

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 90

[WT Docket No. 99–87; RM–9332; FCC 03–34]

Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended and Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document the Federal Communications Commission (FCC) amends its rules to include a long-term schedule for the migration of Private Land Mobile Radio (PLMR) systems, using frequencies in the 150–174 MHz and 421–512 MHz bands, to narrowband technology. Review of the FCC's equipment certification rules and the record revealed a slower pace to narrowband technology than is desired. Therefore, the FCC amended its rules to encourage spectral efficiency in the shared PLMR bands and to facilitate timely transition to narrowband technology in the shared PLMR bands. These amendments to the FCC's rules are intended to produce more efficient use of PLMR spectrum in the 150–174 MHz and 421–512 MHz bands.

DATES: Effective September 15, 2003.

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SUPPLEMENTARY INFORMATION: This is a summary of the FCC's *Report and Order*, FCC 03–34, adopted on February 25, 2003, and released on February 12, 2003. 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 FCC's copy contractor, Qualex International, 445 12th Street, SW., Room CY–B402, Washington, DC 20554. The full text may also be downloaded at: 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. The major decisions adopted in the Order are as follows. The Order:

- Prohibits the filing of applications for new operations using 25 kHz

channels, beginning six months after publication of the Order in the **Federal Register**.

- Prohibits any modification applications that expand the authorized contour of an existing station if the bandwidth for transmissions specified in the modification application is greater than 12.5 kHz, beginning six months after publication of the Order in the **Federal Register**.

- Prohibits the certification of any equipment capable of operating at one voice path per 25 kHz of spectrum, *i.e.* equipment that includes a 25 kHz mode, beginning January 1, 2005.

- Prohibits the manufacture and importation of any 150–174 MHz and 421–512 MHz band equipment that can operate on a 25 kHz bandwidth, beginning January 1, 2008.

- Imposes deadlines for migration to 12.5 kHz technology for PLMRS systems operating in the 150–174 MHz and 421–512 MHz bands. The deadlines are: January 1, 2013 for non-public safety systems, and January 1, 2018 for public safety systems.

Procedural Matters

A. Regulatory Flexibility Act Analyses

2. As required by the Regulatory Flexibility Act (RFA), *see* 5 U.S.C. 604, the FCC has prepared a Final Regulatory Flexibility Analysis of the possible impact of the rule changes contained in this Order on small entities. The Final Regulatory Flexibility Act analysis is set forth further. The FCC's Consumer Information Bureau, Reference Information Center, will send a copy of this Order including the Final to the Chief Counsel for Advocacy of the Small Business Administration.

B. Paperwork Reduction Act of 1995 Analysis

3. This Order does not contain any new or modified information collection. Therefore, it is not subject to the requirements for a paperwork reduction analysis, and we have not performed one.

Final Regulatory Flexibility Analysis

4. As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Order in WT Docket 99–87. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Reason for, and Objectives of, the Order

5. The Order adopts rules to promote the transition to narrowband technology in bands 150–174 MHz and 421–512 MHz. Specifically, the FCC amends its

rules to impose a deadline for migration to 2.5 kHz technology for non-public safety PLMRS systems operating on those bands, beginning January 1, 2013 and for public safety systems operating on those bands, beginning January 1, 2018. In addition, the FCC amends its rules to prohibit the certification of any equipment capable of operating at one voice path per 25 kHz of spectrum, *i.e.*, multi-mode equipment that includes a 25 kHz mode, beginning January 1, 2005. The FCC also prohibits the manufacture and importation of 25 kHz equipment (including multi-mode equipment that can operate on a 25 kHz bandwidth) beginning January 1, 2008. The FCC amends its rules to prohibit any applications for new operations using 25 kHz channels beginning six months after notice of the Order is published in the **Federal Register**. Further, the FCC amends its rules to prohibit any modification applications that expand the authorized contour of an existing licensee if the bandwidth subject to the modification application is greater than 12.5 kHz, beginning six months after notice of the Order is published in the **Federal Register**. These actions will effect a transition to a narrowband channel plan. The resulting gain in efficiency will ease congestion on the PLMRS channels in these bands.

