

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
 )  
Amendment of Part 90 ) WP Docket No. 07-100  
of the Commission's Rules )

NOTICE OF PROPOSED RULEMAKING AND ORDER

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By the Commission:

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## I. INTRODUCTION AND BACKGROUND

1. By this *Notice of Proposed Rulemaking and Order*, we initiate a proceeding to propose miscellaneous rule changes to Part 90 of the Commission's Rules,<sup>1</sup> and to related rules in other rule parts. In addition, we seek comment regarding particular changes to the rules governing the 4.9 GHz band and the Wireless Medical Telemetry Service which shares spectrum with Part 90 operations. We also solicit comment on other potential Part 90 rule changes, including suggestions to revise or eliminate provisions that are duplicative, outmoded or otherwise unnecessary. Finally, we take this opportunity to make certain minor editorial amendments to Part 90 to correct errors or omissions of publication, eliminate duplicative language, or conform them with other rule sections. This proceeding is part of our continuing effort to provide clear and concise rules that facilitate new wireless technologies, devices and services, and are easy for the public to understand.<sup>2</sup>

2. Part 90 contains the rules for both the Private Land Mobile Radio (PLMR) Services and certain Commercial Mobile Radio Services (CMRS). PLMR licensees generally do not provide for-profit communications services. Some examples of PLMR licensees are public safety agencies, businesses that use radio only for their internal operations, utilities, transportation entities, and medical service providers.<sup>3</sup> CMRS licensees, by comparison, do provide for-profit communications services, such as paging and Specialized Mobile Radio services that offer customers communications that are interconnected to the public switched network.

## II. DISCUSSION

### A. Miscellaneous Proposals

3. *Frequency Coordination and Related Matters.* Applications for new and modified Part 90 stations generally require frequency coordination<sup>4</sup> before the application is submitted to the Commission,<sup>5</sup> but certain types of applications are exempt from the frequency coordination requirement because they do not "have an impact on near-term frequency selections."<sup>6</sup> Pursuant to Section 90.621 of the Commission's Rules, certain licensees are permitted to modify their licenses to authorize CMRS

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<sup>1</sup> See 47 C.F.R. Part 90.

<sup>2</sup> See, e.g., 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 98-182, 15 FCC Rcd 16673 (2000) (*Biennial Review R&O*); see also Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27 and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Notice of Proposed Rulemaking*, WT Docket No. 03-264, 19 FCC Rcd 708 (2004).

<sup>3</sup> *Biennial Review R&O*, 15 FCC Rcd at 16674-75 ¶ 3.

<sup>4</sup> Frequency coordination is the process by which a private organization recommends to the Commission the most appropriate frequencies for private land mobile radio service applicants. Frequency coordinators provide a valuable service to the Commission by eliminating common application errors, thereby improving the quality of the applications and resolving potential interference problems at the source. See, e.g., *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, Fourth Report and Order and Fifth Notice of Proposed Rule Making*, WT Docket No. 96-86, 16 FCC Rcd 2020, 2064 (2001).

<sup>5</sup> See 47 C.F.R. § 90.175.

<sup>6</sup> Frequency Coordination in the Private Land Mobile Radio Services, *Report and Order*, PR Docket No. 83-737, 103 F.C.C. 2d 1093, 1150 ¶ 116 (1986); see 47 C.F.R. § 90.175(j).

operations instead of PLMR operations, or vice versa.<sup>7</sup> Currently, such applications require frequency coordination. We propose to eliminate the frequency coordination requirement for such applications. We tentatively conclude that frequency coordination is not necessary for such applications because coordinators neither recommend changes between private and commercial status, nor require specific notification of such modifications because that information is already contained in the Commission's Universal Licensing System (ULS) database. We believe that permitting licensees to forgo frequency coordination in these cases and file directly with the Commission is consistent with our goal of reducing unnecessary regulatory burdens on licensees. We ask for comment on this proposal. We also invite commenters to suggest other types of applications for which frequency coordination should no longer be required,<sup>8</sup> such as applications to modify a license to reduce the authorized bandwidth.<sup>9</sup> In addition, we ask commenters to consider whether any modification for which we conclude frequency coordination should no longer be required also should be deemed a minor modification<sup>10</sup> that can be implemented without prior Commission approval.<sup>11</sup>

