| Source of flooding and location of referenced elevation | *Elevation in <br> feet (NGVD) <br> modified | Commuities affected |
| :--- | :--- | :--- |

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] BILLING CODE 6718-04-P

## FEDERAL COMMUNICATIONS COMMISSION

## 47 CFR part 101

[WT Docket No. 00-19; RM-9418; FCC 02218]

## 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 $N P R M$, 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 $R \mathcal{E} O$ 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 $M O \mathscr{O}$ and NPRM, 15 FCC Rcd at 3153 II 45.
- We amend the EIRP table in § 101.113(a) to divide the 10.55-10.68 GHz band into two separate bands: $10.55-10.6 \mathrm{GHz}$ with the maximum power of 55 dBW and $10.6-10.68 \mathrm{GHz}$ 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$10,680 \mathrm{MHz}$ 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 $1 \mathrm{bps} / \mathrm{Hz}$ 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 ( $R \mathscr{\&} O$ ) conforms to the RFA.

## A. Need For and Purpose of This Action

## 7. This $R \mathcal{E} O$ 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 $R \mathscr{\&} O$. 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 $M O \mathcal{O}$ 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/ $952 / 956 \mathrm{MHz}$, the $928 / 959 \mathrm{MHz}$ 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 $17.8-19.7 \mathrm{GHz}$ band are prohibited in the areas defined in § 1.924 of this chapter. Operations proposed in the areas defined in $\S 1.924$ of this chapter may not commence without prior specific notification to, and authorization from, the Commission.
(b) * * *
(1) An applicant for a new point-topoint 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; 11,70012,200; 12,700-13,200; 13,200-13,250; $17,700-19,700$; and $21,800-22,000 \mathrm{MHz}$, and $23,000-23,200 \mathrm{MHz}$ 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 $23.0-23.2 \mathrm{GHz}$ band, the filed application(s) does not propose to operate on a frequency pair centered on other than $21.825 / 23.025 \mathrm{GHz}, 21.875 /$ $23.075 \mathrm{GHz}, 21.925 / 23.125 \mathrm{GHz}$ or $21.975 / 23.175 \mathrm{GHz}$ 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.
2. 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.


3. 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 9295 | 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 9295 | 0.0005 |
| 18,920 to $19,700^{3}$ | 0.003 |
| 19,700 to 27,500 ${ }^{4}$ | 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 $2450-2500 \mathrm{MHz}$ 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 $10,500 \mathrm{MHz}$ and $.05 \%$ in the range $10,500 \mathrm{MHz}$ to $12,200 \mathrm{MHz}$, 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 $\pm 0.03 \%$ 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.


#### Abstract

${ }^{4}$ Applicable to private operational fixed point-to-point microwave and stations providing MVDDS. ${ }^{5}$ For 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, $\pm 0.0005 \%$. ${ }^{6}$ 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 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 ............... | $50 \mathrm{MHz}{ }^{14}$ |

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
$-13 \mathrm{dBm} / 1 \mathrm{MHz}$ is not required.)
where:
A = Attenuation (in decibels) below the mean output power level.
$\mathrm{P}=$ Percent removed from the center frequency of the transmitter bandwidth.
$\mathrm{B}=$ 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:
$\mathrm{A}=11+0.4(\mathrm{P}-50)+10 \log _{10} \mathrm{~B}$.
(Attenuation greater than 56 decibels
or to an absolute power of less than
$-13 \mathrm{dBm} / 1 \mathrm{MHz}$ 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 <br> $(\mathrm{MHz})$ | Maximum allowable <br> EIRP ${ }^{12}$ |  |
| :---: | :---: | :---: |
|  | Fixed <br> (dBW) | Mobile <br> (dBW) |


| * * | * | * | * |
| :---: | :---: | :---: | :---: |
| 10,550 to $10,600^{5} \ldots$. |  |  |  |
| 10,600 to $10,680^{5} \ldots$. |  |  |  |
| * * | * | * | * |

