

Source of flooding and location of referenced elevation	*Elevation in feet (NGVD) modified	Communities affected
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Maps are available for inspection at 200 Civic Center, Tulsa, Oklahoma.

Tulsa County

Maps are available for inspection at the Tulsa County Anex Building, 633 West 3rd, Room 140, Tulsa, Oklahoma.

(Catalog of Federal Domestic Assistance No. 83.100, "Flood Insurance.")

Dated: January 21, 2003.

Anthony S. Lowe,

Administrator, Federal Insurance and Mitigation Administration.

[FR Doc. 03-2245 Filed 1-30-03; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR part 101

[WT Docket No. 00-19; RM-9418; FCC 02-218]

Streamline Processing of Microwave Applications in the Wireless Telecommunications Services and Telecommunications Industry Association Petition for Rulemaking

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, we take further actions to streamline, clarify, and update our rules. We take these actions to provide increased flexibility to licensees, ensure greater and more efficient use of the spectrum bands regulated under the rules, and ensure that our rules are consistent with international agreements.

DATES: Effective April 1, 2003.

FOR FURTHER INFORMATION CONTACT:

Edward Hayes or Michael Pollak of the Wireless Telecommunications Bureau, Public Safety and Private Wireless Division at (202) 418-0680 (voice), (202) 418-7233 (TTY).

SUPPLEMENTARY INFORMATION: This is a summary of the Federal Communications Commission's *Report and Order*, FCC 02-218, adopted on July 18, 2002, and released on July 31, 2002. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street, SW., Washington, DC 20554. The complete text may be purchased from the Commission's copy contractor, Qualex International, 445 12th Street, SW., Room CY-B402, Washington, DC 20554. The full text may also be downloaded at: <http://www.fcc.gov>.

Alternative formats are available to persons with disabilities by contacting Brian Millin at (202) 418-7426 or TTY (202) 418-7365 or at bmillin@fcc.gov.

1. In the *Report and Order* in WT Docket No. 94-148 and CC Docket No. 93-2, the Commission consolidated the rules for the common carrier and private operational fixed (POFS) microwave services contained in parts 21 and 94, respectively, of the Commission's Rules to create a new part 101. The new consolidated part 101 reduces or eliminates the differences in processing applications between common carriers and POF microwave service licensees, and furthers regulatory parity between these microwave services. On February 14, 2000, the Commission released the *Memorandum Opinion and Order and Notice of Proposed Rule Making* ("NPRM"), 65 FR 38333, June 20, 2000, in this proceeding. In the *NPRM*, the Commission proposed eliminating duplicative, outmoded, or otherwise unnecessary regulations in order to further the work begun by the consolidation of parts 21 and 94 into a single part 101 in the *R&O* and the implementation of the Universal Licensing System (ULS) for wireless applications. Applicants, licensees and related industries were invited to examine these rules and procedures and offer their views and explanations of ways to streamline them and to make sure that the regulations conform with the Communications Act of 1934, as amended (Act).

2. In this *Report and Order*, we take further actions to streamline, clarify, and update our part 101 rules. These actions will provide increased flexibility to licensees, ensure greater and more efficient use of the spectrum bands regulated under part 101, and ensure that our Rules are consistent with international agreements. The significant rule changes and clarifications that we adopt in this *Report and Order* to streamline part 101 are:

- We permit POFS licensees to lease reserve capacity to common carriers for their common carrier traffic. Further, we grandfather certain POFS licensees who formerly carried private traffic now classified as common carrier traffic.
- We clarify that conditional authorization in the 23 GHz Band is

permitted only on the frequency pairs identified in Section 101.147(s), and only if the maximum Effective Isotropic Radiated Power (EIRP) utilized does not exceed 55 dBm.

- We allow conditional operation in the 952.95-956.15 and 956.55-959.75 MHz bands.

- We clarify and correct the frequency tolerance table in Section 101.107(a) in accordance with the proposal contained in the *MO&O and NPRM*, 15 FCC Rcd at 3153 ¶ 45.

- We amend the EIRP table in § 101.113(a) to divide the 10.55-10.68 GHz band into two separate bands: 10.55-10.6 GHz with the maximum power of 55 dBW and 10.6-10.68 GHz with a maximum power of 40 dBW.

- We permit any Local Multipoint Distribution Service (LMDS) antenna polarization away from service boundaries.

- We amend § 101.507 to provide the frequency tolerance of $\pm 0.0001\%$ for Digital Electronic Message Service (DEMS) Nodal Stations and $\pm 0.0003\%$ for DEMS User Stations in the 10,550-10,680 MHz band.

- We modify the part 101 emission mask to make it less severe for LMDS by adopting for LMDS the same mask requirements that we did for the 24 GHz service, as outlined in § 101.111(a)(2)(iv).