4. *Paging on Public Safety VHF Frequencies.* VHF public safety frequencies (150-160 MHz) are used primarily for two-way voice communications (*e.g.*, mobile dispatch). The current rules, however, also allow for paging operations on these frequencies.<sup>12</sup> Experience has shown that paging and voice operations can generally co-exist on the same channel in the same area,<sup>13</sup> provided the paging transmissions are infrequent (low traffic volume) and the paging licensee monitors the channel prior to transmitting. The potential for paging to interfere with voice operations, however, increases as the amount of paging traffic increases. In short, two-way voice communications and high volume paging (*e.g.*, the type of paging often associated with large hospitals) on the same channel often are not compatible.<sup>14</sup>

5. Over the years, the Commission has received informal complaints about VHF paging systems interfering with public safety two-way voice communications. Of particular concern is paging interference to public safety communications on VHF frequencies set aside for mutual aid (*e.g.*, 155.340

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<sup>7</sup> See 47 C.F.R. § 90.621(e)(2), (3).

<sup>8</sup> We note that the Commission adopted a proposal to eliminate the frequency coordination requirement for applications seeking to delete one or more frequencies or locations from a license. See Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27 and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-264, 20 FCC Rcd 13900, 13906 ¶ 8 (2005).

<sup>9</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order*, WT Docket No. 99-87, 19 FCC Rcd 25045, 25051-52 ¶¶ 12-13 (2004) (requiring most PLMR licensees in the 150-174 MHz and 421-512 MHz bands to migrate to 12.5 kHz technology by January 1, 2013); see also 47 C.F.R. § 90.209(b)(5).

<sup>10</sup> See 47 C.F.R. § 1.929.

<sup>11</sup> See 47 C.F.R. § 1.947(b).

<sup>12</sup> See 47 C.F.R. § 90.22.

<sup>13</sup> In general, VHF public safety frequencies are assigned on a shared basis. Consequently, the same channel can be licensed to different entities in the same general area.

<sup>14</sup> Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service, *Report and Order*, PR Docket No. 91-72, 8 FCC Rcd 1454, 1457 ¶ 17 (1993); see also Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service, *Notice of Proposed Rulemaking*, PR Docket No. 91-72, 6 FCC Rcd 207, 217 ¶ 20 (1991).

MHz).<sup>15</sup> We also are concerned about paging interference to public safety communications on other VHF frequencies, especially in cases where the frequency may not be reserved under the rules for mutual aid but is used by the public safety community as a de facto common channel (e.g., the frequency 155.160 MHz is the frequency most commonly used by search and rescue entities for communicating with one another).

6. Accordingly, we seek comment on whether we should place any restrictions on paging operations on VHF public safety frequencies, especially those frequencies reserved under the rules for mutual aid/interoperability communications. Commenters favoring restrictions should identify (1) the specific frequencies, (2) the type of protection needed (e.g., prohibit all paging, allow only low volume paging, make paging secondary, etc), (3) reasons why the protection is needed and (4) how to handle existing licensees (e.g., grandfathering). We also ask that commenters address the disadvantages associated with restricting paging on these frequencies (e.g., the economic impact to existing paging operations). Finally, we ask whether we should eliminate paging operations in the VHF public safety frequencies altogether.

7. *Cross-Banding.* Section 90.243(b)(1) states that public safety medical service systems operating in the 150-160 MHz band are permitted to be cross-banded<sup>16</sup> in order to communicate with systems operating in the 450-470 MHz band.<sup>17</sup> The current language of the rule might be interpreted to mean that only medical service systems are allowed to use cross-band repeaters.<sup>18</sup> This is not the case. All public safety licensees may operate cross-band repeaters under the general mobile relay rules in Section 90.243. Therefore, we propose to modify this section to specifically state that cross-band repeaters are permitted for all public safety systems. We seek comment on this proposal.