${ }^{5}$ The 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 $10,600-10,680 \mathrm{MHz}$ 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 ${ }^{1}$ (included angle in degrees) | Minimum antenna gain (dBi) | Minimum radiation suppression to angle in degrees from centerline of main beam in decibels |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} 5^{\circ} \text { to } \\ 10^{\circ} \end{gathered}$ | $\begin{gathered} 10^{\circ} \text { to } \\ 15^{\circ} \end{gathered}$ | $\begin{aligned} & 15^{\circ} \text { to } \\ & 20^{\circ} \end{aligned}$ | $\begin{gathered} 20^{\circ} \text { to } \\ 30^{\circ} \end{gathered}$ | $\begin{gathered} 30^{\circ} \text { to } \\ 100^{\circ} \end{gathered}$ | $\begin{gathered} 100^{\circ} \text { to } \\ 140^{\circ} \end{gathered}$ | $\begin{gathered} 140^{\circ} \text { to } \\ 180^{\circ} \end{gathered}$ |
| * | * | * |  | * |  | * |  |  |  |  |
| 10,550 to $10,680^{7} \ldots \ldots$. | 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 April 1, 2003, the minimum radiation suppression for Category B is 35 dB in the $10,550-10,680 \mathrm{MHz}$ band and 36 dB in the $21,200-23,600 \mathrm{MHz}$ band for discrimination angles from $100^{\circ}$ to $180^{\circ}$.
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 $21,200-23,600 \mathrm{MHz}$ 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 sytems; 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 $20 \mathrm{Mb} / \mathrm{s}$ 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 $21.2-23.6 \mathrm{GHz}$ 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 $21.2-23.6 \mathrm{GHz}$ 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.


(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 $25^{\circ} 30^{\prime}$ north latitude in the State of Florida and U. S. possessions in the Caribbean area. Additionally, the band $2160-2162 \mathrm{MHz}$ 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 fixedsatellite service.
(26) Frequencies from $21.8-22.0 \mathrm{GHz}$ and $23.0-23.2 \mathrm{GHz}$ 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]

(k) $\underset{*}{\text { [Reserved] }}{ }_{*}^{*}$
(r) * * *
(10) Special provision for low power systems in the $17-700-19700 \mathrm{MHz}$ 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 $38^{\circ} 48^{\prime} \mathrm{N} /$ $76^{\circ} 52^{\prime} \mathrm{W}$ and $39^{\circ} 43^{\prime} \mathrm{N} / 104^{\circ} 46^{\prime} \mathrm{W}$. 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 $23,600 \mathrm{MHz}: 50 \mathrm{MHz}$ authorized bandwidth.

| Transmit (receive) (MHz) | Receive (transmit) (MHz) |
| :---: | :---: |
| (1) 2.5 MHz bandwidth channels: $21601.25$ $\qquad$ <br> 21603.75 | $\begin{aligned} & 22801.25 \\ & 22803.75 \end{aligned}$ |