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

6. No comments or reply comments were filed in direct response to the IRFA. The FCC has, however, reviewed the general comments that may impact small businesses. Much of the potential impact on small businesses arises from the mandatory migration to 12.5 kHz technology beginning on January 1, 2013, the ban on importation and manufacture of 25 kHz equipment after January 1, 2008 and the freeze on new 25 kHz applications. The costs associated with replacement of current systems were cited in opposition to mandatory conversion proposals.

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

7. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term

“small business concern” under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA). A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” Nationwide, as of 1992, there were approximately 275,801 small organizations.

8. The rule changes effectuated by this Order apply to licensees and applicants of private land mobile frequencies in the 150–174 MHz and 421–512 MHz bands, and to manufactures of radio equipment.

9. *Private Land Mobile Radio.* PLMR systems serve an essential role in a vast range of industrial, business, land transportation and public service activities. These radios are used by companies of all sizes that operate in all U.S. business categories. Because of the vast array of PLMR users, the FCC had not developed, nor would it be possible to develop, a definition of small entities specifically applicable to PLMR users. For the purpose of determining whether a licensee is a small business as defined by the Small Business Administration (SBA), each licensee would need to be evaluated within its own business area. The FCC’s fiscal year 1994 annual report indicates that, at the end of fiscal year 1994, there were 1,087,276 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Further, because any entity engaged in a commercial activity is eligible to hold a PLMR license, these rules could potentially impact every small business in the U.S.

10. *Public Safety.* Public safety radio services include police, fire, local governments, forestry conservation, highway maintenance, and emergency medical services. The SBA rules contain a definition for small radiotelephone (wireless) companies, which encompass business entities engaged in radiotelephone communications employing no more than 1,500 persons. There are a total of approximately 127,540 licensees within these services. Governmental entities as well as private businesses comprise the licensees for these services. The RFA also includes small governmental entities as a part of the regulatory flexibility analysis. “Small governmental jurisdiction” generally means “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000.” As of 1992, there were approximately 85,006

such jurisdictions in the United States. This number includes 38,978 counties, cities and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000. The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, the FCC estimates that 81,600 (96 percent) are small entities.

11. *Equipment Manufacturers.* We anticipate that at least six radio equipment manufacturers will be affected by our decisions in this proceeding. According to the SBA’s regulations, a radio and television broadcasting and communications equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern. Census Bureau data indicate that there are 858 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would therefore be classified as small entities.

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

12. This Order adopts rules to promote the transition to narrowband technology for private land mobile licensees, in the 150–174 MHz and 421–512 MHz bands. In particular, applications for operations on 25 kHz equipment will no longer be accepted six months after publication of this item in the **Federal Register**. Additionally, modification applications that expand the authorized contour of an existing licensee if the bandwidth subject to the modification application is greater than 12.5 kHz will be prohibited beginning six months after publication of this item in the **Federal Register**. On January 1, 2005, certification will not be afforded any equipment capable of operating at one voice path per 25 kHz of spectrum. Further, this Order amends the FCC’s current rules to prohibit the importation or manufacture of 25 kHz-only equipment beginning on January 1, 2008. All equipment utilized in non-public safety systems on or after January 1, 2018 must utilize a maximum channel bandwidth of 12.5 kHz. Lastly, all equipment utilized in public safety systems on or after January 1, 2018 must utilize a maximum channel bandwidth of 12.5 kHz.

E. Steps Taken To Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

13. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its

proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

14. The FCC adopted rules in this Order upon consideration of the economic burden on small businesses. For instance, many commenters supported adoption of rules that would require conversion to 12.5 kHz equipment as early as January 1, 2005. Such a proposal fails to give any consideration to the amortization and life-span of current equipment and the resources available to small entities. Rather than require small business licensees to convert its system to 12.5 kHz or equivalent technology beginning on January 1, 2005, the FCC delays mandatory migration to 12.5 kHz or equivalent technology until January 1, 2013 for non-public safety PLMR systems and until January 1, 2018 for public safety systems. Similarly, the rule changes permit modification to existing licensees, while the comments did not reflect such a consideration. The Order rejected a phased approach that would have burdened licensees to determine which market and which date applied to them. Although the FCC also takes intermediary steps to promote migration to 12.5 kHz equipment, it notes that none of the intermediary steps require the incumbent to immediately cease use of 25 kHz equipment. Exemption from coverage of the rule changes for small businesses would frustrate the purpose of the rule, *i.e.*, migration to more efficient spectrum use, and facilitate continued inefficient use of spectrum.