- We modify the reference bandwidth in § 101.111(a)(2)(iii) from 4 kHz to 1 MHz for consistency with § 101.111(a)(2)(ii) and Appendix S3 of the International Radio Regulations.

3. Additionally, in response to the Telecommunications Industry Association (TIA) Petition for Rulemaking relating to the 10 GHz and 23 GHz bands, we adopt the following rule changes:

- We specify a channel plan for the 23 GHz band in our Rules.

- We adopt frequency tolerance standards for both digital and analog radios operating in the 23 GHz band.

- We extend a 1 bps/Hz spectrum efficiency rate requirement to the 23 GHz band for digital transmitters.

- We allow the use of smaller antennas in the 10 GHz and 23 GHz bands.

I. Procedural Matters

A. Regulatory Flexibility Act Analysis

4. A Final Regulatory Flexibility Analysis (FRFA) with respect to the *Report and Order*, pursuant to the Regulatory Flexibility Act (RFA), is contained below. The Commission's Consumer Information Bureau, Reference Information Center, will send a copy of this *Report and Order*, including the FRFA, to the Chief Counsel of the Small Business Administration in accordance with the RFA.

B. Paperwork Reduction Act of 1995 Analysis

5. This Report and Order does not contain either a proposed or modified information collection.

II. Final Regulatory Flexibility Analysis

6. As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. 603 (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *MO&O and NPRM* in this proceeding. The Commission sought written public comments on the proposals in those proceedings, including on the IRFA. The Commission's Final Regulatory Flexibility Analysis (FRFA) for the *Report and Order (R&O)* conforms to the RFA.

A. Need For and Purpose of This Action

7. This *R&O* furthers the Commission's continuing efforts to eliminate and/or modify regulations in part 101 that are duplicative, outmoded, or otherwise unnecessary. This action will (1) clarify the existing rules so they are easier to understand, (2) facilitate the awarding of licenses more quickly, and (3) eliminate unnecessary regulation.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

8. Commenters did not file any comments in direct response to the IRFA. Some commenters, however, raised issues that may be of particular concern to small entities. The specific suggestions, modifications, and deletions have been discussed above. We have reviewed the comments to determine the impact of the decisions set forth herein on small entities.

C. Description and Estimate of the Number of Small Entities to Which the Rules Apply

9. The rules will affect all common carrier and private operational fixed microwave licensees who are authorized

under part 101 of the Commission's Rules. The Commission has not developed a definition of small entities applicable to these licensees. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules for the radiotelephone industry, which provides that a small entity is a radiotelephone company employing fewer than 1,500 persons. The 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent information available, shows that 12 radiotelephone firms out of a total of 1,178 such firms which operated during 1992 had 1,000 or more employees. With respect to these entities, we note that the effect will be to lessen time and input and thereby any costs associated with processing their applications.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

10. There is only one new reporting requirement adopted in this *R&O*. We are amending § 101.31(b) to require that 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. We will require that 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. This requirement previously was in our rules and inadvertently deleted during recodification. Nothing in the record indicates that the requirement was, or will be, burdensome to small entities. Other than this, we have amended the fixed microwave rules to make them less burdensome and clarified the language of some of the rules.

E. Significant Alternatives Considered

11. The comments offered various alternatives for modification of proposals contained in the notice of proposed rule making portion of the *MO&O and NPRM*. An additional alternative was to maintain the *status quo*. Generally, the comments supported the proposals, but offered changes to make the rules more clear and accurate. Some of the suggested modifications are contained in the final rules. Aside from the amendment of § 101.31 highlighted above, the rules impose no additional regulatory burdens. The Commission will continue to examine alternatives in the future with the objective of eliminating unnecessary regulations and

minimizing economic impact on small business entities.

F. Commission's Outreach Efforts To Learn of and Respond to the Views of Small Entities Pursuant to 5 U.S.C. 609

12. In this proceeding, the Commission has taken several steps to learn and respond to the views of small entities. Throughout the course of this proceeding, representatives of the Public Safety and Private Wireless Division (PSPWD) of the Wireless Telecommunications Bureau have had numerous discussions with the representatives of small entities. The staff of the Licensing and Technical Analysis Branch of the PSPWD in Gettysburg, Pennsylvania routinely respond to questions posed by the representatives of small entities and, when appropriate, refer issues arising from those questions to PSPWD staff in Washington, DC for determination of whether a rule change or clarification will benefit the small entities posing the questions.

G. Report to Congress

13. The Commission shall send a copy of this Final Regulatory Flexibility Analysis, along with the *Report and Order*, in a report to Congress pursuant to section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 801(a)(1)(A). A copy of this FRFA will also be published in the **Federal Register**.

