

t. Section 101-44.109 is amended by revising paragraphs (a) and (b) to read as follows:

§ 101-44.109 Donation screening period.

(a) Unless otherwise directed by GSA, a period of 21 calendar days following the surplus release date (see § 101-43.001-32) shall be provided to set aside surplus reportable and nonreportable property determined to be usable and necessary for donation purposes in accordance with the provisions of Subparts 101-44.2, 101-44.4, and 101-44.5. Reportable surplus property will be set aside for donation when a Standard Form 123, with an informational copy to the holding activity, is submitted to a GSA regional office for approval within the donation screening period. Nonreportable property will be set aside for donation upon notification to a holding activity within the donation screening period by a responsible Federal official, a State agency representative, or an authorized donee representative that the property is usable and necessary for donation purposes.

(b) During the prescribed 21-day donation screening period, Standard Forms 123 will be processed by GSA regional offices in the following sequence:

(1) Department of Defense personal property which is reportable surplus will be reserved for public airport donation during the first 5 calendar days of the donation screening period and for service educational activities (SEA's) during the next 5 calendar days. During the remaining portion of the donation screening period, the property will be available on an equal basis to all applicants.

(2) Executive agency personal property, other than personal property of the Department of Defense, which is reportable surplus will be reserved for public airport donation during the first 5 calendar days of the donation screening period. During the remaining portion of the donation screening period, the property will be available on an equal basis to all applicants. This property is not available for donation to SEA's.

(3) All executive agency personal property which is nonreportable surplus will be made available for donation on an equal basis to all applicants. SEAs are not eligible for donation of nonreportable surplus of executive agencies other than the Department of Defense.

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u. Section 101-45.303 is amended by revising paragraphs (a) and (b) to read as follows:

§ 101-45.303 Reporting property for sale.

* * * * *

(a) Reportable surplus. Reportable surplus, if not donated, will be programmed for sale by the GSA regional office unless the holding agency indicates on their reports of excess personal property that they elect to sell their own property.

(b) Nonreportable surplus. Nonreportable surplus, if not donated, shall be reported to the appropriate GSA regional office on Standard Form 126, Report of Personal Property for Sale (illustrated at § 101-45.4901-126) if GSA is to sell the property.

Standard Form 126A, Report of Personal Property for Sale (Continuation Sheet), shall be added if additional pages are required. Standard Forms 126 and 126A are stocked as five-part carbon interleaved forms and may be obtained by submitting a requisition in FEDSTRIP/MILSTRIP format to the GSA regional office providing support to the requesting activity.

8. *Effect on other directives.* This regulation modifies portions of regulations appearing at Parts 101-42 through 101-45 that pertains to the reporting and screening process for property determined to be excess to an agency's needs.

Dated: September 5, 1996.

David J. Barram,

Acting Administrator of General Services.

[FR Doc. 97-574 Filed 1-14-97; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 90

[PR Docket Nos. 92-235 and 92-257; FCC 96-492]

Private Land Mobile Radio Services

AGENCY: Federal Communications Commission.

ACTION: Final rule; petition for reconsideration.

SUMMARY: The Commission has adopted a *Memorandum Opinion and Order (MO&O)* which addresses issues and concerns raised in twenty-four petitions, five oppositions, and three replies, requesting that we reconsider or clarify various decisions and technical rules adopted in the *Report and Order (R&O)* in PR Docket No. 92-235. This *MO&O* also addresses a petition for reconsideration filed in PR Docket No. 92-257 regarding the shared use of industrial/land transportation and maritime public correspondence frequencies. Consistent with our objective of increasing the efficiency of the PLMR frequency bands this *MO&O* clarifies our decisions in the *R&O*, and where necessary, makes appropriate modifications to the rules. This *MO&O* maintains the channel plan adopted in the *R&O*, but also permits frequency coordinators to recommend frequencies for any technology with lesser bandwidth, provided that interference is not caused to other systems.

Additionally, the Commission extends the first transition date for the type acceptance of narrowband equipment from August 1, 1996, to February 14, 1997, and retains the second transition date of January 1, 2005. Further, the Commission clarifies the rules regarding type acceptance to provide greater

flexibility for manufacturers to support existing equipment and, where appropriate, to provide alternatives to our efficiency standards. Finally, the Commission clarifies a variety of technical rules including, but not limited to, those pertaining to new power/antenna height limits, the emission mask, and frequency stability requirements.

EFFECTIVE DATE: February 14, 1997.

FOR FURTHER INFORMATION CONTACT: Ira Keltz of the Wireless Telecommunications Bureau at (202) 418-0680 or via E-Mail at mayday@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's *Memorandum Opinion and Order*, FCC 96-492, adopted December 23, 1996, and released December 30, 1996. The full text of this *Memorandum Opinion and Order* is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239) 1919 M Street, NW, Washington, DC. The complete text may be purchased from the Commission's copy contractor, ITS, Inc., 2100 M Street NW, Suite 140, Washington, DC 20037, telephone (202) 857-3800.

Summary of Order

1. The *R&O* (60 FR 37152, July 19, 1995) provided the private land mobile radio (PLMR) community with a regulatory framework that promotes efficient use of spectrum, increases technical flexibility, enhances the deployment of new technologies, and promotes a competitive and robust marketplace for product development. In this action, the Commission clarifies its decisions in the *R&O* and where necessary, makes appropriate modifications to the rules.

2. In the *R&O*, the Commission adopted a channel plan based on 7.5 kHz channel spacing in the 150-174 MHz VHF band and 6.25 kHz channel spacing in the 421-430 MHz, 450-470 MHz, and 470-512 MHz UHF bands. Flexibility is provided to licensees by permitting them to aggregate up to four narrowband channels to employ spectrum efficient wideband technology. Additionally, licensees are provided with a simple migration path because they will be able to remain on their currently assigned center frequencies and can continue to use existing equipment while they upgrade to new equipment.

3. Several petitioners ask the Commission to reconsider the new channel plan and instead adopt a channel plan based on 5 kHz channel spacing claiming that the Commission's

decision to space channels at 7.5 kHz creates inefficient "white spaces" in the VHF band. Additionally, they assert that the ability to use wideband equivalent technologies by aggregating narrowband channels is not taken into account in our rationale for rejecting 5 kHz spacing. We disagree with these petitioners. In a 5 kHz channel plan, a user would need to identify three contiguous channels to obtain a 12.5 kHz channel, but only two are required in the adopted plan. Thus, the adopted plan eases the transition for current users who desire to implement a two-step transition to narrowband through 12.5 kHz equipment. Petitioners also assert that inefficient white spaces are created by our adopted channel plan, since 12.5 kHz VHF equipment would actually use 15 kHz of spectrum by aggregating two 7.5 kHz VHF channels. However, to use 12.5 kHz equipment in a plan based on 5 kHz channels would also require licensees to use 15 kHz of spectrum because they would have to aggregate three 5 kHz channels. In the UHF band, 12.5 kHz equipment also would use 15 kHz of spectrum in a 5 kHz channel plan, but only 12.5 kHz of spectrum in the adopted plan. Furthermore, a 5 kHz channel plan would require users who choose to implement 6.25 kHz equipment to acquire the same 15 kHz of spectrum needed for 12.5 kHz equipment. Thus, a 5 kHz channel plan would create as much or more white space than the adopted channel plan.

4. Consequently, we conclude that our adopted 7.5/6.25 kHz channel plan is more flexible than a 5 kHz plan because it will accommodate users of 25, 12.5, 6.25, and 5 kHz equipment while accomplishing our goal of increasing spectrum efficiency. Further, this channel plan creates a flexible migration path, which is considered a critical factor by current users. For these reasons, we decline to modify the channel plan as adopted in the *R&O*. However, we are mindful of the fact that some users may want to implement 5 kHz technology within their existing 25 kHz bandwidth. Such a channelization, however, would require the licensee to deviate from the adopted band plan. Therefore, we will permit frequency coordinators to recommend frequencies inconsistent with the adopted band plan, for any technology, including 5 kHz, provided that such a system will not cause harmful interference to any existing system.

5. In the *R&O*, we decided to manage the transition to narrowband channels through the type acceptance process. This decision requires that new equipment type accepted after August 1, 1996, and January 1, 2005, meet

specified efficiency guidelines. We note, however, that this approach does not impose a strict transition timetable upon individual users.

6. Petitioners argue that the conversion timetable for the type acceptance of narrowband equipment is too short and fails to account for normal product development cycles. They recommend that the first transition date be extended to August 1, 1998, and that the second transition date be extended to January 1, 2014. Other petitioners oppose this request stating that such action is not necessary because the *R&O* does not mandate the production or use of any particular type of technology according to a fixed timetable.