15. *Report to Congress:* The FCC will send a copy of this Order, including this FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, *see* 5 U.S.C. 801(a)(1)(A). In addition, the FCC will send another copy of the Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Order and FRFA (or summaries thereof) will also be published in the **Federal Register**. *See* 5 U.S.C. 604(b).

Ordering Clauses

16. 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, and 351, the Balanced Budget Act of 1997, Public Law Number 105–33, Title III, 111 Stat. 251 (1997), and §§ 1.421 and 1.425 of the FCC's rules, 47 CFR 1.421 and 1.425, it is ordered that the *Second Report and Order* is hereby adopted.

17. It is further ordered that part 90 of the FCC's rule is amended as set forth in the rule changes, and that these rules shall be effective September 15, 2003.

18. The Motion to Accept Supplemental Comments submitted by

Industrial Telecommunications Association, Inc. is granted.

List of Subjects in 47 CFR Part 90

Communications equipment, Radio, Reporting and recordkeeping requirements.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

Rule Changes

■ For the reasons discussed in the preamble the FCC proposes to amend 47 CFR part 90 as follows:

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

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

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

■ 1. Section 90.20 is amended by removing limitation 27 in the table of paragraph (c)(3) from the following frequencies and by revising paragraphs (d)(27) and (d)(30) to read as follows:

§ 90.20 Public Safety Pool.

* * * * *

(c) * * *

(3) * * *

PUBLIC SAFETY POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
* * *	* * *	* * *	* * *
150.7825 .....do	.....do	.....do	PM
* * *	* * *	* * *	* * *
151.0025 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0175 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0325 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0475 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0625 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0775 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.0925 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.1075 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.1225 .....do	.....do	28	PH
* * *	* * *	* * *	* * *
151.1375 .....do	.....do	28, 80	PH
* * *	* * *	* * *	* * *
151.1525 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.1675 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.1825 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.1975 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2125 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2275 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2425 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2575 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2725 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.2875 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.3025 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.3175 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.3325 .....do	.....do	28	PO
* * *	* * *	* * *	* * *
151.3475 .....do	.....do	28	PO

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
151.3625 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.3775 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.3925 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4075 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4225 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4375 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4525 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4675 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4825 .....do	.....do	28	PO
* * * * *	* * * * *	* * * * *	* * * * *
151.4975 .....do	.....do	7, 28	PO
* * * * *	* * * * *	* * * * *	* * * * *
153.7475 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.7625 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.7775 .....do	.....do		PF
* * * * *	* * * * *	* * * * *	* * * * *
153.7925 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8075 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8225 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8375 .....do	.....do	31	PF
* * * * *	* * * * *	* * * * *	* * * * *
153.8525 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8675 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8825 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.8975 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.9125 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.9275 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.9425 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.9575 .....do	.....do		PF
* * * * *	* * * * *	* * * * *	* * * * *
153.9725 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
153.9875 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0025 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0175 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0325 .....do	.....do		PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0475 .....do	.....do	28	PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0625 .....do	.....do	28	PX
* * * * *	* * * * *	* * * * *	* * * * *
154.0775 .....do	.....do	28	PF
* * * * *	* * * * *	* * * * *	* * * * *
154.0925 .....do	.....do	28	PX
* * * * *	* * * * *	* * * * *	* * * * *
154.1075 .....do	.....do	28	PX
* * * * *	* * * * *	* * * * *	* * * * *
154.1225 .....do	.....do	28	PX