8. *Mobile Repeaters.* A mobile station authorized to operate on a mobile service frequency above 25 MHz generally may be used as a mobile repeater<sup>19</sup> to extend the range of handheld units, but Section 90.247(b) states that for frequencies below 450 MHz in the Industrial/Business pool, only low power frequencies (where power is limited to two watts) may be assigned for use by mobile repeaters and associated hand-held units, when separate frequencies are assigned for that purpose.<sup>20</sup> Previously, this

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<sup>15</sup> The frequency 155.340 MHz may be designed by common consent as an intersystem mutual assistance frequency under an area-wide medical communications plan. See 47 C.F.R. § 90.20(d)(40).

<sup>16</sup> The spectrum available for public safety use is in multiple bands (e.g., 150-174 MHz, 421-512 MHz, 800 MHz). Often, some public safety entities are authorized to operate in one band while others in the same general area are authorized to operate in another band or bands. In order for entities to communicate with one another, “cross-band repeaters” – repeaters that receive on frequencies in one band and transmit on frequencies in another band -- are often used to allow for communication between incompatible communications systems. See *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communication Requirements Through the Year 2010, Notice of Proposed Rule Making*, WT Docket No. 96-86, 11 FCC Rcd 12460, 12475 ¶ 37 (1996).

<sup>17</sup> See 47 C.F.R. § 90.243(b)(1).

<sup>18</sup> The reference to “medical services systems” appears to be left over from the prior rule that applied only to the Emergency Medical and Special Emergency Radio Services, see 47 C.F.R. § 90.243(b)(1) (1996), before those services were consolidated into the Public Safety Radio Pool. See *Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, Second Report and Order*, PR Docket No. 92-235, 12 FCC Rcd 14307 (1997) (*Refarming 2<sup>nd</sup> R&O*).

<sup>19</sup> A mobile repeater station is a mobile station authorized to retransmit automatically, on a mobile service frequency, communications to or from hand-carried transmitters. See 47 C.F.R. § 90.7.

<sup>20</sup> See 47 C.F.R. § 90.247(b).

limitation applied only to the former Business and Special Industrial Radio (B/ILT) Services.<sup>21</sup> The restriction was imposed because there were relatively few high-power 150 MHz band frequencies available in those two services. After the Part 90 radio services were consolidated,<sup>22</sup> however, a greater number of high-power 150 MHz channels became available for use by B/ILT licensees. We also note that the number of low-power 150 MHz band frequencies available for mobile repeater operations was reduced when the Commission reallocated five channels to the Part 95 Multi-Use Radio Service.<sup>23</sup> In light of these developments, we seek tentatively conclude that restricting mobile repeaters to low-power channels is no longer necessary. We seek comment on our proposal to amend Section 90.247(b) accordingly.

9. *Expired Licenses.* In general, frequencies associated with expired licenses become available for reassignment once the license is deleted from the ULS database of active licenses.<sup>24</sup> Ordinarily, there is a delay between the date a license expires and the date its status is changed from Active to Expired in our licensing records. During that period, frequency coordinators may select a frequency associated with the expired license for recommendation to the Commission (coordinate the frequency), but applications are not accepted for the frequency until the frequency becomes available for reassignment.<sup>25</sup> The Land Mobile Communications Council (LMCC)<sup>26</sup> has notified the Commission that all Part 90 frequency coordinators have now agreed not to coordinate frequencies associated with an expired license until the frequency becomes available for reassignment.<sup>27</sup> LMCC requests the Commission's cooperation in enforcing this policy.<sup>28</sup> We therefore request comment on whether the rules should be amended to prohibit the coordination of frequencies associated with expired licenses until those frequencies are deleted from the ULS database.