7. As noted, the transition dates established in the *R&O* do not require manufacturers to take any specific action. Consequently, we believe it is unnecessary to make extensive changes to the adopted transition dates and, thus, deny the request to do so. Additionally, we note that a number of manufacturers have already type accepted equipment that is compliant with the new rules. However, in consideration of the time elapsed between the *R&O* and adoption of this *MO&O*, and because this *MO&O* modifies rules which affect the type acceptance of equipment, we are extending the first transition date from August 1, 1996, to February 14, 1997. Additionally, to remove the uncertainty in trying to anticipate the amount of time necessary to attain a type acceptance grant, we are amending 47 CFR 90.203 to clarify that the transition dates refer to type acceptance application filing deadlines, rather than type acceptance grants.

8. The Association of Public-Safety Communications Officials-International, Inc. asks that we reconsider our decision not to adopt specific transition deadlines for public safety users. We decline to adopt such dates. The imposition of a mandate on any user, particularly public safety entities, to replace existing equipment and systems, is contrary to one of our basic goals in this proceeding of providing maximum flexibility to individual users. Also, since public safety entities are funded by local tax dollars, and are often constrained by limited financial resources, subjecting these entities to such a mandate could be unduly burdensome. Further, in light of the work of the Public Safety Wireless Advisory Committee and the Commission's overall evaluation and assessment of public safety wireless communications in WT Docket No. 96-86 (61 FR 25185, May 20, 1996), it would be premature at this time to make

decisions regarding transition dates for public safety users.

9. In the *R&O*, we adopted spectrum efficiency standards that require at least one voice channel per 12.5 kHz of channel bandwidth for equipment type accepted after August 1, 1996, and at least one voice channel per 6.25 kHz of channel bandwidth for equipment type accepted after January 1, 2005. Additionally, after August 1, 1996, equipment designed for data operation must be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of bandwidth.

10. Several petitioners request that the type acceptance rules be amended to allow alternative showings of spectrum efficiency for low power frequency reuse systems. We agree with the petitioners that there is a place within the PLMR environment for spectrum efficient low-power, frequency reuse systems. However, we will not alter the efficiency standard. Instead, we will exempt all transmitters that operate with less than 500 mW output power from the bit rate requirement for type acceptance. Additionally, we will provide manufacturers with additional flexibility to design spectrally efficient transmitters. The Commission's Equipment Authorization Division may, on a case by case basis, grant type acceptance to equipment with slower bit rates than specified in 47 CFR 90.203(j)(3) and 47 CFR 90.203(j)(5), provided that an acceptable technical analysis is submitted with the application which demonstrates that the slower data rate will provide more spectral efficiency than the standard data rate.

11. Some petitioners asked that we clarify the distinction between digital voice and data. In this connection, we refer to the definitions in 47 CFR part 2. Radios type accepted for telephony must meet the voice channel standard, and those type accepted for telegraphy or telemetry must meet the data rate standard. Further radios that are type accepted for both telephony and telegraphy or telemetry must meet both standards. Additionally, because 47 CFR 90.207(b) allows stations authorized for telephony to use emissions for telecommand, the telecommand function of such radios will not be subject to the data rate standard. Also, because transmissions made via modem through the external microphone port of an analog radio are limited to audio, the data rate standard will not be applied to such uses. Finally, we clarify that the spectrum efficiency requirements imposed by the *R&O* do not apply to paging systems.

12. In the *R&O*, we adopted new power and antenna height limitations based on "safe harbor" tables submitted by the Land Mobile Communications Council (LMCC). These new limits allow various combinations of effective radiated power (ERP) and antenna height above average terrain (HAAT) based upon the size of an applicant's desired service area and the applicant's operating frequency. In general, the rules allow for a maximum ERP of 500 watts and maximum service area radii of 40 km in the VHF band and 32 km in the UHF band. The rules state that larger areas, up to 80 km, will be authorized provided that the applicant demonstrates that the requested station parameters will not produce coverage in excess of that which is required.

However, areas larger than 80 km will be authorized on a secondary basis. Finally, these new rules only apply to new stations, which were defined as stations not functionally integrated with an earlier-installed system.

13. Several petitioners argue that special separation criteria should be developed for systems that operate in the 150–174 MHz and 421–512 MHz bands under conditions of extreme terrain, that a streamlined process for deviating from the power/antenna height tables be considered for applicants that operate in areas of non-uniform terrain, that applicants be permitted to use any commonly accepted propagation model to demonstrate radio system coverage, and that a formal waiver not be required for such requests.

14. We agree that special consideration should be given to the power/antenna heights in areas of extreme terrain. We recognize that in these areas, average terrain calculations may not provide accurate depictions of the actual terrain over which a system will operate and therefore our tables may not provide an appropriate antenna height/power combination for a desired service area size. We are modifying 47 CFR 90.205(d)(2) and 47 CFR 90.205(g)(2) to reflect that applicants may deviate from the tables when operating in areas of non-uniform terrain. Additionally, the rules allow the use of generally accepted engineering practices and standards, including models that are widely accepted by the engineering community, as producing outputs representative of real world results. Applicants who demonstrate special circumstances (*e.g.* extreme terrain conditions or need for a larger service area) will not be required to submit a waiver request to the Commission. Rather, the required engineering analysis should be

submitted to the frequency coordinator and as an attachment to the license application, FCC Form 600.

Additionally, a waiver request will be unnecessary for applicants who request service areas greater than 40 km in the VHF band and 32 km in the UHF band. These applications, however, pursuant to footnote 4 in Tables 1 and 2 of 47 CFR 90.205, must be accompanied by a justification for the larger service area and include a technical analysis demonstrating that the signal strength at the edge of the service area is within the specified guidelines. Additionally, we will allow applicants to exceed the reference antenna height limits if they correspondingly lower their power.

15. Petitioners seek clarification of the rules that would classify all base stations with service areas greater than 80 km as secondary arguing that certain geographic areas, particularly in western regions, warrant special consideration because the terrain in those areas provide few suitable transmitter sites.

16. We note that licensees who need to communicate over large distances generally employ systems that make extensive use of mobile relay stations, which are afforded the protection of primary status under our rules. Because mobile relay stations would typically be within 80 km of another base station, primary status would be conferred on the entire area that a licensee needs to cover. We believe that coverage areas up to 80 km around a single base station will serve the vast majority of licensees and are modifying 47 CFR 90.205(d)(3) and 47 CFR 90.205(g)(3) to confer primary status for communications within 80 km from a base station. We also recognize that some licensees' operations may require primary status within a region larger than 80 km. Because we anticipate that a limited number of licensees will have such needs, we will entertain waiver requests for those instances where a licensee requests coverage by one base station for an area greater than 80 km.

17. Many petitioners seek clarification on what constitutes a new station. As a general matter, we elected to exempt existing stations from complying with the power/antenna height tables adopted in the *R&O* in order to afford licensees flexibility to modify, expand, or upgrade their facilities without adversely affecting their current operations. 47 CFR 90.135 provides examples of permissible modifications to authorized stations. Stations that modify their existing authorization in accordance with one of the listed modifications will not be subject to the new power/antenna height rules. We decline to grant a request to characterize

the addition of base and mobile relay facilities that operate on different frequencies from an existing system as an existing system.

18. Because 47 CFR 90.135(a) allows licensees to modify their authorizations due to a change in emissions, the new power/antenna height limits will not apply to systems that are modified by converting to equipment designed for narrower channel bandwidths. Furthermore, if the only modification that a licensee makes to a system is a narrowing of its emission, a formal application for modification need not be filed with the Commission. However, the licensee will be required to notify the Commission of this change immediately, either by filing FCC Form 405-A or submitting a letter in accordance with 47 CFR 90.135(d).

19. Several organizations seek reconsideration of the power/antenna height tables as they relate to private carrier paging channels. We believe that our rules should reflect the differences between paging systems and the majority of two-way mobile systems in the PLMR bands. In this connection, we will allow new one-way paging operations to operate at the same power levels that applied prior to the adoption of the *R&O*, *i.e.*, for most stations, 350 watts output power with no limit on ERP, on the frequencies specifically reserved for one-way paging.

20. Regarding the decision regarding the ability of manufacturers to continue producing and supporting 25 kHz equipment through upgrades and permissive changes, some petitioners argue that it is unnecessary to prohibit manufacturers from making minor design changes to existing 25 kHz equipment because our rules already ensure a transition to more narrowband equipment. This request is opposed by Securicor Radiocoms Limited because it is inconsistent with the primary goal in this proceeding since it would excuse compliance with the multi-mode requirement. Our intent is to allow only those modifications which would provide a multi-mode capability or a narrowband mode to existing equipment. In these instances, manufacturers must obtain a new FCC Identifier for their equipment. Modifications which entail the redesign of existing equipment will not be allowed.

21. When compared to wideband channels, *i.e.*, 25 kHz channels, the rules adopted in the *R&O* allow emissions on narrowband channels to occupy a larger percentage of the channel. This combination of increased channel occupancy and narrower channel spacing increases the

importance of frequency stability to reduce adjacent channel interference. Therefore, the Commission adopted stringent frequency stability requirements as recommended by the Telecommunications Industry Association (TIA).