III. Ordering Clauses

14. Accordingly, pursuant to sections 1, 2, 4(i), 5(c), 7(a), 11(b), 301, 302, 303, 307, 308, 309(j), 310, 312a, 316, 319, 323, 324, 332, 333, 336, 337, and 351 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 155(c), 157(a), 161(b), 301, 302, 303, 307, 308, 309(j), 310, 312a, 316, 319, 323, 324, 332, 333, 336, 337, 351, and §§ 1.421 and 1.425 of the Commission's Rules, 47 CFR 1.421, 1.425, the *Report and Order* in this proceeding is hereby adopted.

15. The Commission's Consumer Information Bureau, Reference Information Center, shall send a copy of this *Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the U.S. Small Business Administration.

List of Subjects in 47 CFR Part 101

Communications equipment, Marine safety, Radio, Reporting and recordkeeping requirements.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Rule Changes

Part 101 of chapter 1 of title 47 of the Code of Federal Regulations is 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 101.3 is amended by removing the definition for MHz Service Bands and by revising the Multiple address system (MAS) definition to read as follows:

§ 101.3 Definitions.

* * * * *

Multiple address system (MAS). A point-to-multipoint or point-to-point radio communications system used for either one-way or two-way transmissions that operates in the 928/952/956 MHz, the 928/959 MHz or the 932/941 MHz bands in accordance with § 101.147.

* * * * *

3. Section 101.5 is 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 a Multiple Address System (MAS) remote or mobile station. 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 (to the extent this part permits such operation) within a specified area will be included in the authority for the MAS fixed master stations.

* * * * *

4. Section 101.31 is amended by revising paragraphs (a)(2), (b)(1)

introductory text, (b)(1) (vii) and (b)(3), by removing paragraphs (a)(3) through (a)(5) and paragraph (b)(4), by redesignating paragraphs (a)(6) as paragraph (a)(3) and by revising newly designated paragraph (a)(3) to read as follows:

§ 101.31 Temporary and conditional authorizations.

(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 specific coordinate (latitude/longitude), or as a county, or as a State. 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.

(3) Operations in the 17.8–19.7 GHz band are prohibited in the areas defined in § 1.924 of this chapter. Operations proposed in the areas defined in § 1.924 of this chapter may not commence without prior specific notification to, and authorization from, the Commission.

* * * * *

(b) * * *

(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; 12,700–13,200; 13,200–13,250; 17,700–19,700; and 21,800–22,000 MHz, and 23,000–23,200 MHz bands (*see* § 101.147(s) 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) With respect to the 21.8–22.0 GHz and 23.0–23.2 GHz band, the filed application(s) does not propose to operate on a frequency pair centered on other than 21.825/23.025 GHz, 21.875/23.075 GHz, 21.925/23.125 GHz or 21.975/23.175 GHz and does not propose to operate with an E.I.R.P. greater than 55 dBm. The center frequencies are shifted from the center frequencies listed above for certain bandwidths as follows: add 0.005 GHz for 20 MHz bandwidth channels, add 0.010 GHz for 30 MHz bandwidth channels, and subtract 0.005 GHz for 40 MHz bandwidth channels. *See* specific channel listings in § 101.147(s).

* * * * *

(3) Conditional authorization does not prejudice any action the Commission may take on the subject application(s). Conditional authority is accepted with the express understanding that such authority may be modified or cancelled by the Commission at any time without hearing if, in the Commission's discretion, the need for such action arises. An applicant operating pursuant to this conditional authority assumes all risks associated with such operation, the termination or modification of the conditional authority, or the subsequent dismissal or denial of its applications(s).

* * * * *

1. Section 101.55 is amended by revising paragraph (a) introductory text and removing paragraph (e) to read as follows:

§ 101.55 Considerations involving transfer or assignment applications.

(a) Except as provided for in paragraph (d) of this section, licenses not authorized pursuant to competitive bidding procedures may not be assigned or transferred prior to the completion of construction of the facility.

* * * * *

6. Section 101.101 is amended by revising frequency band 2450–2500, 18,820–18,920 and 19,160–19,210 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

Frequency band (MHz)	Radio service					Notes
	Common carrier (part 101)	Private radio (part 101)	Broadcast auxiliary (part 74)	Other (parts 15, 21, 24, 25, 74, 78, & 100)		
* * *	*	*	*	*	*	*
18,820–18,920	CC	OFS		SAT		
* * *	*	*	*	*	*	*
19,160–19,260	CC	OFS		SAT		
* * *	*	*	*	*	*	*

7. Section 101.107 is 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 ¹²	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 ³	0.003
18,820 to 18,920 ³	0.001
928 to 929 ⁵	0.0005
18,920 to 19,700 ³	0.003
19,700 to 27,500 ⁴⁷	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

* * *

¹Applicable 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.

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

³Existing type accepted equipment with a frequency tolerance of $\pm 0.03\%$ 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 $\pm 0.03\%$. However, the replacement of equipment requires that the current tolerance be met.