10. *Multiple Licensing.* Most PLMR communication systems employ mobile relays (repeaters) with wide-area coverage so that communication may be maintained between mobile units that otherwise would be out of range of one another. Typically, wide-area coverage is achieved by locating the mobile relay antenna at a high site, *e.g.*, a mountain top, tall building, or tower. High antenna sites, however, are often scarce and usually expensive. Consequently, the practice has developed whereby the entity that owns and operates the repeater shares the base station with a number of users. While this third-party equipment provider sometimes uses the system to serve its own internal communications need, usually it

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<sup>21</sup> See 47 C.F.R. § 90.247(b) (1996).

<sup>22</sup> See *Refarming 2<sup>nd</sup> R&O*, 12 FCC Rcd 14307.

<sup>23</sup> See *Biennial Review R&O*, 15 FCC Rcd at 16688-89 ¶ 32.

<sup>24</sup> *I.e.*, the license's status in ULS is changed from "Active" to "Expired" or "Cancelled," and a date is entered into the "Cancellation" field.

<sup>25</sup> See Amendment of Parts 1 and 90 of the Commission's Rules Concerning the Construction, Licensing, and Operation of Private Land Mobile Radio Stations, *Memorandum Opinion and Order*, PR Docket No. 90-481, 8 FCC Rcd 6690, 6691 ¶ 5 (1993); see also National Science and Technology Network, Inc., *Memorandum Opinion and Order*, 17 FCC Rcd 365, 365 ¶ 2 (2001).

<sup>26</sup> The LMCC is a non-profit association of organizations representing substantially all land mobile radio licensees, providers of land mobile services and manufacturers of land mobile equipment. LMCC's membership includes all of the Commission's certified Part 90 frequency coordinators. See Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Power Operations in the Private Land Mobile Radio 450-470 MHz Band, *Memorandum Opinion and Order*, WT Docket No. 01-146, 19 FCC Rcd 18501, 18502 n.11 (2004).

<sup>27</sup> See Letter dated June 30, 2004 from Jim Pakla, President LMCC, to D'wana Terry, Chief, Public Safety and Critical Infrastructure Division, Wireless Telecommunications Bureau, Federal Communications Commission.

<sup>28</sup> *Id.* at 2.

operates solely to provide service to the entities sharing the system. This sharing is often referred to as “multiple licensing.” Under this concept, each user of the mobile relay station (commonly called a “community repeater”) applies for and obtains an individual license for the station. Thus, a single base station is licensed to multiple users. Section 90.185 of the Commission’s Rules<sup>29</sup> permits multiple licensing, provided that each licensee complies with the Commission’s Rules regarding permissible communications and is eligible for the frequency(ies) on which the station operates.<sup>30</sup>

11. In 1999, the Commission sought comment on whether to retain the multiple licensing rules.<sup>31</sup> Because few comments were received, the Commission concluded in 2000 that there was no reason to eliminate multiple licensing.<sup>32</sup> Since that time, however, changes in the Commission’s rules have created new means for multiple entities to share facilities or otherwise meet their communications needs. The availability and coverage of commercial communications systems has increased in recent years.<sup>33</sup> Also, some PLMR licensees now may convert their stations to CMRS operation.<sup>34</sup> In addition, users now may obtain spectrum in secondary market transactions.<sup>35</sup> These developments lead us to revisit the Commission’s conclusion, in 2000, that multiple licensing should be retained. We are also concerned that there may be parties using community repeaters that do not hold licenses.<sup>36</sup> Against this background, we request comment on whether multiple licensing has become unnecessary and administratively burdensome, considering the options discussed above. Commenters supporting elimination of multiple licensing should discuss how that would affect licensees currently using community repeaters.

12. *Transit Systems and Toll Roads.* Both Congress<sup>37</sup> and the Commission<sup>38</sup> have recognized that metropolitan transit systems are important components of public safety or critical infrastructure. Under the current rules, publicly-operated transit systems, as governmental entities, are eligible to hold authorizations in the Public Safety Pool.<sup>39</sup> However, not all metropolitan transit systems are publicly-owned; some are privately-owned non-profit entities that operate under contract or similar arrangement with a governmental entity, and thus are ineligible to use Public Safety Pool frequencies. In terms of the services provided, these non-profit entities appear indistinguishable from their government-owned

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<sup>29</sup> See 47 C.F.R. § 90.185.