22. SEA, Inc. contends that the frequency stability limits for mobile radios designed to operate with channel bandwidths of 6.25 kHz are too restrictive and recommends alternative limits. These recommendations are supported by Motorola. We agree that, in the VHF band, a less stringent requirement can be tolerated because of the presence of a small guard band. Further, we believe that the frequency coordination process can compensate for less stringent requirements in the UHF band. Therefore, we are modifying 47 CFR 90.213 in accordance with the suggestions of SEA.

23. In order to accommodate our new channel plan, we adopted new guidelines for authorized bandwidth. For equipment designed to operate on 7.5 kHz or 6.25 kHz channels, the authorized bandwidth is 6 kHz and for equipment designed to operate on 12.5 kHz channels the authorized bandwidth is 11.25 kHz. SEA requests that the authorized bandwidth for 6.25 kHz channels in the UHF and VHF bands be reduced to 5 kHz in order to allow same area operation on the narrowband channels.

24. We decline to reduce the authorized bandwidth from 6 kHz to 5 kHz. The 6 kHz authorized bandwidth was chosen to provide manufacturers with flexibility to implement a wide range of modulation techniques. We note, however, that the emission mask only serves as an upper limit and thus, manufacturers can employ any emission they desire as long as they do not exceed the specified limits. Therefore, if a manufacturer determines that same-area operations cannot be achieved on adjacent narrowband channels, it can design its equipment with narrower emissions.

25. When determining the shape of a frequency mask, it is essential that instrumentation requirements and measurement procedures are defined. In general, transmitter emissions are measured using established industry standards. In this connection, EIA/TIA Standard 603 instructs radio manufacturers to use a resolution bandwidth of 300 Hz or less. Consistent with this standard, in the *R&O*, we determined that emissions of equipment designed to operate in the Refarming bands should be measured using a resolution bandwidth of 100 Hz with

the measuring instrument in a peak hold mode.

26. Motorola contends that using a resolution bandwidth of 100 Hz, rather than the 300 Hz recommended by TIA, adds 5 dB of energy to the adjacent channel and will result in reduced spectrum efficiency. SEA agrees with Motorola, but recommends that the resolution bandwidth be left at 100 Hz, and that the attenuation of the emission masks be adjusted 5 dB.

27. We decline to adjust the measurement technique adopted in the *R&O*. The current industry trend for measuring digital emissions just outside the channel, *i.e.*, the adjacent channel, is to use measuring instrumentation having a resolution capability of 1% of the bandwidth of the carrier emission. This is evidenced by measurement procedures and interpretations that have been developed in our rules for the licensed Personal Communications Services (PCS) and unlicensed PCS devices. A resolution bandwidth of 1% of the carrier emission bandwidth provides a reasonable compromise where the emission's interference potential can be measured and the instrumentation will not detrimentally affect the measurement. Using a 100 Hz resolution bandwidth for equipment in the Refarming bands approximates the 1% standard that has been accepted by the affected industries in other rule makings. Finally, we believe the claim of a 5 dB increase in energy to the adjacent channel to be overstated because it assumes a uniform level of energy across the measurement window without taking into account the roll-off of energy at the band edges that results from the emission mask. Therefore, we conclude that any effects on the adjacent channel will be less than 5 dB.

28. In order to promote flexibility for manufacturers to introduce new and innovative modulation techniques in the PLMR bands below 512 MHz, we revised 47 CFR 90.211 to eliminate those requirements that were primarily applicable to radios that use frequency modulation (FM). TIA supports our objective, but disagrees with our decision to remove specified deviation limits for FM and recommends that the modulation limits be reinserted into the rules with their respective filter characteristics. We disagree. Our rationale for removing the filter specifications from 47 CFR 90.211 and the FM deviation limits from 47 CFR 90.209 was to provide manufacturers flexibility in designing and implementing radio specifications. In this connection, we believe that setting specifications for FM would be inconsistent with such rationale.

29. With the adoption of a new channel plan, many frequency allocations and assignments were altered, particularly those of the former low power offset channels. One result of the new channel plan is that channels formally available as low power offset channels under Section 47 CFR 90.267 are now available as regularly assignable channels for high power operations. Additionally, the new channel plan resulted in a reallocation of some of these channels from one radio service to another by allocating channels that were between allocations for two different radio services to the radio service or services where the lower of the channels was allocated. Many Petitioners request that we reexamine permissible uses for several former offset channels. Upon reexamination, we are making several modifications to the frequency tables in 47 CFR part 90.

30. The *R&O* provided several operational alternatives for licensees authorized on the former low power offset channels. One option is to remain on their current channels and achieve primary status by providing sufficient justification to raise power. A second option is to migrate to designated low power channels and achieve primary status on those channels. A third option is to remain on their current channel at low power and continue to have secondary status.

31. The Alarm Industry Communications Committee (AICC) contends that licensees should be able to attain primary status without raising power. Additionally, they ask whether stations wishing to increase power need to file a letter notification or an application to provide coordinates. Finally, AICC suggests that the Commission continue to allow the current practice for alarm transmitters of providing coordinates for the center of an operating area and the radius around these coordinates in which transmitters will operate rather than requiring each fixed transmitter to be individually licensed.

32. As an initial matter, recognizing that any decision regarding changes in power requirements on former low power offset channels will be affected by our resolution of the exclusivity issues raised in the *Further Notice of Proposed Rule Making* (60 FR 37148, July 18, 1995) in this proceeding, we defer decisions on this matter to a future *Order*. Regarding the requirement to furnish coordinates, we note that situations exist where it is neither feasible nor desirable for a licensee to furnish coordinates of all transmitters in their system. Therefore, we will allow licensees to supply only coordinates of

the center of an operating area and a radius when all stations are fixed, low power, *i.e.*, not to exceed 2 watts, stations.

33. When we eliminated the low power offset channels in the *R&O*, we established new low power offset channels 3.125 kHz removed from regularly assignable channels and authorized them on a secondary, non-interference basis. The creation of these channels was opposed by the Personal Communications Industry Association which contends that low power users will be accommodated through coordinator designated exclusive low power channels and the color dot channels and that these new low power offset channels will recreate difficulties which existed with the former low power offset channels. Finally, they state that these new low power offset channels may have the unintended effect of preventing the use of primary channels by wideband, spectrally efficient systems. We agree that these low power offset channels could potentially have a detrimental effect on the operations on primary channels and will therefore remove the new low power offset channels from 47 CFR 90.267(b). However, in light of technological advances and usage patterns in these bands, we reserve the right to revisit this issue in the future.

34. When we established the Emergency Medical Radio Service (EMRS), we assigned the 453 MHz and 458 MHz frequencies used for medical paging systems in the Special Emergency Radio Service (SERS) to the EMRS. SERS users were permitted to continue operating on these channels as primary users for a period of five years. In the *R&O*, the SERS frequencies reassigned to the EMRS were rechannelized at the new narrowband spacings. Several petitioners request removal of the new channels that arose from splitting the 453 MHz and 458 MHz channels from the SERS. We agree and will remove the 453 MHz narrowband channels from the SERS frequency table in 47 CFR 90.53(a).

35. In the EMRS, MED channels are used for emergency medical communications. Prior to adoption of the *R&O*, there were 10 MED channels, designated as MED-1 through MED-10. The new channel plan created 3 new MED channels higher in frequency than each existing MED channel. These new channels, designated as MED-A through MED-X, were assigned as follows: MED-A, MED-B, and MED-C were assigned between MED-1 and MED-2, MED-D, MED-E, and MED-F were assigned between MED-2 and MED-3. The new MED channels higher in frequency than

MED-9 and MED-10 were not labeled. Several Petitioners propose changing the MED channel labeling scheme to one that is entirely numeric.

36. We agree that a different labeling approach is needed for the new MED channels because any confusion regarding their designation could potentially interfere with the communication of messages necessary to ensure public safety. Therefore, we will use a trailing 1, 2, or 3 to designate the position of the new MED channels in relation to the existing MED channels. For example, the channel 6.25 kHz above MED-3 will be designated as MED-31, the channel 12.5 kHz above MED-3 as MED-32, and the channel 18.25 kHz above MED-3 as MED-33. We will adopt this labeling approach for designating the channel positions accorded to each of the 10 MED channels.

37. Currently, 47 CFR 90.217 exempts transmitters used in the Business Radio Service that have an output power not exceeding 120 milliwatts from the technical requirements imposed by our rules, provided that they meet minimum emission limitations. Many petitioners request that this exemption be expanded to include all PLMR services. We agree and are expanding the current exemption to include all private land mobile radio services.

38. In order to assure that transient frequencies do not cause excessive interference to land mobile licensees and television receivers in adjacent bands, the Commission adopted standards for transient frequency behavior. These standards are based on EIA/TIA standard 603, which sets allowable transient response for radios that operate in three frequency bands: 30-300 MHz, 300-500 MHz, and 500-1000 MHz.