| 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 | $21635{ }^{1}$ | 122835 |
| 21575 | 22775 | 22295 | 23495 | $21685{ }^{1}$ | 122885 |
| 21585 | 22785 | $22305{ }^{1}$ | 123505 | $21735{ }^{1}$ | 122935 |
| 21595 | 22795 | $22315{ }^{1}$ | ${ }^{1} 23515$ | $21785{ }^{1}$ | ${ }^{1} 22985$ |
| $21605{ }^{1}$ | ${ }^{1} 22805$ | $22325^{1}$............................ | ${ }^{1} 23525$ | 218352 | 223035 |
| $21615^{1}$........................... | ${ }^{1} 22815$ | $22335{ }^{1}$.. | ${ }^{1} 23535$ | $21885{ }^{2}$ | 223085 |
| $21625^{1}$.......................... | ${ }^{1} 22825$ | $22345{ }^{1}$.. | ${ }^{1} 23545$ | 219352 | 223135 |
| $21635^{1}$............................ | 122835 | $22355{ }^{1}$.......................... | 123555 | 219852 | 223185 |
| $21645{ }^{1}$ | 122845 | $22365{ }^{1}$.. | 123565 | 22035 | 23235 |
| $21655{ }^{1}$ | ${ }^{1} 22855$ | $22375{ }^{1}$........................... | 123575 | 22085 | 23285 |
| $21665{ }^{1}$ | 122865 | $22385{ }^{1}$............................ | 123585 | 22085 | 23285 |
| $21675{ }^{1}$ | ${ }^{1} 22875$ | $22395{ }^{1}$ | ${ }^{1} 23595$ | 22135 | 23335 |
| $21685{ }^{1}$ | 122885 | (4) 20 MHz bandwidth chan- |  | 22185 | 23385 |
| $21695{ }^{1}$ | ${ }^{1} 22895$ | nels: |  | 22235 | 23435 |
| $21705{ }^{1}$ | ${ }^{1} 22905$ | 21210 | 22410 | 22285 | 23485 |
| $21715^{1}$ | ${ }^{1} 22915$ | 21230 | 22430 | $22335{ }^{1}$ | ${ }^{1} 23535$ |
| $21725^{1}$ | 122925 | 21260 .............................. | 22460 | $22385{ }^{1}$ | ${ }^{1} 23585$ |
| $21735{ }^{1}$ | 122935 | 21280 | 22480 | (6) 40 MHz bandwidth chan- |  |
| $21745{ }^{1}$ | 122945 | 21310 | 22510 | nels: |  |
| $21755^{1}$ | 122955 | 21330 | 22530 | 21220 | 22420 |
| $21765{ }^{1}$ | 122965 | 21360 | 22560 | 21270 | 22470 |
| $21775{ }^{1}$ | 122975 | 21380 | 22580 | 21320 | 22520 |
| $21785{ }^{1}$ | 122985 | 21410 | 22610 | 21370 | 22570 |
| $21795{ }^{1}$ | 122995 | 21430 | 22630 | 21420 | 22620 |
| $21805{ }^{2}$ | 223005 | 21460 | 22660 | 21470 | 22670 |
| $21815{ }^{2}$ | 223015 | 21480 | 22680 | 21520 | 22720 |
| $21825{ }^{2}$............................ | 223025 | 21510 | 22710 | 21570 | 22770 |
| $21835{ }^{2}$ | 223035 223045 | 21530 | 22730 | $21620{ }^{1}$ | ${ }^{1} 22820$ |
| $21855{ }^{2}$ | 223055 | 21580 | 22780 | $21670{ }^{1}$ | 122870 |
| $21865{ }^{2}$ | 223065 | $21610{ }^{1}$ | 122810 | $21720{ }^{1}$ | 122920 |
| $21875{ }^{2}$ | 223075 | $21630{ }^{1}$ | 122830 | $21770{ }^{1}$ | 122970 |
| $21885{ }^{2}$ | 223085 | $21660{ }^{1}$ | 122860 | $21820{ }^{2}$ | 223020 |
| $21895{ }^{2}$ | 223095 | $21680{ }^{1}$ | 122880 | $21870{ }^{2}$ | 223070 |
| $21905{ }^{2}$ | 223105 | $21710{ }^{1}$ | 122910 | $21920{ }^{2}$ | 223120 |
| $21915^{2}$ | 223115 | $21730{ }^{1}$ | 122930 | $21970{ }^{2}$ | 223170 |
| $21925{ }^{2}$ | 223125 | $21760{ }^{1}$ | 122960 | 22020 | 23220 |
| $21935{ }^{2}$ | 223135 | $21780{ }^{1}$ | 122980 | 22070 | 23270 |
| $21945{ }^{2}$ | 223145 | $21810^{2}$ | 223010 | 22120 | 23320 |
| $21955{ }^{2}$ | 223155 | $21830{ }^{2}$ | 223030 | 22170 | 23370 |
| $21965{ }^{2}$ | 223165 | $21860{ }^{2}$ | ${ }^{2} 23060$ | 22220 | 23420 |
| $21975{ }^{2}$ | 223175 | $21880{ }^{2}$ | 223080 | 22270 | 23470 |
| $21985{ }^{2}$ | 223185 | $21910^{2}$ | 223110 | $22320{ }^{1}$ | 123520 |
| $21995{ }^{2}$ | 223195 | $21930{ }^{2}$ | 223130 | $22370{ }^{1}$ | 123570 |
| 22005 | 23205 | $21960{ }^{2}$ | 223160 | (7) 50 MHz bandwidth chan- |  |
| 22015 | 23215 | $21980{ }^{2}$ | 223180 | nels: |  |
| 22025 | 23225 | 22010 | 23210 | 21225 | 22425 |
| 22035 | 23235 | 22030 .............................. | 23230 | 21275 | 22475 |
| 22045 | 23245 | 22060 | 23260 | 21325 | 22525 |
| 22055 | 23255 | 22080 | 23280 | 21375 | 22575 |
| 22065 | 23265 | 22110 | 23310 | 21425 | 22625 |
| 22075 | 23275 | 22130 | 23330 | 21475 | 22675 |
| 22085 | 23285 | 22160 ............................ | 23360 | 21525 | 22725 |
| 22095 | 23295 | 22180 | 23380 | 21575 | 22775 |
| 22115 | 23315 | 22230 | 23430 | $21625{ }^{1}$ | ${ }^{1} 22825$ |
| 22125 | 23325 | 22260 ......................................... | 23460 | $21675{ }^{1}$ | 122875 |
| 22135 | 23335 | 22280 | 23480 | $21725^{1}$ | ${ }^{1} 22925$ |
| 22145 | 23345 | $22310{ }^{1}$ | 123510 | $21775{ }^{1}$ | ${ }^{1} 22975$ |
| 22155 | 23355 | $22330{ }^{1}$ | 123530 | $21825{ }^{2}$ | 223025 |
| 22165 | 23365 | $22360{ }^{1}$............................................... | 123560 | $21875{ }^{2}$ | 223075 |
| 22175 | 23375 | $22380{ }^{1}$ | 123580 | $21925{ }^{2}$ | 223125 |
| 22185 | 23385 | (5) 30 MHz bandwidth chan- |  | 21975 | 223175 |
| 22195 | 23395 | nels: |  | 22025 | 23225 |
| 22205 | 23405 | 21235 | 22435 | 22075 | 23275 |
| 22215 | 23415 | 21285 | 22485 | 22125 | 23325 |
| 22225 | 23425 | 21335 .............................. | 22535 | 22175 | 23375 |
| 22235 | 23435 | 21385 .............................. | 22585 | 22225 | 23425 |
| 22245 | 23445 | 21435 .............................. | 22635 | 22275 | 23475 |
| 22255 | 23455 | 21485 | 22685 | $22325{ }^{1}$ | ${ }^{1} 23525$ |