⁴Applicable to private operational fixed point-to-point microwave and stations providing MVDDS.

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

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

⁷The frequency tolerance for stations authorized on or before April 1, 2005 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 analog systems, if the channel bandwidth is greater than 30 MHz up to 50 MHz, the frequency tolerance standard will be 0.03%; if the channel bandwidth is 30 MHz or less, then the frequency tolerance standard will be 0.003%. This analog standard is conditional provided that harmful interference is not caused to digital stations operating within the 0.001% tolerance standards. If harmful interference is caused to stations operating with the more stringent standard, the onus shall be on the operators with the less stringent parameters to develop an engineering solution to the problem. For exceptions, see § 101.147 and § 101.507.

8. Section 101.109 is amended by revising the frequency band of 21,200 to 23,600 table in paragraph (c) to read as follows:

§ 101.109 Bandwidth.

* * *
(c) * * *

Frequency band (MHz)	Maximum authorized bandwidth
* * *	*
21,200 to 23,600	50 MHz ¹⁴
* * *	*

9. Section 101.111 is amended by revising (a)(2)(i) through (a)(2)(iv) to read as follows:

§ 101.111 Emission limitations.

* * *
(a) * * *
(2) * * *

(i) For operating frequencies below 15 GHz, in any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 250 percent of the authorized bandwidth: As specified by the following equation but in no event less than 50 decibels:

$$A = 35 + 0.8(P - 50) + 10 \log_{10} B.$$

(Attenuation greater than 80 decibels or to an absolute power of less than -13 dBm/1MHz is not required.)

where:

A = Attenuation (in decibels) below the mean output power level.

P = Percent removed from the center frequency of the transmitter bandwidth.

B = Authorized bandwidth in MHz.

Note: MVDDS operations in the 12.2–12.7 GHz band shall use 24 megahertz for the value of B in the emission mask equation set forth in this section.

(ii) For operating frequencies above 15 GHz, in any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 250 percent of the authorized bandwidth: As specified by the following equation but in no event less than 11 decibels:

$$A = 11 + 0.4(P - 50) + 10 \log_{10} B.$$

(Attenuation greater than 56 decibels or to an absolute power of less than -13 dBm/1MHz is not required.)

(iii) In any 1 MHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log_{10}$ (the mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation. The authorized bandwidth includes the nominal radio frequency bandwidth of an individual transmitter/modulator in block-assigned bands. Equipment licensed prior to April 1, 2005 shall only be required to meet this standard in any 4 kHz band.

(iv) The emission mask for LMDS and the 24 GHz Service shall use the equation in paragraph (a)(2)(ii) of this section and apply it only to the band edge of each block of spectrum, but not

to subchannels established by licensees. The value of P in the equation is the percentage removed from the carrier frequency and assumes that the carrier frequency is the center of the actual bandwidth used. The emission mask can be satisfied by locating a carrier of the subchannel sufficiently far from the channel edges so that the emission levels of the mask are satisfied. The LMDS or 24 GHz emission mask shall use a value B (bandwidth) of 40 MHz, for all cases even in the case where a narrower subchannel is used (for instance the actual bandwidth is 10 MHz) and the mean output power used in the calculation is the sum of the output power of a fully populated channel. For block assigned channels, the out-of-band emission limits apply only outside the assigned band of operation and not within the band.

* * * * *

10. Section 101.113 is amended by revising the frequency band of 10,550 to 10,680 and by revising footnote 5 of 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	

* * *	*	*
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⁵The output power of a DEMS System nodal transmitter shall not exceed 0.5 watt per 250 kHz. The output power of a DEMS System user transmitter shall not exceed 0.04 watt per 250 kHz. The transmitter power in terms of the watts specified is the peak envelope power of the emission measured at the associated antenna input port. The operating power shall not exceed the authorized power by more than 10 percent of the authorized power in watts at any time. Frequencies from 10,600–10,680 MHz are subject to footnote US265 in the Table of Frequency Allocations in § 2.106 of the Commission's Rules. Stations authorized prior to April 1, 2003 to exceed the 40 dBW limit may continue to operate at their authorized output power level indefinitely, provided that neither end point of the relevant link is relocated.

* * * * *

11. Section 101.115 is amended by removing paragraph (b) and redesignating paragraphs (c) through (g) as (b) through (f), and revising footnote 7 and the frequency bands of 10,550 to 16,680 and 21,200 to 23,600, and by adding footnote 7 to frequency 21,200 to 23,600 of the table in newly designated paragraph (b) to read as follows:

§ 101.115 Directional antennas.

* * * * *

(b) * * *

(2) * * *

ANTENNA STANDARDS

Frequency (MHz)	Category	Maximum beamwidth to 3 dB points ¹ (in- cluded angle in de- grees)	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°
* * *	*	*	*	*		*		*		*
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
* * *	*	*	*	*		*		*		*

⁷For stations authorized or pending on April 1, 2003, 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°.