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
154.1375 .....do	28	PF	*
154.1525 .....do	28	PF	*
154.1675 .....do	28	PF	*
154.1825 .....do	28	PF	*
154.1975 .....do	28	PF	*
154.2125 .....do	28	PF	*
154.2275 .....do	28	PF	*
154.2425 .....do	28	PF	*
154.2575 .....do	28	PF	*
154.2725 .....do	19, 28	PF	*
154.2875 .....do	19, 28	PF	*
154.3025 .....do	19, 28	PF	*
154.3175 .....do	28	PF	*
154.3325 .....do	28	PF	*
154.3475 .....do	28	PF	*
154.3625 .....do	28	PF	*
154.3775 .....do	28	PF	*
154.3925 .....do	28	PF	*
154.4075 .....do	28	PF	*
154.4225 .....do	28	PF	*
154.4375 .....do	28	PF	*
154.4525 .....do	28, 80	PF	*
154.6575 .....do		PP	*
154.6725 .....do	16	PP	*
154.6875 .....do	16	PP	*
154.7025 .....do	16	PP	*
154.7175 .....do		PP	*
154.7325 .....do		PP	*
154.7475 .....do		PP	*
154.7625 .....do		PP	*
154.7775 .....do		PP	*
154.7925 .....do		PP	*
154.8075 .....do		PP	*
154.8225 .....do		PP	*
154.8375 .....do		PP	*
154.8525 .....do		PP	*

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
154.8675 .....do	.....do	.....do	PP *
154.8825 .....do	.....do	.....do	PP *
154.8975 .....do	.....do	.....do	PP *
154.9125 .....do	.....do	16 .....do	PP *
154.9275 .....do	.....do	16 .....do	PP *
154.9425 .....do	.....do	16 .....do	PP *
154.9575 .....do	.....do	.....do	PP *
154.9725 .....do	.....do	.....do	PX *
154.9875 .....do	.....do	.....do	PX *
155.0025 .....do	.....do	.....do	PX *
155.0175 .....do	.....do	.....do	PP *
155.0325 .....do	.....do	.....do	PX *
155.0475 .....do	.....do	.....do	PX *
155.0625 .....do	.....do	.....do	PX *
155.0775 .....do	.....do	.....do	PP *
155.0925 .....do	.....do	.....do	PX *
155.1075 .....do	.....do	.....do	PX *
155.1225 .....do	.....do	.....do	PX *
155.1375 .....do	.....do	.....do	PP *
155.1525 .....do	.....do	.....do	PX *
155.1675 .....do	.....do	10 .....do	PS *
155.1825 .....do	.....do	10 .....do	PS *
155.1975 .....do	.....do	.....do	PP *
155.2125 .....do	.....do	10 .....do	PS *
155.2275 .....do	.....do	10 .....do	PS *
155.2425 .....do	.....do	10 .....do	PS *
155.2575 .....do	.....do	.....do	PP *
155.2725 .....do	.....do	10 .....do	PS *
155.2875 .....do	.....do	10 .....do	PS *
155.3025 .....do	.....do	10 .....do	PS *
155.3175 .....do	.....do	.....do	PP *
155.3325 .....do	.....do	38, 39 .....do	PM *
155.3475 .....do	.....do	39, 40 .....do	PM *
155.3625 .....do	.....do	38, 39 .....do	PM *
155.3775 .....do	.....do	.....do	PP *
155.3925 .....do	.....do	38, 39 .....do	PM

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
155.4075	do	38, 39	PM
155.4225	do		PP
155.4375	do		PP
155.4525	do	16	PP
155.4675	do	16	PP
155.4825	do	41	PP
155.4975	do		PP
155.5125	do	16	PP
155.5275	dof		PP
155.5425	do		PP
155.5575	do		PP
155.5725	do		PP
155.5875	do		PP
155.6025	do		PP
155.6175	do		PP
155.6325	do		PP
155.6475	do		PP
155.6625	do		PP
155.6775	do		PP
155.6925	do		PP
155.7075	do		PP
155.7225	do		PX
155.7375	do		PP
155.7525	do	80, 83	PX
155.7675	do		PX
155.7825	do		PX
155.7975	do		PP
155.8125	do		PX
155.8275	do		PX
155.8425	do		PX
155.8575	do		PP
155.8725	do		PX
155.8875	do		PX
155.9025	do		PX
155.9175	do		PP
155.9325	do		PX