<sup>30</sup> *Id.*

<sup>31</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Notice of Proposed Rule Making*, WT Docket No. 99-87, 14 FCC Rcd 5206, 5232 ¶ 50 (1999).

<sup>32</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 99-87, 15 FCC Rcd 22709, 22766-67 ¶¶ 124-26 (2000) (*BBA Report and Order*).

<sup>33</sup> See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 2003, *Tenth Report*, WT Docket No. 05-71, 20 FCC Rcd 15908, 15936-37 ¶ 73 (2005).

<sup>34</sup> See 47 C.F.R. § 90.621(e)(2), (f).

<sup>35</sup> See generally Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, *Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking*, WT Docket No. 00-230, 19 FCC Rcd 17503 (2004).

<sup>36</sup> See *BBA Report and Order*, 15 FCC Rcd at 22767 ¶ 126 (concluding that the record did not demonstrate that abuse of multiple licensing was widespread enough to merit eliminating the rule).

<sup>37</sup> See H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess. at 572 (1997).

<sup>38</sup> See, e.g., Improving Public Safety Communications in the 800 MHz Band, *Supplemental Order and Order on Reconsideration*, WT Docket 02-55, 19 FCC Rcd 21520, 21523 n.7 (2004).

<sup>39</sup> See 47 C.F.R. § 90.20(a).

counterparts. We therefore seek comment on whether Section 90.20 should be amended to allow privately-run metropolitan transit systems to use frequencies in the Public Safety Pool. If so, would it be appropriate to place conditions or restrictions on such authorizations, to ensure that such authorizations are used for the benefit of public safety? Should the Commission establish additional criteria in order for a private entity to be eligible for licensing of Public Safety Pool frequencies? For example, should we require the private entity to submit, with its application for a Public Safety Pool frequency, documentation evidencing the concurrence of the governmental entity?

13. In addition, we note that a number of government entities have entered into agreements, or are considering such agreements, to lease or sell toll roads to private entities.<sup>40</sup> When toll roads are operated by government entities, the operator is eligible to hold an authorization in the Public Safety Pool. A private entity that takes over operation of a toll road ordinarily is not eligible for that Public Safety Pool license. We seek comment on how best to administer licenses associated with toll roads that are transferred from government to private operation. As compared to transit systems, would these private entities also appear indistinguishable from their government-owned counterparts? Should Section 90.20 be amended to allow privately-run toll road systems to use frequencies in the Public Safety Pool? If so, would it be appropriate to place conditions or restrictions on such authorizations, to ensure that such authorizations are used for the benefit of public safety? Should the Commission establish additional criteria in order for a private entity to be eligible for licensing of Public Safety Pool frequencies? For example, should we require the private entity to submit, with its application for a Public Safety Pool frequency, documentation evidencing the concurrence of the governmental entity?

14. *Industrial/Business Pool Eligibility.* We have received inquiries from state and local government entities concerning their eligibility to apply for licenses in the Industrial/Business Pool for commercial enterprises, e.g., golf courses, electrical utilities, that are government-operated. We note that Section 90.35 of the Commission's Rules permits licensing of, *inter alia*, entities engaged in "[t]he operation of a commercial activity,"<sup>41</sup> and does not state that government entities cannot hold licenses in the Industrial/Business Pool for these activities. We conclude that Section 90.35 is flexible, and activities such as the operation of a utility, golf course, etc. whether conducted by a government or otherwise are "commercial activities" within the meaning of the rule. Nonetheless, we seek comment on whether there is any need to amend Section 90.35 to state explicitly that government entities engaged in commercial enterprises are eligible for Industrial/Business Pool frequencies.<sup>42</sup> In addition, we seek comment on a request filed by National Public Safety Telecommunications Council (NPSTC)<sup>43</sup> requesting that the rule be amended to permit government surveying operations to utilize Industrial/Business Pool itinerant frequencies.<sup>44</sup> NPSTC argues that this would enable government entities to utilize modern surveying equipment, which currently is manufactured to operate only on Industrial/Business Pool frequencies.<sup>45</sup>

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<sup>40</sup> See, e.g., Amy Goldstein, *Strapped States Try New Route, Lease Toll Roads to Foreign Firms*, The Washington Post, June 14, 2006, at A1.