* * * * *

12. Section 101.117 is 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. Unless otherwise allowed, only linear polarization (horizontal and vertical) shall be used. For LMDS systems, unless otherwise authorized, system operators are permitted to use any polarization within its service area, but only vertical and/or horizontal polarization for antennas located within 20 kilometers of the outermost edge of their service area.

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

§ 101.133 Limitations on use of transmitters.

* * * * *

(e) Existing private operational fixed wireless licensees applying to become common carrier wireless licensees shall comply with all provisions of the Communications Act and the Commission's rules. Applicants must take all required filings, including FCC Form 601, and receive all necessary Commission approval prior to operating

as a common carrier wireless licensee. The regulatory fee associated with FCC wireless application Form 601 is waived for applicants who are existing private operational fixed licensees seeking common carrier status, provided that such licensees have also complied with all other discontinuance requirements of Title II of the Act. Applicants are responsible for all other Commission regulatory fees.

14. Section 101.135 is amended by revising paragraph (a) 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.

15. Section 101.139 is amended by revising paragraphs (a) and (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 April 1, 2005, 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 for digital systems in § 101.107(a) or the 0.03–0.003% frequency tolerance for analog systems; and

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

16. Section 101.141 is amended by revising paragraph (a) introductory text and revising paragraph (a)(1) to read as follows:

§ 101.141 Microwave modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 25.25 GHz (except for MVDDS stations in the 12,200–12,700 MHz band) must, with appropriate multiplex equipment, comply with the following additional requirements:

(1) The bit rate, in bits per second, must be equal to or greater than the bandwidth specified by the emission designator in Hertz (*e.g.*, to be acceptable, equipment transmitting at a 20 Mb/s rate must not require a bandwidth of greater than 20 MHz), except the bandwidth used to calculate the minimum rate may not include any authorized guard band.

(i) Stations authorized prior to December 1, 1988 may install equipment after that date with no minimum bit rate. Equipment applied for or authorized prior to April 1, 2005 in the 21.2–23.6 GHz band may be installed with no minimum bit rate.

(ii) However, any digital equipment applied for after April 1, 2005 and equipment replacing existing equipment in the 21.2–23.6 GHz band must meet the bit rate standard.

17. Section 101.147 is amended by removing note 4 and adding note 12 to the frequency band of 2,450 to 2,500 in the table following paragraph (a), by revising notes (1), (12), (14), (26) to the table in paragraph (a), by adding a note to paragraph (b) introductory text, by revising the remote transmit of frequency 928.75675 of Table 3 in paragraph (b)(2), by removing and reserving paragraph (k) and by revising paragraphs (r) (10) introductory text and paragraph (s) to read as follows:

§ 101.147 Frequency assignments.

(a) * * *
* * * * *
2,450–2,500 MHz (12)
* * * * *

(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 Radio communication 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.

(14) Frequencies in this band are shared with stations in the fixed-satellite service.

(26) Frequencies from 21.8–22.0 GHz and 23.0–23.2 GHz may be authorized for low power, limited coverage systems

subject to the provisions of paragraph (s)(8) of this section.

* * * * *

(b) * * *
Note to paragraph (b) introductory text: Paragraphs (b)(1) through (b)(5) and Tables 1 through 7 of this section pertain to Multiple Address System (MAS) frequencies and paragraph (b)(6) and Tables 8 through 11 of this section pertain to Point-To-Point frequencies.

* * * * *

(2) * * *

TABLE 3.—PAIRED FREQUENCIES (MHz)

[12.5 kHz bandwidth]

Remote transmit	Master transmit
928.75625	952.75625

* * * * *

(k) [Reserved]

* * * * *

(r) * * *

(10) Special provision for low power systems in the 17–700–19700 MHz band: Notwithstanding other provisions in this rule part, and except for specified areas around Washington, DC, and Denver, Colorado, licensees of point-to-multipoint channel pairs 25–29 identified in paragraph (r)(9) of this section may operate multiple low power transmitting devices within a defined service area. New operations are prohibited within 55 km when used outdoor and within 20 km when used indoor of the coordinates 38°48' N/76°52' W and 39°43' N/104°46' W. The service area will be a 28 kilometer omnidirectional radius originating from specified center reference coordinates. The specified center coordinates must be no closer than 56 kilometers from any co-channel nodal station or the specified center coordinates of another co-channel system. Applicants/licensees do not need to specify the location of each individual transmitting device operating within their defined service areas. 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.