39. Several petitioners request that we clarify the new rules by declaring that they are only applicable to equipment type accepted after a specific date. Motorola recommends that the three frequency band columns listed in 47 CFR 90.214 be replaced by two frequency band columns, one for 150-174 MHz and one for 421-512 MHz. We decline to modify the implementation date of §90.214 of our rules. Since the new rules took effect on August 18, 1995, the Commission's Equipment Authorization Division has been granting type acceptance based on transmitters meeting all of the new technical requirements. Therefore, because there have been no objections to the transient frequency requirements of 47 CFR 90.214, we see no reason to grant type acceptance to transmitters that do not meet the new requirements.

Additionally, granting type acceptance to radios that do not meet the new requirements would be administratively burdensome because it would create two categories of transmitters which would be difficult to track and identify in the future. We are, however adopting Motorola's recommendation to apply the standards for radios that operate in the 421-500 MHz band to radios that operate in the 500-512 MHz band.

40. In the *R&O*, we eliminated 47 CFR 90.271 which provided for 5 kHz narrowband channels that were offset either 2.5 kHz or 7.5 kHz from regularly assignable channels in the 150-170 MHz band. Additionally, the *R&O* permits licensees on these channels to remain on their currently authorized frequency until August 1, 2001 if interference is not experienced. Securicor asserts that users of these 5 kHz channels, who operate the most spectrally-efficient equipment in the PLMR bands, are being treated unfairly because they must modify their systems to comply with the new channel plan even if they do not experience or cause interference.

41. We share Securicor's concern about unnecessarily causing disruption to existing operations. Therefore, to accommodate the needs of our licensees and to prevent the premature obsolescence of narrowband systems that are already operating in the 150-174 MHz band, we will extend by two years, until August 1, 2003, the date by which these licensees must migrate to one of the new VHF channels. Additionally, licensees may remain on their currently assigned channels after August 1, 2003, on a secondary, non-interference basis.

42. We recently adopted rules in PR Docket No. 92-257 (60 FR 35507, July 10, 1995) to allow industrial and land transportation entities to use nine VHF maritime public correspondence channel pairs for standard two-way base/mobile operations. 47 CFR 90.283 imposes power/antenna height restrictions on these frequencies and requires minimum separation distances from protected entities.

43. LMCC requests that the 25 kHz wide channels listed in 47 CFR 90.283 of our rules be integrated into the new 6.25 kHz narrowband channel plan. We note that new 25 kHz Part 90 radios will no longer be type accepted in the 150-174 MHz band after the effective date of the rule amendments of this *MO&O*; thus, we find it unreasonable to require their use. Additionally, we believe that the current restrictions are sufficient to ensure that PLMR licensees operating on narrowband channels will not cause harmful interference to the protected

entities. Therefore, we modify 47 CFR 90.283 to provide narrowband channel spacings for PLMR users on the shared maritime public correspondence frequencies.

44. The Industrial Telecommunications Association requests that we adopt changes in the power/antenna height tables of 47 CFR 90.283(c) and 47 CFR 90.283(d) to accommodate users that need to exceed the imposed limits due to circumstances such as terrain effects or coverage requirements. We are not modifying the rules, rather, we will require a request for waiver of the power/antenna height limits of 47 CFR 90.283.

45. With the adoption of this *Memorandum Opinion and Order*, we finalize the new channel plan and incorporate certain modifications to our regulatory and technical framework for the PLMR services in 47 CFR part 90. These new rules will provide greater technical flexibility for PLMR licensees and equipment manufacturers, promote the highly effective and efficient use of the PLMR spectrum, and create an environment which will provide users the opportunity to introduce advanced technologies into the private land mobile radio services.

46. The rules are set forth at the end of this document.

47. The rules contained herein have been analyzed with respect to the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., and found to contain no new or modified form, information collection, and/or recordkeeping, labeling, disclosure, or record retention requirements and will not increase or decrease burden hours imposed on the public.

48. This *Memorandum Opinion and Order* and the rule amendments are issued under the authority of 47 U.S.C. 154(i), 303(r), and 405.

Final Regulatory Flexibility Analysis

49. 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 *Notice of Proposed Rule Making* (56 FR 31097, July 9, 1991) in PR Docket 92-235. The Commission sought written public comments on the proposals in the Refarming Notice, including on the IRFA. The Commission's Final Regulatory Flexibility Analysis (FRFA) in this *Memorandum Opinion and Order* conforms to the RFA, as amended by the Contract With America Advancement Act of 1996.¹

¹ Pub. L. 104-121, 110 Stat. 847 (1996) (CWAAA). Subtitle II of the CWAAA is "The Small Business Regulatory Enforcement Fairness Act of 1996" (SBREFA), codified at 5 U.S.C. 601 et seq.

A. Need For and Objective of the Proposed Rule

50. Our objective is to increase spectrum efficiency and facilitate the introduction of advanced technologies into the 150-174 MHz, 421-430 MHz, 450-470 MHz, and 470-512 MHz PLMR bands. The *Report and Order* in this proceeding modified the Commission's rules to resolve many of the technical issues which inhibited the use of spectrally efficient technologies in these frequency bands. This *MO&O* address petitions for reconsideration and clarification received in response to the *Report and Order*.

51. We find that the potential benefits to the PLMR community exceed any negative effects that may result from the promulgation of rules for this purpose. Thus, we conclude that the public interest is served by modifying our rules to increase the spectral efficiency of the PLMR bands.

B. Summary of Significant Issues Raised by the Public Comments in Response to the Initial Regulatory Flexibility Analysis

52. No comments were submitted in direct response to the IRFA. We have, however, reviewed general comments that may impact small businesses.

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

53. The rules adopted in this *Memorandum Opinion and Order* will apply to small business that choose to use, manufacture, or design radios that operate in the PLMR bands below 512 MHz. There are no Commission imposed requirements, however, for any entity to use or produce these products.

Estimates for PLMR Manufacturers

54. The Commission has not developed a definition of small entities specifically applicable to PLMR manufacturers. Therefore, for the purposes of this analysis, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to radio and television broadcasting and communications equipment manufacturers. The SBA defines a small entity in this category as one in which less than 750 persons are employed.²

55. Because the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small entities that

² See 13 CFR 121.201, Standard Industrial Classification (SIC) Code 3663.

manufacture PLMR equipment and is unable at this time to determine the number of manufacturers which are small businesses. However, the 1992 Census of Manufacturers, conducted by the Bureau of Census, which is the most comprehensive and recent information available, shows that approximately 925 out of the 948 entities manufacturing radio and television transmitting equipment in 1992 employed less than 750 persons.³ We are unable to discern from the Census data precisely how many of these manufacturers produce private land mobile radios. Further, any entity may choose to manufacture such radio equipment. Therefore, for purposes of our evaluations and conclusions in this Final Regulatory Flexibility Analysis, we estimate that there are at least 925 manufacturers and potential manufacturers of PLMR equipment which are small businesses, as that term is defined by the SBA.

Estimates for PLMR Licensees

56. Private land mobile radio systems serve an essential role in a vast range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories. Because of the vast array of PLMR users, the Commission has 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 SBA, each licensee would need to be evaluated within its own business area.

57. Because the Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, the Commission was unable to request information regarding the number of small entities that are private land mobile radio licensees. Therefore, the Commission is unable at this time to determine the number of small businesses which could be impacted by the rules. However, the Commission's fiscal year 1994 annual report indicates that at the end of fiscal year 1994 there were 1,101,711 licensees operating 12,882,623 transmitters in the PLMR

³ See 1992 Census of Manufacturers, Industry Series, Communication Equipment, Including Radio and Television, Industries 3651, 3652, 3661, 3663, and 3669, Issued March 1995, Table 4. This table shows a total of 23 manufacturers with an average of 1,000 employees or more and 908 with an average of 499 employees or less. It lists a total of 17 manufacturers with an average of 500-999 employees. Because we could not determine the number of manufacturers in 500-999 category with an average of 750 employees or less, we assume all 17 are small businesses for the purpose of this evaluation.

bands below 512 MHz.⁴ 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.

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

58. There are no general reporting or recordkeeping requirements. However, for certain requests we have substituted a new, less burdensome reporting requirement in place of a requirement for applicants to file applications for waiver or modification.

(1) In order to obtain a type acceptance grant, PLMR radios that transmit data must meet a specified spectrum efficiency standard—measured in bits per second per Hertz. For radios that transmit bit rates slower than the specified standard, our rules permit manufacturers an alternative to requesting a waiver of the technical rules. Type acceptance grants may be obtained, provided that the applicant submits a technical analysis which demonstrates that the slower data rate will provide more spectral efficiency than the standard data rate.

(2) Our rules provide allowable combinations of antenna height and effective radiated power (ERP) based on the size of the area an applicant intends to serve and a certain signal strength at the edge of this service area. Rather than filing a waiver request, we are allowing applicants to exceed the reference antenna height, provided they correspondingly lower their ERP and demonstrate that the signal strength of their system at the edges of their service area meets the general limits.