<sup>41</sup> See 47 C.F.R. § 90.35(a)(1).

<sup>42</sup> See, e.g., Letter dated Mar. 29, 2006 from Thomas F. Smaidris, Data Flow Systems, Inc. to Office of the Secretary, Federal Communications Commission (noting that many government entities are licensed in the 217-220 MHz band, which is designated for Industrial/Business use, see 47 C.F.R. § 90.259(a), and asking that the rule be amended to expressly permit licensing of public safety eligibles).

<sup>43</sup> See Petition for Rulemaking of the National Public Safety Telecommunications Council (filed August 23, 2006) (NPSTC Petition).

<sup>44</sup> See 47 C.F.R. § 90.35(c)(17).

<sup>45</sup> See NPSTC Petition at 5-6.

15. *Disturbance of AM Broadcast Station Antenna Patterns.* Part 90 of the Commission's Rules lacks provisions for the protection of AM broadcast stations whose antenna patterns can be altered by the proximity of new land mobile towers and antennas. The Commission's rules for other services contain requirements for detuning antenna structures constructed near an AM transmitting antenna.<sup>46</sup> We seek comment on the need, if any, for similar provisions in Part 90 of the Commission's Rules. Commenters also should consider whether any other rule parts (*e.g.*, Part 22) should be similarly revised in order to further regulatory consistency among services, or whether any such rule changes should more appropriately be in Part 17, in that the issue largely relates to the tower itself.

16. *FB8T Station Class.* In 2000, the Commission established a new station class code, FB8, to identify those trunked radio systems' base and mobile relay channels that are not subject to a monitoring requirement<sup>47</sup> because the applicant/licensee has obtained the necessary consent from co-channel licensees or has exclusive use of the channel.<sup>48</sup> All channels associated with a centralized trunked system and any channels in a hybrid system for which the necessary consent has been obtained or that are licensed on an exclusive basis must have an FB8 code for the base/mobile relay station.<sup>49</sup> Approximately thirty-five authorizations have been issued with a station class of FB8T, allowing temporary use of base and mobile relay channels in systems that are not subject to a monitoring requirement. Authorizing temporary base stations anywhere within the licensee's authorized operating area could, however, allow the licensee to expand the contour of its unmonitored operations into areas where it does not have exclusivity, which could result in interference to other licensees.<sup>50</sup> Consequently, we no longer issue authorizations for systems with a station class of FB8T. In addition, we propose to renew existing FB8T authorizations with a station class code of FBT (temporary base), which would make it clear that these operations are subject to the monitoring requirement. We seek comment on this proposal, and on whether any corresponding amendment to Part 90 is necessary.

17. *Reorganization of Part 90.* When the Commission established Part 90 in 1978, it addressed only PLMR services.<sup>51</sup> Since that time, radio technology has advanced substantially, and there have been changes in the way spectrum is used. To keep pace with these changes, the Commission adopted a

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<sup>46</sup> See 47 C.F.R. §§ 22.371, 27.63, 73.1692.

<sup>47</sup> Under the Part 90 rules, trunked systems must meet certain monitoring requirements. The monitoring requirements, however, do not apply if certain conditions are met. See 47 C.F.R. § 90.187(b), (c).

<sup>48</sup> See 1998 Biennial Regulatory Review -- 47 C.F.R. Part 90 - Private Land Mobile Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 98-182, 15 FCC Rcd 16673, 16886 ¶ 26 (2000).