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	*
155.9475 .....do	.....do	.....do	PX *
155.9625 .....do	.....do	.....do	PX *
155.9775 .....do	.....do	.....do	PP *
155.9925 .....do	.....do	.....do	PX *
156.0075 .....do	.....do	.....do	PX *
156.0225 .....do	.....do	.....do	PX *
156.0375 .....do	.....do	.....do	PP *
156.0525 .....do	.....do	.....do	PH *
156.0675 .....do	.....do	.....do	PH *
156.0825 .....do	.....do	.....do	PH *
156.0975 .....do	.....do	.....do	PP *
156.1125 .....do	.....do	.....do	PH *
156.1275 .....do	.....do	.....do	PH *
156.1425 .....do	.....do	.....do	PH *
156.1575 .....do	.....do	.....do	PP *
156.1725 .....do	.....do	.....do	PH *
156.1875 .....do	.....do	.....do	PH *
156.2025 .....do	.....do	.....do	PH *
156.2175 .....do	.....do	.....do	PP *
156.2325 .....do	.....do	.....do	PH *
158.7375 .....do	.....do	.....do	PP *
158.7525 .....do	.....do	.....do	PX *
158.7675 .....do	.....do	.....do	PX *
158.7825 .....do	.....do	.....do	PX *
158.7975 .....do	.....do	.....do	PP *
158.8125 .....do	.....do	.....do	PX *
158.8275 .....do	.....do	.....do	PX *
158.8425 .....do	.....do	.....do	PX *
158.8575 .....do	.....do	.....do	PP *
158.8725 .....do	.....do	.....do	PX *
158.8875 .....do	.....do	.....do	PX *
158.9025 .....do	.....do	.....do	PX *
158.9175 .....do	.....do	.....do	PP *
158.9325 .....do	.....do	.....do	PX *
158.9475 .....do	.....do	.....do	PX *
158.9625 .....do	.....do	.....do	PX

PUBLIC SAFETY POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
158.9775 .....do	.....do	.....do	PP
* * * * *	* * * * *	* * * * *	* * * * *
158.9925 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0075 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0225 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0375 .....do	.....do	.....do	PP
* * * * *	* * * * *	* * * * *	* * * * *
159.0525 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0675 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0825 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.0975 .....do	.....do	.....do	PP
* * * * *	* * * * *	* * * * *	* * * * *
159.1125 .....do	.....do	43	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.1275 .....do	.....do	43	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.1425 .....do	.....do	43	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.1575 .....do	.....do	.....do	PP
* * * * *	* * * * *	* * * * *	* * * * *
159.1725 .....do	.....do	43	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.1875 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.2025 .....do	.....do	.....do	PH
* * * * *	* * * * *	* * * * *	* * * * *
159.2175 .....do	.....do	.....do	PP
* * * * *	* * * * *	* * * * *	* * * * *
159.2325 .....do	.....do	.....do	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.2475 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.2625 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.2775 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.2925 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3075 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3225 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3375 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3525 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3675 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3825 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.3975 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.4125 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.4275 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.4425 .....do	.....do	46	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.4575 .....do	.....do	.....do	PO
* * * * *	* * * * *	* * * * *	* * * * *
159.4725 .....do	.....do	80	PO
* * * * *	* * * * *	* * * * *	* * * * *

* * * * *

(d) * * *

(27) In the 450–470 MHz band, secondary telemetry operations pursuant to § 90.238(e) will be authorized on this frequency.

* * * * *

(30) This frequency will be authorized a channel bandwidth of 25 kHz notwithstanding §§ 90.203 and 90.209.

■ 2. Section 90.35 is amended by removing limitation 30 in the table of paragraph (b)(3) from the following frequencies, by adding in numerical order the following frequencies 151.820,

151.880 and 151.940 and by revising paragraphs (c)(29) and (c)(30) to read as follows:

§ 90.35 Industrial/Business Pool.

* * * * *

(b) * * *

(3) * * *

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
150.8525 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.8675 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.8825 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.8975 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.9425 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.9575 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.9725 .....	.....do .....	.....	LA
* * * * *	* * * * *	* * * * *	* * * * *
150.9875 .....	.....do	8	IP
* * * * *	* * * * *	* * * * *	* * * * *
151.0025 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.0175 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.0325 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.0475 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.0925 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.1075 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.1225 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.1375 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.1525 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.1675 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2125 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2275 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2425 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2575 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2725 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.2875 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.3325 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.3475 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.3625 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.3775 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.3925 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.4075 .....	.....do	31.	
* * * * *	* * * * *	* * * * *	* * * * *
151.4225 .....	.....do	31.	