(3) Licensees, when making changes to their radio systems, are normally required to file an application for modification. However, in instances where the only modification to a radio system is a narrowing of its operating bandwidth, we will not require an application for modification. Instead, we are only requiring that licensees notify the Commission of the change.

E. Steps Taken by Agency To Minimize Significant Economic Impact on Small Entities Consistent With Stated Objectives

59. The Commission, in this *MO&O*, has considered petitions to reconsider the rules adopted in the *Report and Order* in this proceeding. In doing so, the Commission has adopted several alternatives which minimize burdens

placed on small entities. First, the Commission reaffirms its decision to implement the transition to narrowband equipment through the type acceptance process. Users are not required to replace their existing systems, rather they are provided flexibility to choose a transition schedule that best fulfills their needs while balancing technical capabilities and financial considerations. Second, private paging systems, many of which are operated by small entities, will not be subject to many of the new rules. This approach, by not imposing new requirements on private paging licensees, will lower the cost of expanding such systems. Third, we provide applicants the ability to deviate from the new power/antenna height restrictions, which only apply to new stations, without applying for a waiver. This approach eliminates the need for small entities to remit waiver fees of \$125 per rule section per station. Additionally, it eliminates the need for small entities to expend clerical support to prepare these waiver requests. Fourth, we allow manufacturers to make permissive changes to previously type accepted equipment. This will allow small entities to continue supporting their existing equipment and customer base in advance of changing their production facilities to manufacture radios compliant with the new spectrum efficiency rules. Fifth, we ease the frequency stability requirements for narrowband radios and extend the exemption from technical standards for low power transmitters to all radio services. These changes will lower development and production costs for small entities. Sixth, we will not require licensees operating on 5 kHz channels under former § 90.271 of our rules to comply with the new channel plan by August 1, 2001. Instead, these licensees can continue operating on their current frequency as long as they do not cause interference to other users. This approach will lower costs to small entities by not requiring those who operate such systems to modify them sooner than necessary or at all.

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

60. The Commission has, in this proceeding, taken several steps to learn and respond to the views of small entities. In response to the Refarming Notice, we held two public forums. On November 14, 1991, the Private Radio Bureau, in cooperation with the Annenberg Washington Program, Communications Policy Studies of Northwestern University, sponsored a conference on Refarming and on May

16, 1993, the Private Radio Bureau held a Refarming technology Roundtable. Additionally, throughout the course of this proceeding the representatives of the Private Wireless Division (PWD) of the Wireless Telecommunications Bureau have had numerous ex parte discussions with small entities or their representatives. For example, the PWD has met with many of the frequency coordinators for the nineteen PLMR services.⁵

G. Report to Congress

61. The Commission shall send a copy of this final Regulatory Flexibility analysis, along with the Memorandum Opinion and Order, in a report to Congress pursuant to the SBREFA.⁶ A copy of this FRFA will also be published in the Federal Register.

List of Subjects in 47 CFR Part 90

Communications equipment, Radio.
Federal Communications Commission
William F. Caton,
Acting Secretary.

Rule Changes

Part 90 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

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

Authority: 47 U.S.C. 154, 302, 303, and 332, unless otherwise noted.

2. Section 90.17 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(31) to read as follows:

§ 90.17 Local Government Radio Service.

* * * * *

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *	* * * * *	* * * * *
Mega-hertz:		
* * * * *	* * * * *	* * * * *
150 to 170	Base or Mobile	29, 31
* * * * *	* * * * *	* * * * *

(c) * * *

(31) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz

⁵ Many of the frequency coordinators are trade associations and represent their members, many of which are small entities, views on telecommunications matters.

⁶ See 5. U.S.C. 801(a)(1)(A).

⁴ See Federal Communications Commission, 60th Annual Report, Fiscal Year 1994 at 120–121.

removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *

3. Section 90.19 is amended by revising the entries for 150 to 170 MHz, and 460.0125 MHz in the frequency table in paragraph (d) and adding paragraphs (e)(35) and (e)(36) to read as follows:

§ 90.19 Police Radio Service.

* * * * *

(d) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	33, 35
460.0125	.....do	26, 36

* * * * *

(e) * * *

(35) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

(36) Use of this frequency is on a secondary basis and subject to the provisions of § 90.267(a)(3), (a)(4), (a)(5), and (a)(7)

* * * * *

4. Section 90.21 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(23) to read as follows:

§ 90.21 Fire Radio Service.

* * * * *

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	21, 23

* * * * *

(c) * * *

(23) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on

a secondary, non-interference basis after August 1, 2003.

* * * * *

5. Section 90.23 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(24) to read as follows:

§ 90.23 Highway Maintenance Radio Service.

* * * * *

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	21, 24

* * * * *

(c) * * *

(24) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *

6. Section 90.25 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(28) to read as follows:

§ 90.25 Forestry-Conservation Radio Service.

* * * * *

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	25, 28

* * * * *

(c) * * *

(28) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *

7. Section 90.27 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b), by revising the tables in paragraphs (c)(11) and (c)(13)(i), and by adding paragraph (c)(29) to read as follows:

§90.27 Emergency Medical Radio Service.

* * * * *

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	28, 29

* * * * *

(c) * * *

(11) * * *

Frequencies base and mobile (MHz)	Mobile only (MHz)	Channel name
462.950	467.950	MED-9
462.95625	467.95625	MED-91
462.9625	467.9625	MED-92
462.96875	467.96875	MED-93
462.975	467.975	MED-10
462.98125	467.98125	MED-101
462.9875	467.9875	MED-102
462.99375	467.99375	MED-103

* * * * *

(13) * * *

(i) * * *

Frequencies base and mobile (MHz)	Mobile only (MHz)	Channel name
463.000	468.000	MED-1
463.00625	468.00625	MED-11
463.0125	468.0125	MED-12
463.01875	468.01875	MED-13
463.025	468.025	MED-2
463.03125	468.03125	MED-21
463.0375	468.0375	MED-22
463.04375	468.04375	MED-23
463.050	468.050	MED-3
463.05625	468.05625	MED-31
463.0625	468.0625	MED-32
463.06875	468.06875	MED-33
46.075	46.075	MED-4
463.08125	468.08125	MED-41
463.0875	468.0875	MED-42
463.09375	468.09375	MED-43
463.100	468.100	MED-5
463.10625	468.10625	MED-51
463.1125	468.1125	MED-52
463.11875	468.11875	MED-53
463.125	468.125	MED-6
463.13125	468.13125	MED-61
463.1375	468.1375	MED-62
463.14375	468.14375	MED-63
463.150	468.150	MED-7
463.15625	468.15625	MED-71
463.1625	468.1625	MED-72
463.16875	468.16875	MED-73
463.175	468.175	MED-8
463.18125	468.18125	MED-81
463.1875	468.1875	MED-82
463.19375	468.19375	MED-83

* * * * *

(29) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

8. Section 90.53 is amended by revising the entries for 150 to 170 MHz and 458.0375 MHz, removing the entries for 453.03125 MHz, 453.03750 MHz, 453.04375 MHz, 453.08125 MHz, 453.08750 MHz, 453.09375 MHz, 453.13125 MHz, 453.13750 MHz, 453.14375 MHz, 453.18125 MHz, 453.18750 MHz, 453.19375 MHz, 462.0125 MHz, 462.0375 MHz, 462.0625 MHz, 462.0875 MHz, 462.1125 MHz, 462.1375 MHz, 462.1625 MHz, 462.1775 MHz, 467.0125 MHz, 467.0375 MHz, 467.0625 MHz, 467.0875 MHz, 467.1125 MHz, 467.1375 MHz, 467.1625 MHz, 467.1875 MHz, and adding entries for 458.0125 MHz, 463.0125 MHz, 463.0375 MHz, 463.0625 MHz, 463.0875 MHz, 463.1125 MHz, 463.1375 MHz, 463.1625 MHz, 463.1875 MHz, 468.0125 MHz, 468.0375 MHz, 468.0625 MHz, 468.0875 MHz, 468.1125 MHz, 468.1375 MHz, 468.1625 MHz, and 468.1875 MHz in the frequency table in paragraph (a), and adding paragraph (b)(39) to read as follows:

§90.53 Frequencies available.

(a) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	36, 39
458.0125	Mobile	38
458.0375	.....do	38
463.0125	.....do	38
463.0375	.....do	38
463.0625	.....do	38
463.0875	.....do	38
463.1125	.....do	38
463.1375	.....do	38
463.1625	.....do	38
463.1875	.....do	38
468.0125	.....do	38
468.0375	.....do	38
468.0625	.....do	38
468.0875	.....do	38
468.1125	.....do	38
468.1375	.....do	38
468.1625	.....do	38
468.1875	.....do	38

* * * * *

(39) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

9. Section 90.63 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (c) and adding paragraph (d)(31) to read as follows:

§90.63 Power Radio Service.