| Transmit (receive) (MHz) | Receive <br> (transmit) <br> (MHz) |
| :---: | :---: |
| $22375^{1} \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . ~$ | ${ }^{1} 23575$ |

${ }^{1}$ 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 21.822.0 GHz and $23.0-23.2 \mathrm{GHz}$ band segments. Notwithstanding any contrary provisions in this part, the frequency band segment $21.8-22.0 \mathrm{GHz}$ 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 21.822.0 GHz and $23.0-23.2 \mathrm{GHz}$, 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 $\S 101.107$ (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 $\S 101.115$ 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 cochannel 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$10,680 \mathrm{MHz}$ 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 $24,250-25,250 \mathrm{MHz}$ 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 privateoperational fixed point-to-point microwave services.
(d) * * *
(8) This frequency band is shared with the common carrier and privateoperational 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 <br> $(\mathrm{MHz})$ |
| :---: | ---: |
| 3,700 to $4,200 \ldots \ldots . \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ | 120 |
| 5,925 to $6,425 \ldots$ |  |

MAXIMUM AUTHORIZED-Continued

| Frequency band (MHz) | Bandwidth (MHz) |
| :---: | :---: |
| 6,425 to 6,525 | 25 |
| 10,700 to 12,200 | 140 |
| 13,200 to 13,250 | 25 |
| 21,200 to 23,600 ..... | 150 |

${ }^{1}$ 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 $40 \mathrm{~dB} \mu \mathrm{~V} /$ 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] BILLING CODE 6712-01-P

## 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