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * *	* * *	* * *	*
151.4375 .....do	31.	*	*
151.4525 .....do	31.	*	*
151.4675 .....do	31.	*	*
151.4825 .....do	31.	*	*
151.4975 .....do	32.	*	*
151.5125 .....do	17.	*	*
151.5275 .....do	*	*	*
151.5425 .....do	*	*	*
151.5575 .....do	*	*	*
151.5725 .....do	*	*	*
151.5875 .....do	*	*	*
151.6025 .....do	*	*	*
151.6475 .....do	*	*	*
151.6625 .....do	*	*	*
151.670 .....do	*	*	*
151.6775 .....do	*	*	*
151.700 .....do	10, 34.	*	*
151.7225 .....do			
151.730 .....do			
151.7375 .....do	*	*	*
151.760 .....do	*	*	*
151.7825 .....do			
151.790 .....do			
151.7975 .....do	*	*	*
151.820 .....do	Mobile 12, 14, 35	*	*
151.8425 .....do			
151.850 .....do			
151.8575 .....do	*	*	*
151.880 .....do	Mobile 12, 14, 35	*	*
151.9025 .....do			
151.910 .....do			
151.9175 .....do	*	*	*
151.940 .....do	Mobile.	*	*
151.9625 .....do			
151.970 .....do			
151.9775 .....do	*	*	*
151.2775 .....do	*	*	*
151.2925 .....do	*	*	*
152.3075 .....do	*	*	*
152.3225 .....do	*	*	*
152.3375 .....do	*	*	*
152.3525 .....do	6.		

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	*
152.3675 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.3825 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.3975 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.4125 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.4275 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.4425 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.4575 .....do	.....do	6.	*
* * * * *	* * * * *	* * * * *	*
152.8775 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.8925 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9075 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9225 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9375 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9525 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9675 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9825 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
152.9975 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
153.0125 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
153.0275 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
153.0425 .....do	.....do	* * * * *	*
* * * * *	* * * * *	* * * * *	*
153.0575 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.0725 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.0875 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.1025 .....do	.....do	80	IP
* * * * *	* * * * *	* * * * *	*
153.1175 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.1325 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.1475 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.1625 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.1775 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.1925 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.2075 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.2225 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.2375 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.2525 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.2675 .....do	.....do	4, 7	IP
* * * * *	* * * * *	* * * * *	*
153.2825 .....do	.....do	* * * * *	IP
* * * * *	* * * * *	* * * * *	*
153.2975 .....do	.....do	4, 7	IP

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
153.3125	do		IP
153.3275	do	4, 7	IP
153.3425	do		IP
153.3575	do	4, 7	IP
153.3725	do		IP
153.3875	do		IP
153.4025	do		IP
153.4175	do		IW
153.4325	do	80	IP, IW
153.4475	do	80	IP, IW
153.4625	do	80	IP, IW
153.4775	do		IW
153.4925	do	80	IP, IW
153.5075	do	80	IP, IW
153.5225	do	80	IP, IW
153.5375	do		IW
153.5525	do	80	IP, IW
153.5675	do	80	IP, IW
153.5825	do	80	IP, IW
153.5975	do		IW
153.6125	do	80	IP, IW
153.6275	do	80	IP, IW
153.6425	do	80	IP, IW
153.6575	do		IW
153.6725	do	80	IP, IW
153.6875	do	80	IP, IW
153.7025	do		IW
153.7175	do		IW
153.7325	do		IW
154.4825	Base or Mobile		
154.4975	do		
154.505	do		
154.5275	Mobile	10, 34.	
154.5475	do		
154.640	Base	36, 37, 48.	
157.4775	do	12	LA
157.4925	do	12	LA