(c) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	29, 31

(d) * * *

(31) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

10. Section 90.65 is amended by revising the entry for 150 to 170 MHz, removing the second entry for 456.525 MHz, and adding entries for 456.7375 MHz and 462.5125 MHz in the frequency table in paragraph (b) and adding paragraph (c)(48) to read as follows:

§90.65 Petroleum Radio Service.

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	45, 48
456.7375	.....do	46
462.5125	Mobile	46

(c) * * *

(48) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on

a secondary, non-interference basis after August 1, 2003.

11. Section 90.67 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(43) to read as follows:

§90.67 Forest Products Radio Service.

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	39, 43

(c) * * *

(43) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

12. Section 90.69 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(16) to read as follows:

§90.69 Film and Video Production Radio Service.

(b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *		*
Mega-hertz:		
150 to 170	Base or Mobile	15, 16

(c) * * *

(16) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

13. Section 90.73 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (c)

and adding paragraph (d)(42) to read as follows:

§ 90.73 Special Industrial Radio Service.

()*(*)*(*)*(*)*(*)
(c)***

Frequency or band	Class of station(s)	Limitations
Mega-hertz:		
150 to 170	Base or Mobile	39, 42

()*(*)*(*)*(*)*(*)
(d)***
(42) Licensees as of August 18, 1995

who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

()*(*)*(*)*(*)*(*)

14. Section 90.75 is amended by revising the entries for 150 to 170 MHz, 150.830 MHz, 150.920 MHz, 151.070 MHz, 151.190 MHz, 151.310 MHz, 152.480 MHz, 157.740 MHz, 460.66250 MHz, 460.68750 MHz, 460.71250 MHz, 460.73750 MHz, 460.76250 MHz, 460.78750 MHz, 460.81250 MHz, 460.83750 MHz, 460.86250 MHz, 460.88750 MHz, 462.750 MHz, 462.775 MHz, 462.800 MHz, 462.825 MHz, 462.850 MHz, 462.875 MHz, 462.900 MHz, 462.925 MHz, 462.93750 MHz, 462.94375 MHz, 463.200 MHz, 464.4875 MHz, 464.5125 MHz, 464.5375 MHz, 464.5625 MHz, 464.98750 MHz, 465.01250 MHz, 465.650 MHz, 465.66250 MHz, 465.68750 MHz, 465.71250 MHz, 465.73750 MHz, 465.76250 MHz, 465.78750 MHz, 465.81250 MHz, 465.83750 MHz, 465.86250 MHz, 465.88750 MHz, 469.4875 MHz, 469.5125 MHz, 469.5375 MHz, and 469.5625 MHz, adding entries for 154.585 MHz and 467.9375 MHz in the table in paragraph (b) and adding paragraphs (c)(53), (c)(54), and (c)(55) to read as follows:

§ 90.75 Business Radio Service.

()*(*)*(*)*(*)*(*)
(b)***

Frequency or band	Class of station(s)	Limitations
Mega-hertz:		
150 to 170	Base or Mobile	48, 54
150.830	Base	8, 10, 12, 49, 55

Frequency or band	Class of station(s)	Limitations	Frequency or band	Class of station(s)	Limitations
150.920	Base	8, 10, 12, 49, 55	460.8625	.....do	2, 15, 24, 25, 26, 53
151.070	Base	8, 10, 12, 49, 55	460.8875	.....do	2, 15, 24, 25, 26, 53
151.190	Base	8, 10, 12, 49, 55	462.750	Base	10, 49, 55
151.310	Base	8, 10, 12, 49, 55	462.775	Base	10, 49, 55
152.480	Base	10, 11, 12, 49, 55	462.800	Base	10, 49, 55
154.585	.....do	4, 13, 22, 38, 24	462.825	Base	10, 49, 55
157.740	Base	10, 11, 12, 49, 55	462.850	Base	10, 49, 55
460.6625	.....do	2, 15, 24, 25, 26, 53	462.875	Base	10, 49, 55
460.6875	.....do	2, 15, 24, 25, 26, 53	462.900	Base	10, 49, 55
460.7125	.....do	2, 15, 24, 25, 26, 53	462.925	Base	10, 49, 55
460.7375	.....do	2, 15, 24, 25, 26, 53	462.9375	Mobile	52
460.7625	.....do	2, 15, 24, 25, 26, 53	462.94375	Base or mobile	46
460.7875	.....do	2, 15, 24, 25, 26, 53	463.200	.....do	1, 2, 26
460.8125	.....do	2, 15, 24, 25, 26, 53	464.4875	.....do	1, 2, 24, 26, 29
460.8375	.....do	2, 15, 24, 25, 26, 53	464.5125	.....do	1, 2, 24, 26, 29
460.8625	.....do	2, 15, 24, 25, 26, 53	464.5375	.....do	1, 2, 24, 26, 29
460.8875	.....do	2, 15, 24, 25, 26, 53	464.5625	.....do	1, 2, 24, 26, 29
460.9125	.....do	2, 15, 24, 25, 26, 53	464.9875	Mobile	52
460.9375	.....do	2, 15, 24, 25, 26, 53	465.0125	Mobile	52
460.9625	.....do	2, 15, 24, 25, 26, 53	465.650	.....do	2, 4, 25, 26, 31

Frequency or band	Class of station(s)	Limitations	Frequency or band	Class of station(s)	Limitations	Frequency or band	Class of station(s)	Limitations
465.6625	.....do	2, 4, 24, 25, 26, 31, 53	469.5625	.....do	1, 2, 24, 26			
465.6875	.....do	2, 4, 24, 25, 26, 31, 53	<p>(c) * * *</p> <p>(53) This frequency may be used on a secondary, non-interference basis by a hospital or health care institution holding a license to operate a radio station under this part to operate a medical radio telemetry device with an output power not to exceed 20 milliwatts without specific authorization from the Commission.</p>			<p>Mega-hertz:</p> <p>150 to 170 Base or Mobile 17, 19</p>		
465.7125	.....do	2, 4, 24, 25, 26, 31, 53	<p>(54) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.</p>			<p>(d) * * *</p> <p>(19) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.</p>		
465.7375	.....do	2, 4, 24, 25, 26, 31, 53	<p>(55) One-way paging transmitters on this frequency may operate with an output power of 350 watts.</p>			<p>17. Section 90.89 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(27) to read as follows:</p>		
465.7625	.....do	2, 4, 24, 25, 26, 31, 53	<p>15. Section 90.79 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (c) and adding paragraph (d)(32) to read as follows:</p>			<p>§ 90.89 Motor Carrier Radio Service.</p> <p>* * * * *</p> <p>(b) * * *</p>		
465.7875	.....do	2, 4, 24, 25, 26, 31, 53	<p>Frequency or band</p> <p>Class of station(s)</p> <p>Limitations</p>			<p>Frequency or band</p> <p>Class of station(s)</p> <p>Limitations</p>		
465.8125	.....do	2, 4, 24, 25, 26, 31, 53	<p>* * * * *</p>			<p>* * * * *</p>		
465.8375	.....do	2, 4, 24, 25, 26, 31, 53	<p>§ 90.79 Manufacturers Radio Service.</p> <p>* * * * *</p> <p>(c) * * *</p>			<p>Mega-hertz:</p> <p>150 to 170 Base or Mobile 24, 27</p>		
465.8625	.....do	2, 4, 24, 25, 26, 31, 53	<p>Frequency or band</p> <p>Class of station(s)</p> <p>Limitations</p>			<p>* * * * *</p> <p>(c) * * *</p>		
465.8875	.....do	2, 4, 24, 25, 26, 31, 53	<p>* * * * *</p>			<p>(27) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.</p>		
466.0125	.....do	1, 2, 24, 28, 39, 53	<p>(d) * * *</p> <p>(32) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.</p>			<p>18. Section 90.91 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(25) to read as follows:</p>		
467.9375	.....do	24, 52	<p>* * * * *</p>			<p>§ 90.91 Railroad Radio Service.</p> <p>* * * * *</p> <p>(b) * * *</p>		
469.4875	.....do	1, 2, 24, 26	<p>16. Section 90.81 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (c) and adding paragraph (d)(19) to read as follows:</p>			<p>Frequency or band</p> <p>Class of station(s)</p> <p>Limitations</p>		
469.5125	.....do	1, 2, 24, 26	<p>* * * * *</p>			<p>* * * * *</p>		
469.5375	.....do	1, 2, 24, 26	<p>§ 90.81 Telephone Maintenance Radio Service.</p> <p>* * * * *</p> <p>(c) * * *</p>			<p>Mega-hertz:</p> <p>150 to 170 Base or Mobile 23, 25</p>		

(c) * * *
 (25) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *
 19. Section 90.93 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (b) and adding paragraph (c)(20) to read as follows:

§ 90.93 Taxicab Radio Service.

* * * * *
 (b) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *	* * * * *	* * * * *
Megahertz:		
150 to 170	Base or Mobile	18, 20

* * * * *
 (c) * * *
 (20) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *
 20. Section 90.95 is amended by revising the entry for 150 to 170 MHz in the frequency table in paragraph (c) and adding paragraph (d)(24) to read as follows:

§ 90.95 Automobile Emergency Radio Service.

