as defined in paragraph (8) of this section.

(6) 40 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21220	22420
21270	22470
21320	22520
21370	22570
21420	22620
21470	22670
21520	22720
21570	22770
21620 /1/	22820 /1/
21670 /1/	22870 /1/
21720 /1//2/	22920 /1//2/
21770 /1//2/	22970 /1//2/
21820 /2/	23020 /2/
21870 /2/	23070 /2/
21920 /2/	23120 /2/
21970 /2/	23170 /2/
22020	23220
22070	23270
22120	23320
22170	23370
22220	23420
22270	23470
22320 /1/	23520 /1/
22370 /1/	23570 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and

should be used only if all other channels are blocked.

/2/ These frequencies may be assigned to low power systems, as defined in paragraph (8) of this section.

(7) 50 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
21225	22425
21275	22475
21325	22525
21375	22575
21425	22625
21475	22675
21525	22725
21575	22775
21625 /1/	22825 /1/
21675 /1/	22875 /1/
21725 /1//2/	22925 /1//2/
21775 /1//2/	22975 /1//2/
21825 /2/	23025 /2/
21875 /2/	23075 /2/
21925 /2/	23125 /2/
21975 /2/	23175 /2/
22025	23225
22075	23275
22125	23325
22175	23375
22225	23425
22275	23475
22325 /1/	23525 /1/
22375 /1/	23575 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ These frequencies may be assigned to low power systems, as defined in paragraph (8) of this section.

(8) *Special provisions for low power, limited coverage systems in the 21.2-23.6 GHz band.*

Notwithstanding any contrary provisions in this part, the frequencies from 21.7-22.0 GHz and 22.9-23.2 GHz may be authorized for low power, limited coverage systems subject to the following provisions:

(i) The maximum EIRP shall be 55 dBm.

(ii) In the band segments from 21.8-22.0 GHz and 23.0-23.2 GHz, the frequency tolerance for stations authorized on or before **[insert date 24 months after effective date]** is 0.05%. Existing licensees and pending applicants on that date may continue to operate after that date with a frequency tolerance of 0.05%, provided that it does not cause harmful interference to the operation of any other licensee. The frequency tolerance of §101.107(a) shall apply to stations applied for after **[insert date 24 months after effective date]**.

(iii) Stations authorized on or before **[insert date 24 months after effective date]** shall meet the following antenna standards:

(A) The maximum beamwidth shall not exceed 4 degrees; and

(B) The sidelobe suppression criteria contained in §101.115 of this part shall not apply, except that a minimum front-to-back ratio of 38 dB shall apply.

(iv) Stations applied for after **[insert date 24 months after effective date]** shall meet the antenna standards of §101.115. Existing licensees and pending applicants on that date may continue to operate after that date with antennas meeting the requirements of paragraph (iii) of this section.

* * * * *

15. Section 101.507 is proposed to be revised to read as follows:

§ 101.507 Frequency stability.

The frequency stability in the 10,565-10,680 MHz band must be ±0.0001% for each DEMS Nodal Station transmitter and ±0.0003% for each DEMS User Station transmitter. The frequency stability in the 17,700-19,700 MHz and 24,250-25,250 MHz bands must be ±0.001% for each DEMS Nodal Station transmitter and ±0.003% for each DEMS User Station transmitter.

16. Section 101.603 is proposed to be amended by revising paragraph (b)(1) to read as follows:

§ 101.603 Permissible communications.

* * * * *

(b) * * *

(1) Render a common carrier service of any kind except for grandfathered private operational fixed microwave systems which were contracted and licensed to support Specialized Mobile Radio

Systems (SMRS) on these frequencies before the Commission implemented the Budget Act to revise Section 332 of the Communications Act and changed their SMRS status from private service to Commercial Mobile Radio Service (CMRS) as a common carrier.

* * * * *

17. Section 101.803 is proposed to be amended by removing paragraph (e), and revising paragraphs (a) and (d) to read as follows:

§ 101.803 Frequencies.

(a) Frequencies in the following bands are available for assignment to television pickup and television non-broadcast pickup stations in this service:

* * *

14,200 to 14,400 MHz.	/8/
21,200 to 22,000 MHz.	/1/ /2/ /4/ /5/
22,000 to 23,600 MHz.	/1/ /2/ /5/

* * *

* * * * *

/5/ This frequency band is shared with the common carrier and private-operational fixed point-to-point microwave services.

* * * * *

/8/ The maximum power for the local television transmission service in the 14.2-14.4 GHz band is +45 dBW, except that operations are not permitted within 1.5 degrees of the geostationary orbit.

* * * * *

(d) * * *

/8/ This frequency band is shared with the common carrier and private-operational fixed point-to-point microwave services.

* * * * *

18. Section 101.809 is proposed to be amended by revising paragraph (d) to read as follows:

§ 101.809 Bandwidth and emission limitations.

* * * * *

(d) Maximum bandwidths in the following frequency bands must not exceed the limits set forth below:

Frequency band (MHz)	Maximum Authorized Bandwidth (MHz)
3,700 to 4,200	20 /1/
5,925 to 6,425	30 /1/
6,425 to 6,525	25
10,700 to 12,200	40 /1/
13,200 to 13,250	25
21,200 to 23,600	50 /1/

/1/ The maximum bandwidth that will be authorized for each particular frequency in this band is detailed in the appropriate frequency table in §101.147.

* * * * *

19. Section 101.815 is proposed to be amended by revising paragraph (a)(1) to read as follows:

§ 101.815 Stations at temporary fixed locations.

(a) * * *

(1) When a fixed station is to remain at a single location for less than 6 months, the location is considered to be temporary.

* * * * *