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
157.5075 .....do	12	LA	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5225 .....do	12	LA	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5375 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5525 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5675 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5825 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.5975 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6125 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6275 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6425 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6575 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6725 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.6875 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.7025 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
157.7175 .....do	6.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
158.1375 .....do		IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.1525 .....do		IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.1675 .....do		IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.1825 .....do	81	IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.1975 .....do		IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2125 .....do	81	IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2275 .....do	81	IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2425 .....do	81	IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2575 .....do		IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2725 .....do	81	IP, IW	*
* * * * *	* * * * *	* * * * *	* * * * *
158.2875 .....do		IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3025 .....do		IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3175 .....do	4, 7	IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3325 .....do		IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3475 .....do		*	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3625 .....do		IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3775 .....do	4, 7	IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.3925 .....do		*	*
* * * * *	* * * * *	* * * * *	* * * * *
158.4075 .....do	17.	*	*
* * * * *	* * * * *	* * * * *	* * * * *
158.4225 .....do		IP	*
* * * * *	* * * * *	* * * * *	* * * * *
158.4375 .....do	4, 7	IP	

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
159.4875 .....do	8		IP
159.5025 .....do			
159.5175 .....do.			
159.5325 .....do.			
159.5475 .....do.			
159.5625 .....do.			
159.5775 .....do.			
159.5925 .....do.			
159.6075 .....do.			
159.6225 .....do.			
159.6375 .....do			
159.6525 .....do			
159.6675 .....do			
159.6825 .....do			
159.6975 .....do			
159.7125 .....do			
159.7275 .....do			
159.7425 .....do			
159.7575 .....do			
159.7725 .....do			
159.7875 .....do			
159.8025 .....do			
159.8175 .....do			
159.8325 .....do			
159.8475 .....do			
159.8625 .....do			
159.8775 .....do			
159.8925 .....do			
159.9075 .....do			
159.9225 .....do			
159.9375 .....do			
159.9525 .....do			
159.9675 .....do			
159.9825 .....do			
159.9975 .....do			
160.0125 .....do			

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	*
160.0275 .....do	*	.....do	*
160.0425 .....do	*	.....do	*
160.0575 .....do	*	.....do	*
160.0725 .....do	*	.....do	*
160.0875 .....do	*	.....do	*
160.1025 .....do	*	.....do	*
160.1175 .....do	*	.....do	*
160.1325 .....do	*	.....do	*
160.1475 .....do	*	.....do	*
160.1625 .....do	*	.....do	*
160.1775 .....do	*	.....do	*
160.1925 .....do	*	.....do	*
160.2075 .....do	*	.....do	*
160.2225 .....do	*	50 .....do	LR
160.2375 .....do	*	50 .....do	LR
160.2525 .....do	*	50 .....do	LR
160.2675 .....do	*	50 .....do	LR
160.2825 .....do	*	50 .....do	LR
160.2975 .....do	*	50 .....do	LR
160.3125 .....do	*	50 .....do	LR
160.3275 .....do	*	50 .....do	LR
160.3425 .....do	*	50 .....do	LR
160.3575 .....do	*	50 .....do	LR
160.3725 .....do	*	50 .....do	LR
160.3875 .....do	*	50 .....do	LR
160.4025 .....do	*	50 .....do	LR
160.4175 .....do	*	50 .....do	LR
160.4325 .....do	*	50, 52 .....do	LR
160.4475 .....do	*	50, 52 .....do	LR
160.4625 .....do	*	50, 52 .....do	LR
160.4775 .....do	*	50, 52 .....do	LR
160.4925 .....do	*	50, 52 .....do	LR
160.5075 .....do	*	50, 52 .....do	LR
160.5225 .....do	*	50, 52 .....do	LR
160.5375 .....do	*	50, 52 .....do	LR
160.5525 .....do	*	50, 52 .....do	LR

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
160.5675 .....do	.....do	50, 52	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.5825 .....do	.....do	50, 52	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.5975 .....do	.....do	50, 52	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6125 .....do	.....do	50, 52	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6275 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6425 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6575 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6725 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.6875 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7025 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7175 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7325 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7475 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7625 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7775 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.7925 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8075 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8225 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8375 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8525 .....do	.....do	50	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8675 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8825 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.8975 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9125 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9275 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9425 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9575 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9725 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
160.9875 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0025 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0175 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0325 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0475 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0625 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0775 .....do	.....do	50, 51	LR
* * * * *	* * * * *	* * * * *	* * * * *
161.0925 .....do	.....do	50, 51	LR