* * * * *
 (c) * * *

Frequency or band	Class of station(s)	Limitations
* * * * *	* * * * *	* * * * *
Megahertz:		
150 to 170	Base or Mobile	21, 24

* * * * *
 (d) * * *
 (24) Licensees as of August 18, 1995 who operate systems that are 2.5 kHz removed from regularly assignable frequencies may continue to operate on a secondary, non-interference basis after August 1, 2003.

* * * * *
 21. Section 90.135 is amended by revising paragraph (a)(2), redesignating paragraph (b)(5) as paragraph (b)(6),

adding a new paragraph (b)(5), revising the first and last sentences in paragraph (d) and revising the first sentence in paragraph (e) to read as follows:

§ 90.135 Modification of license.

(a) * * *
 (2) Change in the type of emission, except under the conditions specified in paragraph (b)(5) of this section.

* * * * *
 (b) * * *
 (5) Change in the type of emission when:

- (i) Operation is in the 150–174 MHz or 421–512 MHz bands; and
- (ii) The modification will be for a narrower emission than specified in the current authorization.

* * * * *
 (d) In case of a change listed in paragraphs (b)(1), (b)(2), or (b)(5) of this section, the licensee must notify the Commission immediately. * * * Licensees whose licenses are due for renewal and who have received the renewal Form 574–R in the mail from the Commission must use the appropriate boxes on that form to notify the Commission of a change listed in paragraphs (b)(1), (b)(2), or (b)(5) of this section.

(e) In the case of a change listed in paragraphs (b)(3), (b)(4), and (b)(6) of this section, the licensee must notify the Commission within 30 days of the change. * * *

* * * * *
 22. Section 90.173 is amended by revising paragraph (a) to read as follows:

§ 90.173 Policies governing the assignment of frequencies.

(a) The frequencies which ordinarily may be assigned to stations in the services governed by this part are listed in subparts B, C, D, E, and F of this part. Frequencies other than those listed in subparts B, C, D, and E may be assigned in the 150–174 MHz, 421–430 MHz, 450–470 MHz, and 470–512 MHz bands, provided such applications are accompanied by a showing of frequency coordination in accordance with the requirements of Section 90.175. Except as otherwise specifically provided in this part, frequencies assigned to land mobile stations are available on a shared basis only and will not be assigned for the exclusive use of any licensee.

* * * * *
 23. Section 90.203 is amended by revising paragraph (j) to read as follows:

§ 90.203 Type acceptance required.

* * * * *
 (j) Except where otherwise specifically provided for, transmitters operating on frequencies in the 150–174

MHz and 421–512 MHz bands must comply with the following.

(1) Applications for type acceptance received prior to February 14, 1997, will be granted for equipment with channel bandwidths up to 25 kHz.

(2) Applications for type acceptance received on or after February 14, 1997 will only be granted for equipment with the following channel bandwidths:

- (i) 12.5 kHz or less for single bandwidth mode equipment or multi-bandwidth mode equipment with a maximum channel bandwidth of 12.5 kHz;
- (ii) 25 kHz for multi-bandwidth mode equipment with a maximum channel bandwidth of 25 kHz if it is capable of operating on channels of 12.5 kHz or less; and

(iii) 25 kHz if the equipment meets the efficiency standard of paragraph (j)(3) of this section.

(3) Applications for Part 90 type acceptance of transmitters designed to operate on frequencies in the 150–174 MHz and /or 421–512 MHz bands, received on or after February 14, 1997, must include a certification that the equipment meets a spectrum efficiency standard of one voice channel per 12.5 kHz of channel bandwidth.

Additionally, if the equipment is capable of transmitting data, has transmitter output power greater than 500 mW, and has a channel bandwidth of 6.25 kHz or more, the equipment must be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.

(4) Applications for type acceptance received on or after January 1, 2005, except for hand-held transmitters with an output power of two watts or less, type acceptance will only be granted for equipment with the following channel bandwidths:

- (i) 6.25 kHz or less for single bandwidth mode equipment;
- (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;
- (iii) 25 kHz for multi-bandwidth mode equipment with a maximum channel bandwidth of 25 kHz if it is capable of operating on channels of 6.25 kHz or less; and

(iv) Up to 25 kHz if the equipment meets the efficiency standard of paragraph (j)(5) of this section.

(5) Applications for Part 90 type acceptance of transmitters designed to operate on frequencies in the 150–174

MHz and/or 421–512 MHz bands, received on or after January 1, 2005, must include a certification that the equipment meets a spectrum efficiency standard of one voice channel per 6.25 kHz of channel bandwidth. Additionally, if the equipment is capable of transmitting data, has transmitter output power greater than 500 mW, and has a channel bandwidth of 6.25 kHz or more, the equipment must be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.

(6) Modification and permissive changes to type acceptance grants.

(i) The Commission's Equipment Authorization Division will not allow adding a multi-mode or narrowband operation capability to single bandwidth mode transmitters, except under the following conditions:

(A) Transmitters that have the inherent capability for multi-mode or narrowband operation allowed in paragraphs (j)(2) and (j)(4) of this section, may have their grant of Type Acceptance modified (reissued) upon demonstrating that the original unit complies with the technical requirements for operation; and

(B) New FCC Identifiers will be required to identify equipment that needs to be modified to comply with the requirements of paragraphs (j)(2) and (j)(4) of this section.

(ii) All other applications for modification or permissive changes will be subject to the Rules of part 2 of this chapter.

(7) Transmitters designed for one-way paging operations will be type accepted with a 25 kHz channel bandwidth and are exempt from the spectrum efficiency requirements of paragraphs (j)(3) and (j)(5) of this section.

(8) The Commission's Equipment Authorization Division may, on a case by case basis, grant type acceptance to equipment with slower data rates than specified in paragraphs (j)(3) and (j)(5) of this section, provided that a technical analysis is submitted with the application which describes why the slower data rate will provide more spectral efficiency than the standard data rate.

(9) Transmitters used for stolen vehicle recovery on 173.075 MHz must

comply with the requirements of Section 90.19(f)(7).

24. Section 90.205 is amended by revising paragraph (d)(2), the last sentence of paragraph (d)(3), paragraph (g)(2), the last sentence of paragraph (g)(3), and adding a new paragraph (n) to read as follows:

§90.205 Power and antenna height limits.

* * * * *

(d) * * *

(2) Applications for stations where special circumstances exist that make it necessary to deviate from the ERP and antenna heights in Table 1 will be submitted to the frequency coordinator accompanied by a technical analysis, based upon generally accepted engineering practices and standards, that demonstrates that the requested station parameters will not produce a signal strength in excess of 37 dBu at any point along the edge of the requested service area. The coordinator may then recommend any ERP appropriate to meet this condition.

(3) * * * For base stations with service areas greater than 80 km, all operations 80 km or less from the base station will be on a primary basis and all operations outside of 80 km from the base station will be on a secondary basis and will be entitled to no protection from primary operations.

* * * * *

(g) * * *

(2) Applications for stations where special circumstances exist that make it necessary to deviate from the ERP and antenna heights in Table 2 will be submitted to the frequency coordinator accompanied by a technical analysis, based upon generally accepted engineering practices and standards, that demonstrates that the requested station parameters will not produce a signal strength in excess of 39 dBu at any point along the edge of the requested service area. The coordinator may then recommend any ERP appropriate to meet this condition.

(3) * * * For base stations with service areas greater than 80 km, all operations 80 km or less from the base station will be on a primary basis and all operations outside of 80 km from the base station will be on a secondary basis

and will be entitled to no protection from primary operations.

* * * * *

(n) The output power shall not exceed by more than 20 percent either the output power shown in the Radio Equipment List [available in accordance with §90.203(a)(1)] for transmitters included in this list or when not so listed, the manufacturer's rated output power for the particular transmitter specifically listed on the authorization.

25. Section 90.207 is amended by revising the introductory text of paragraph (a) and adding the symbol W to paragraphs (a)(1) and (a)(3) to read as follows:

§90.207 Types of emissions.

* * * * *

(a) *Most common emission symbols.* For a complete listing of emission symbols allowable under this part, see §2.201 of this chapter.

(1) * * *

W—Cases not covered above, in which an emission consists of the main carrier modulated, either simultaneously or in a pre-established sequence, in a combination of two or more of the following modes: amplitude, angle, pulse.

* * * * *

(3) * * *

W—Combination of the above.

* * * * *

26. Section 90.211 is amended by revising paragraph (a) to read as follows:

§90.211 Modulation requirements.

* * * * *

(a) Transmitters utilizing analog emissions that are equipped with an audio low-pass filter must meet the emission limitations specified in §90.210. Testing must be in accordance with the rules specified in part 2 of this chapter.