Transmit (receive) (MHz)	Receive (transmit) (MHz)
(1) 2.5 MHz bandwidth channels:	
21601.25	22801.25
21603.75	22803.75

Transmit (receive) (MHz)	Receive (transmit) (MHz)	Transmit (receive) (MHz)	Receive (transmit) (MHz)	Transmit (receive) (MHz)	Receive (transmit) (MHz)
21606.25	22806.25	21786.25	22986.25	21722.5	22922.5
21608.75	22808.75	21788.75	22988.75	21727.5	22927.5
21611.25	22811.25	21791.25	22991.25	21732.5	22932.5
21613.75	22813.75	21793.75	22993.75	21737.5	22937.5
21616.25	22816.25	21796.25	22996.25	21742.5	22942.5
21618.75	22818.75	21798.75	22998.75	21747.5	22947.5
21621.25	22821.25	22301.25	23501.25	21752.5	22952.5
21623.75	22823.75	22303.75	23503.75	21757.5	22957.5
21626.25	22826.25	22306.25	23506.25	21762.5	22962.5
21628.75	22828.75	22308.75	23508.75	21767.5	22967.5
21631.25	22831.25	22311.25	23511.25	21772.5	22972.5
21633.75	22833.75	22313.75	23513.75	21777.5	22977.5
21636.25	22836.25	22316.25	23516.25	21782.5	22982.5
21638.75	22838.75	22318.75	23518.75	21787.5	22987.5
21641.25	22841.25	22321.25	23521.25	21792.5	22992.5
21643.75	22843.75	22323.75	23523.75	21797.5	22997.5
21646.25	22846.25	22326.25	23526.25	22302.5	23502.5
21648.75	22848.75	22328.75	23528.75	22307.5	23507.5
21651.25	22851.25	22331.25	23531.25	22312.5	23512.5
21653.75	22853.75	22333.75	23533.75	22317.5	23517.5
21656.25	22856.25	22336.25	23536.25	22322.5	23522.5
21658.75	22858.75	22338.75	23538.75	22327.5	23527.5
21661.25	22861.25	22341.25	23541.25	22332.5	23532.5
21663.75	22863.75	22343.75	23543.75	22337.5	23537.5
21666.25	22866.25	22346.25	23546.25	22342.5	23542.5
21668.75	22868.75	22348.75	23548.75	22347.5	23547.5
21671.25	22871.25	22351.25	23551.25	22352.5	23552.5
21673.75	22873.75	22353.75	23553.75	22357.5	23557.5
21676.25	22876.25	22356.25	23556.25	22362.5	23562.5
21678.75	22878.75	22358.75	23558.75	22367.5	23567.5
21681.25	22881.25	22361.25	23561.25	22372.5	23572.5
21683.75	22883.75	22363.75	23563.75	22377.5	23577.5
21686.25	22886.25	22366.25	23566.25	22382.5	23582.5
21688.75	22888.75	22368.75	23568.75	22387.5	23587.5
21691.25	22891.25	22371.25	23571.25	22392.5	23592.5
21693.75	22893.75	22373.75	23573.75	22397.5	23597.5
21696.25	22896.25	22376.25	23576.25	(3) 10 MHz bandwidth chan-	
21698.75	22898.75	22378.75	23578.75	nels:	
21701.25	22901.25	22381.25	23581.25	21205	22405
21703.75	22903.75	22383.75	23583.75	21215	22415
21706.25	22906.25	22386.25	23586.25	21225	22425
21708.75	22908.75	22388.75	23588.75	21235	22435
21711.25	22911.25	22391.25	23591.25	21245	22445
21713.75	22913.75	22393.75	23593.75	21255	22455
21716.25	22916.25	22396.25	23596.25	21265	22465
21718.75	22918.75	22398.75	23598.75	21275	22475
21721.25	22921.25	(2) 5 MHz bandwidth chan-		21285	22485
21723.75	22923.75	nels:		21295	22495
21726.25	22926.25	21602.5	22802.5	21305	22505
21728.75	22928.75	21607.5	22807.5	21315	22515
21731.25	22931.25	21612.5	22812.5	21325	22525
21733.75	22933.75	21617.5	22817.5	21335	22535
21736.25	22936.25	21622.5	22822.5	21345	22545
21738.75	22938.75	21627.5	22827.5	21355	22555
21741.25	22941.25	21632.5	22832.5	21365	22565
21743.75	22943.75	21637.5	22837.5	21375	22575
21746.25	22946.25	21642.5	22842.5	21385	22585
21748.75	22948.75	21647.5	22847.5	21395	22595
21751.25	22951.25	21652.5	22852.5	21405	22605
21753.75	22953.75	21657.5	22857.5	21415	22615
21756.25	22956.25	21662.5	22862.5	21425	22625
21758.75	22958.75	21667.5	22867.5	21435	22635
21761.25	22961.25	21672.5	22872.5	21445	22645
21763.75	22963.75	21677.5	22877.5	21455	22655
21766.25	22966.25	21682.5	22882.5	21465	22665
21768.75	22968.75	21687.5	22887.5	21475	22675
21771.25	22971.25	21692.5	22892.5	21485	22685
21773.75	22973.75	21697.5	22897.5	21495	22695
21776.25	22976.25	21702.5	22902.5	21505	22705
21778.75	22978.75	21707.5	22907.5	21515	22715
21781.25	22981.25	21712.5	22912.5	21525	22725
21783.75	22983.75	21717.5	22917.5	21535	22735