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE—Continued

Frequency or band	Class of station(s)	Limitations	Coordinator
161.1075	.....do	50, 51	LR
161.1225	.....do	50, 51	LR
161.1375	.....do	50, 51	LR
161.1525	.....do	50, 51	LR
161.1675	.....do	50, 51	LR
161.1825	.....do	50, 51	LR
161.1975	.....do	50, 51	LR
161.2125	.....do	50, 51	LR
161.2275	.....do	50, 51	LR
161.2425	.....do	50, 51	LR
161.2575	.....do	50, 51	LR
161.2725	.....do	50, 51	LR
161.2875	.....do	50, 51	LR
161.3025	.....do	50, 51	LR
161.3175	.....do	50, 51	LR
161.3325	.....do	50, 51	LR
161.3475	.....do	50, 51	LR
161.3625	.....do	50, 51	LR
161.3775	.....do	50, 51	LR
161.3925	.....do	50, 52	LR
161.4075	.....do	50, 52	LR
161.4225	.....do	50, 52	LR
161.4375	.....do	50, 52	LR
161.4525	.....do	50, 52	LR
161.4675	.....do	50, 52	LR
161.4825	.....do	50, 52	LR
161.4975	.....do	50, 52	LR
161.5125	.....do	50, 52	LR
161.5275	.....do	50, 52	LR
161.5425	.....do	50, 52	LR
161.5575	.....do	50, 52	LR

(c) * * *

(29) Except when limited elsewhere, one-way paging transmitters on this frequency may operate with an output power of 350 watts.

(30) In the 450–470 MHz band, secondary telemetry operations pursuant to § 90.238(e) will be authorized on this frequency.

* * * * *

■ 3. Section 90.203 is amended by revising paragraph (j)(4)(ii) and removing paragraphs (j)(4)(iii) and (4)(iv) and adding paragraph (j)(10) to read as follows:

§ 90.203 Certification required.

(j) * * *
(4) * * *
(ii) 12.5 kHz for multi-bandwidth mode equipment with a maximum channel bandwidth of 12.5 kHz if it is capable of operating on channels of 6.25 kHz or less.

(10) Transmitters designed to operate in the 150–174 MHz and 421–512 MHz bands that are not equipped with a single-mode or multi-mode function permitting operation with a maximum channel bandwidth of 12.5 kHz or do not meet a spectrum efficiency standard of one voice channel per 12.5 kHz of channel bandwidth shall not be manufactured in, or imported into, the United States after January 1, 2008.

■ 4. Section 90.209 is amended by revising the entries to frequency bands in the table located in paragraph (b)(5) and adding paragraph (b)(6) to read as follows:

§ 90.209 Bandwidth limitations.

(b) * * *

STANDARD CHANNEL SPACING/ BANDWIDTH		
Frequency band (MHz)	Channel spacing (kHz)	Authorized band-width (kHz)
150–174 ..	17.5	1 3 20/11.25/6
421–512 2	16.25	1 3 20/11.25/6

¹ For stations authorized on or after August 18, 1995.
² Bandwidths for radiolocation stations in the 420–450 MHz band and for stations operating in bands subject to this footnote will be reviewed and authorized on a case-by-case basis.
³ Operations using equipment designed to operate with a 12.5 kHz channel bandwidth will be authorized an 11.25 kHz bandwidth. Operations using equipment designed to operate with a 6.25 kHz channel bandwidth will be authorized a 6 kHz bandwidth. All non-public safety stations must operate on channels with a bandwidth of 12.5 kHz or less beginning January 1, 2013. All public safety stations must operate on channels with a bandwidth of 12.5 kHz or less beginning January 1, 2018.

(6) No new applications for the 150–174 MHz and/or 421–512 MHz bands will be acceptable for filing if the applicant utilizes channels with a bandwidth exceeding 11.25 kHz beginning January 13, 2004. For stations licensed or applied for prior to January 13, 2004, the licensee may transfer, assign, renew and modify the authorization consistent with the current rules. No modification applications for stations in the 150–174 MHz and/or 421–512 MHz bands that increase the station’s authorized interference contour will be acceptable for filing if the applicant utilizes channels with a bandwidth exceeding 11.25 kHz, beginning January 13, 2004. See § 90.187(b)(2)(iii) and (iv) of this chapter for interference contour designations and calculations. Applications submitted pursuant to this paragraph must comply with frequency coordination requirements of § 90.175 of this chapter.