* * * * *

27. Section 90.213 is amended by revising the entries for 150–174 MHz, 421–512 MHz, 806–821 MHz, 821–824 MHz, and 896–901 MHz, revising footnotes 6, 7, and 8, and adding footnote 14 to the table in paragraph (a) to read as follows:

§90.213 Frequency stability.

(a) * * *

MINIMUM FREQUENCY STABILITY
[Parts per million (ppm)]

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
150-174	5 11 5	6 5	4 6 50
421-512	7 11 14 2.5	8 5	8 5
806-821	14 1.5	2.5	2.5
821-824	14 1.0	1.5	1.5
896-901	14 0.1	1.5	1.5

⁴ Stations operating in the 154.45 to 154.49 MHz or the 173.2 to 173.4 MHz bands must have a frequency stability of 5 ppm.
⁵ In the 150-174 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.
⁶ In the 150-174 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth or designed to operate on a frequency specifically designated for itinerant use or designed for low-power operation of two watts or less, must have a frequency stability of 5.0 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 2.0 ppm.
⁷ In the 421-512 MHz band, fixed and base stations with a 12.5 kHz channel bandwidth must have a frequency stability of 1.5 ppm. Fixed and base stations with a 6.25 kHz channel bandwidth must have a frequency stability of 0.5 ppm.
⁸ In the 421-512 MHz band, mobile stations designed to operate with a 12.5 kHz channel bandwidth must have a frequency stability of 2.5 ppm. Mobile stations designed to operate with a 6.25 kHz channel bandwidth must have a frequency stability of 1.0 ppm.
¹¹ Paging transmitters operating on paging-only frequencies must operate with frequency stability of 5 ppm in the 150-174 MHz band and 2.5 ppm in the 421-512 MHz band.
¹⁴ Control stations may operate with the frequency tolerance specified for associated mobile frequencies.

§ 90.214 Transient frequency behavior. Transmitters designed to operate in the 150-174 MHz and 421-512 MHz frequency bands must maintain transient frequencies within the maximum frequency difference limits during the time intervals indicated:

Time intervals ^{1, 2}	Maximum frequency difference ³	All equipment	
		150 to 174 MHz	421 to 512 MHz
Transient Frequency Behavior for Equipment Designed to Operate on 25 kHz Channels			
t_1 ⁴	± 25.0 kHz	5.0 ms	10.0 ms
t_2	± 12.5 kHz	20.0 ms	25.0 ms
t_3 ⁴	± 25.0 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 12.5 kHz Channels			
t_1 ⁴	± 12.5 kHz	5.0 ms	10.0 ms
t_2	± 6.25 kHz	20.0 ms	25.0 ms
t_3 ⁴	± 12.5 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 6.25 kHz Channels			
t_1 ⁴	± 6.25 kHz	5.0 ms	10.0 ms
t_2	± 3.125 kHz	20.0 ms	25.0 ms
t_3 ⁴	± 6.25 kHz	5.0 ms	10.0 ms

¹ t_{on} is the instant when a 1 kHz test signal is completely suppressed, including any capture time due to phasing.
² t_1 is the time period immediately following t_{on} .
³ t_2 is the time period immediately following t_1 .
⁴ t_3 is the time period from the instant when the transmitter is turned off until t_{off} .
 t_{off} is the instant when the 1 kHz test signal starts to rise.
² During the time from the end of t_2 to the beginning of t_3 , the frequency difference must not exceed the limits specified in § 90.213.
³ Difference between the actual transmitter frequency and the assigned transmitter frequency.
⁴ If the transmitter carrier output power rating is 6 watts or less, the frequency difference during this time period may exceed the maximum frequency difference for this time period.

29. Section 90.217 is amended by revising the introductory text and the first sentence in paragraph (a) to read as follows:

§ 90.217 Exemption from technical standards.

Except as noted herein, transmitters used at stations licensed in the Business Radio Service and at stations licensed in the 150–174 MHz and 421–512 MHz bands in any Radio Service listed in Subparts B, C, D, and E of this Part which have an output power not exceeding 120 milliwatts are exempt from the technical requirements set out in this subpart, but must instead comply with the following:

(a) For equipment designed to operate with a 25 kHz channel bandwidth, * * *

* * * * *

§ 90.267 [Amended]

30. Section 90.267 is amended by removing and reserving paragraph (b).

31. Section 90.283 is amended by revising the table in paragraph (a), revising paragraph (c) and adding paragraph (g) to read as follows:

§ 90.283 Inter-service sharing of maritime frequencies in the 156–162 MHz band.

(a) * * *

FREQUENCY (MHZ)

Mobile station transmit	Mobile station transmit
157.200	161.800
157.20625 ¹	¹ 161.80625
157.2125 ²	² 161.8125
157.21875 ¹	¹ 161.81875
157.225	161.825
157.23125 ¹	¹ 161.83125
157.2375 ²	² 161.8375
157.24375 ¹	¹ 161.84375
157.250	161.850
157.25625 ¹	¹ 161.85625
157.2625 ²	² 161.8625
157.26875 ¹	¹ 161.86875
157.275	161.875
157.28125 ¹	¹ 161.88125
157.2875 ²	² 161.8875
157.29375 ¹	¹ 161.89375
157.300	161.900
157.30625 ¹	¹ 161.90625
157.3125 ²	² 161.9125
157.31875 ¹	¹ 161.91875
157.325	161.925
157.33125 ¹	¹ 161.93125
157.3375 ²	² 161.9375
157.34375 ¹	¹ 161.94375
157.350	161.950
157.35625 ¹	¹ 161.95625
157.3625 ²	² 161.9625
157.36875 ¹	¹ 161.96875
157.375	161.975
157.38125 ¹	¹ 161.98125
157.3875 ²	² 161.9875
157.39375 ¹	¹ 161.99375

FREQUENCY (MHZ)—Continued

Mobile station transmit	Mobile station transmit
157.400	162.000

¹This frequency will be assigned with an authorized bandwidth not to exceed 6 kHz.

²This frequency will be assigned with an authorized bandwidth not to exceed 11.25 kHz.

* * * * *

(c) Station power, as measured at the output terminals of the transmitter, must not exceed 50 watts for base stations and 20 watts for mobile stations, except in accordance with the provisions of paragraph (g) of this section. Antenna height (HAAT) must not exceed 122 meters (400 feet) for base stations and 4.5 meters (15 feet) for mobile stations, except in accordance with paragraph (g) of this section. Such base and mobile stations must not be operated on board aircraft in flight.

* * * * *

(g) Applicants seeking to be licensed for stations exceeding the power/ antenna height limits of the table in paragraph (d) of this section are required to secure a waiver and must submit with the application, an interference analysis, based upon any of the generally-accepted terrain-based propagation models, that shows that co-channel protected entities, described in paragraph (d) of this section, would receive the same or greater interference protection than provided in the table.

32. Section 90.311 is amended by revising the introductory text of paragraph (b) to read as follows.

§90.311 Frequencies.

* * * * *

(b) Miami, FL, Dallas, TX, and Houston, TX urbanized areas. Only the first and last assignable frequencies are shown. Assignable frequencies will occur in increments of 6.25 kHz.

Frequencies listed in paragraph (a)(3) of this section will only be assigned with a maximum authorized bandwidth of 6 kHz.

* * * * *

[FR Doc. 97–831 Filed 1–14–97; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

49 CFR Part 1185

[STB Ex Parte No. 543]

Revision of Regulations for Interlocking Rail Officers

AGENCY: Surface Transportation Board.

ACTION: Final rules.

SUMMARY: The ICC Termination Act of 1995 (ICCTA) abolished the Interstate Commerce Commission (ICC) and transferred certain rail regulatory functions to the Surface Transportation Board (Board). The ICCTA revised the statute concerning restrictions on officers and directors. Under new 49 U.S.C. 11328, individuals seeking to hold the position of officer or director only of Class III railroads are no longer required to seek Board authorization. This publication contains our final rules implementing the statute.

EFFECTIVE DATE: The rules are effective on February 14, 1997.

FOR FURTHER INFORMATION CONTACT: Beryl Gordon, (202) 927–5660. [TDD for the hearing impaired: (202) 927–5721.]

SUPPLEMENTARY INFORMATION: In a notice of proposed rulemaking served May 10, 1996, and published in the Federal Register on May 13, 1996 (61 FR 22014), we proposed to revise 49 CFR part 1185 to reflect this statutory change (Pub. L. 104–88, 109 Stat. 803 (1995)) and to propose other changes to our rules. Comments were filed by Joseph C. Szabo, for and on behalf of the United Transportation Union, Illinois Legislative Board (UTU), and by the Association of American Railroads (AAR).

The Board is adopting final rules in this decision. This decision is available to all persons for a charge by phoning DC NEWS & DATA, INC., at (202) 289–4357.

The Board certifies that this rule will not have a significant economic effect on a substantial number of small entities. In response to the statutory change, this rule will reduce regulation and it imposes no new reporting requirements on small entities. Requirements for the form of the application have been slightly modified to conform to the Board’s rules of practice.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.