Transmit (receive) (MHz)	Receive (transmit) (MHz)	Transmit (receive) (MHz)	Receive (transmit) (MHz)	Transmit (receive) (MHz)	Receive (transmit) (MHz)
21545	22745	22265	23465	21535	22735
21555	22755	22275	23475	21585	22785
21565	22765	22285	23485	21635 ¹	¹ 22835
21575	22775	22295	23495	21685 ¹	¹ 22885
21585	22785	22305 ¹	¹ 23505	21735 ¹	¹ 22935
21595	22795	22315 ¹	¹ 23515	21785 ¹	¹ 22985
21605 ¹	¹ 22805	22325 ¹	¹ 23525	21835 ²	² 23035
21615 ¹	¹ 22815	22335 ¹	¹ 23535	21885 ²	² 23085
21625 ¹	¹ 22825	22345 ¹	¹ 23545	21935 ²	² 23135
21635 ¹	¹ 22835	22355 ¹	¹ 23555	21985 ²	² 23185
21645 ¹	¹ 22845	22365 ¹	¹ 23565	22035	23235
21655 ¹	¹ 22855	22375 ¹	¹ 23575	22085	23285
21665 ¹	¹ 22865	22385 ¹	¹ 23585	22135	23335
21675 ¹	¹ 22875	22395 ¹	¹ 23595	22185	23385
21685 ¹	¹ 22885	(4) 20 MHz bandwidth channels:		22235	23435
21695 ¹	¹ 22895	21210	22410	22285	23485
21705 ¹	¹ 22905	21230	22430	22335 ¹	¹ 23535
21715 ¹	¹ 22915	21260	22460	22385 ¹	¹ 23585
21725 ¹	¹ 22925	21280	22480	(6) 40 MHz bandwidth channels:	
21735 ¹	¹ 22935	21310	22510	21220	22420
21745 ¹	¹ 22945	21330	22530	21270	22470
21755 ¹	¹ 22955	21360	22560	21320	22520
21765 ¹	¹ 22965	21380	22580	21370	22570
21775 ¹	¹ 22975	21410	22610	21420	22620
21785 ¹	¹ 22985	21430	22630	21470	22670
21795 ¹	¹ 22995	21460	22660	21520	22720
21805 ²	² 23005	21480	22680	21570	22770
21815 ²	² 23015	21510	22710	21620 ¹	¹ 22820
21825 ²	² 23025	21530	22730	21670 ¹	¹ 22870
21835 ²	² 23035	21560	22760	21720 ¹	¹ 22920
21845 ²	² 23045	21580	22780	21770 ¹	¹ 22970
21855 ²	² 23055	21610 ¹	¹ 22810	21820 ²	² 23020
21865 ²	² 23065	21630 ¹	¹ 22830	21870 ²	² 23070
21875 ²	² 23075	21660 ¹	¹ 22860	21920 ²	² 23120
21885 ²	² 23085	21680 ¹	¹ 22880	21970 ²	² 23170
21895 ²	² 23095	21710 ¹	¹ 22910	22020	23220
21905 ²	² 23105	21730 ¹	¹ 22930	22070	23270
21915 ²	² 23115	21760 ¹	¹ 22960	22120	23320
21925 ²	² 23125	21780 ¹	¹ 22980	22170	23370
21935 ²	² 23135	21810 ²	² 23010	22220	23420
21945 ²	² 23145	21830 ²	² 23030	22270	23470
21955 ²	² 23155	21860 ²	² 23060	22320 ¹	¹ 23520
21965 ²	² 23165	21880 ²	² 23080	22370 ¹	¹ 23570
21975 ²	² 23175	21910 ²	² 23110	(7) 50 MHz bandwidth channels:	
21985 ²	² 23185	21930 ²	² 23130	21225	22425
21995 ²	² 23195	21960 ²	² 23160	21275	22475
22005	23205	21980 ²	² 23180	21325	22525
22015	23215	22010	23210	21375	22575
22025	23225	22030	23230	21425	22625
22035	23235	22060	23260	21475	22675
22045	23245	22080	23280	21525	22725
22055	23255	22110	23310	21575	22775
22065	23265	22130	23330	21625 ¹	¹ 22825
22075	23275	22160	23360	21675 ¹	¹ 22875
22085	23285	22180	23380	21725 ¹	¹ 22925
22095	23295	22210	23410	21775 ¹	¹ 22975
22105	23305	22230	23430	21825 ²	² 23025
22115	23315	22260	23460	21875 ²	² 23075
22125	23325	22280	23480	21925 ²	² 23125
22135	23335	22310 ¹	¹ 23510	21975 ²	² 23175
22145	23345	22330 ¹	¹ 23530	22025	23225
22155	23355	22360 ¹	¹ 23560	22075	23275
22165	23365	22380 ¹	¹ 23580	22125	23325
22175	23375	(5) 30 MHz bandwidth channels:		22175	23375
22185	23385	21235	22435	22225	23425
22195	23395	21285	22485	22275	23475
22205	23405	21335	22535	22325 ¹	¹ 23525
22215	23415	21385	22585		
22225	23425	21435	22635		
22235	23435	21485	22685		
22245	23445				
22255	23455				

Transmit (receive) (MHz)	Receive (transmit) (MHz)
22375 ¹	123575

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 21.8–22.0 GHz and 23.0–23.2 GHz band segments.* Notwithstanding any contrary provisions in this part, the frequency band segment 21.8–22.0 GHz paired with the frequency band segment 23.0–23.2 GHz may be authorized for low power, limited coverage systems subject to the following provisions:

(i) The maximum EIRP shall be 55 dBm and the rated transmitter output power shall not exceed 0.100 Watts;

(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 April 1, 2005 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 April 1, 2005;

(iii) The maximum beamwidth shall not exceed 4 degrees;

(iv) 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;

(v) Upon showing of need, a maximum bandwidth of 50 MHz may be authorized per frequency assigned;

(vi) Radio systems authorized under the provisions of this section shall have no more than five hops in tandem, except upon showing of need, but in any event the maximum tandem length shall not exceed 40 km (25 miles);

(vii) Interfering signals at the antenna terminals of station authorized under this section shall not exceed –90 dBm and –70 dBm respectively, for co-channel and adjacent channel interfering signals; and

(viii) Stations authorized under the provisions of this section shall provide the protection from interference specified in § 101.105 to stations operating in accordance with the provisions of this part.

* * * * *

18. Section 101.507 is revised to read as follows:

§ 101.507 Frequency stability.

The frequency stability in the 10,550–10,680 MHz band must be $\pm 0.0001\%$ for each DEMS Nodal Station transmitter and $\pm 0.0003\%$ for each DEMS User Station transmitter. The frequency stability in the 24,250–25,250 MHz bands must be $\pm 0.001\%$ for each Nodal Station transmitter and $\pm 0.003\%$ for each User Station transmitter.

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

§ 101.603 Permissible communications.

* * * * *

(b) * * *

(1) Render a common carrier service of any kind. However, licensees are allowed to lease excess capacity to common carriers. In addition, Specialized Mobile Radio (SMR) licensees reclassified by the Commission as Commercial Mobile Radio Services (CMRS), that were formerly private land mobile radio service providers, may continue to utilize private operational fixed microwave systems licensed prior to April 1, 2003 for their land mobile connecting facilities.

* * * * *

20. Section 101.803 is amended by revising paragraph (a)(5), paragraph (d)(8), by removing paragraph (e) and redesignating paragraphs (f) and (g) as paragraphs (e) and (f) to read as follows:

§ 101.803 Frequencies.

(a) * * *

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

* * * * *

(d) * * *

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

* * * * *

21. Section 101.809 is 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:

MAXIMUM AUTHORIZED

Frequency band (MHz)	Bandwidth (MHz)
3,700 to 4,200	¹ 20
5,925 to 6,425	¹ 30

MAXIMUM AUTHORIZED—Continued

Frequency band (MHz)	Bandwidth (MHz)
6,425 to 6,525	25
10,700 to 12,200	¹ 40
13,200 to 13,250	25
21,200 to 23,600	¹ 50

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.

* * * * *

22. Section 101.815 is 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.

* * * * *

23. Section 101.1325 is amended by revising paragraph (a) to read as follows:

§ 101.1325 Construction requirements.

(a) Incumbent and site-based licenses are subject to the construction requirements set forth in § 101.63.

* * * * *

24. Section 101.1333 is amended by revising paragraph (c) to read as follows:

§ 101.1333 Interference protection criteria

* * * * *

(c) EA licensees are prohibited from exceeding a signal strength of 40 dBμV/m at incumbent licensees' 40.2 kilometer (25-mile) radius composite contour specified in § 101.1331(c).

* * * * *

[FR Doc. 03–1325 Filed 1–30–03; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA 02–14270]

RIN 2127–AI71

Federal Motor Vehicle Safety Standards; Occupant Crash Protection

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Final rule.

SUMMARY: In May 2000, we published a rule to require advanced air bags in light vehicles. The requirements of that rule