<sup>49</sup> In a "centralized trunked system," the base station controller provides dynamic channel assignments by automatically searching all channels in the system for and assigning to a user an open channel within that system. In a "decentralized trunked system," which is also a system of dynamic channel assignment, the system continually monitors the assigned channels for activity both within the trunked system and outside the trunked system, and transmits only when an open channel is found. A "hybrid trunked system" is one where at least one of the frequencies being trunked but not all the frequencies being trunked meet the criteria specified in 47 C.F.R. § 90.187(b).

<sup>50</sup> Temporary stations may be located at unspecified locations within a general area. 47 C.F.R. § 90.137(a). If an FB8T base station is located near the edge of the area in which an FB8 licensee has exclusivity or consent, the FB8T station can extend the licensee's operations beyond the area in which FB8 licensee has exclusivity or consent, resulting in the licensee operating without monitoring in an area where it is required to do so.

<sup>51</sup> See Amendment of the Commission's Rules governing the Private Land Mobile Radio Service to provide a new Part 90 that reorganizes and consolidates Parts 89, 91, and 93, *Report and Order*, Docket No. 21348, 69 F.C.C. 2d 1612 (1978).



number of rule changes over the years to promote flexibility and market-oriented regulations. Consequently many of the services regulated under Part 90 differ significantly from the “traditional” PLMR services on which the original Part 90 rules were premised. Thus the current rules cover both PLMR and CMRS services, which include services licensed on a site-by-site basis, services licensed by geographic area, and public safety services on frequencies ranging from 530 kHz to 4990 MHz.

18. The PLMR and CMRS operations governed under Part 90 are similar in many respects, thus it may be appropriate to continue to include them in the same rule part. On the other hand, the differences among the services may be sufficient to warrant them being administered under different rule parts. For example, it may be appropriate to move the Part 90 CMRS rules to Part 22 or Part 27, or to move the rules governing the Public Safety Pool to a separate rule part. Another option is to keep the rules in Part 90, but reorganize them to minimize confusion and reduce regulatory burdens. We ask commenting parties for an analysis of the comparative costs and benefits associated with the foregoing alternatives.

## B. 4.9 GHz Band

19. On July 22, 2005, M/A-COM, Inc. (M/A-COM), a manufacturer of radio equipment, filed a petition for clarification or in the alternative, rulemaking with respect to certain Part 90 rules governing the 4940-4990 MHz (4.9 GHz) band.<sup>52</sup> Specifically, M/A-COM believes that the Commission needs to clarify its rules and explicitly state that licensees in the 4.9 GHz band have authority to operate point-to-point and point-to-multipoint fixed links using directional antennas on a primary basis.<sup>53</sup> M/A-COM observes that the Commission allotted the band for mobile services on a primary basis, including “hot-spot,” *e.g.*, operations from hot spots to mobile units, and also authorized temporary fixed links on a primary basis.<sup>54</sup> However, because the Commission authorized permanent fixed links only on a secondary basis, M/A-COM believes that the rules are ambiguous regarding the status of permanent fixed links that operate as part of an integrated network with hot spots and mobile links.<sup>55</sup> M/A-Com proposes that the Commission amend its Part 90 rules and grant primary allocation status to point-to-point and point-to-multipoint fixed links that are part of a 4.9 GHz public safety network.<sup>56</sup>

20. In the *Memorandum Opinion and Order and Third Report and Order* in WT Docket No. 00-32, the Commission adopted service and licensing rules for the 4.9 GHz band.<sup>57</sup> The Commission indicated that it would permit broadband mobile services; “hot spot” operations, *i.e.*, automatic high speed file transfers from hot spots to mobile units, such as transfers of maps, building layouts, emergency medical service files, and wanted or missing person images; and operation of temporary fixed links (*i.e.*, operations lasting one year or less) on a primary basis.<sup>58</sup> The Commission also permitted permanent fixed operations, to optimize flexibility and promote spectral efficiency in areas where there may be a greater

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<sup>52</sup> See Petition for Clarification or, in the Alternative, Petition for Rulemaking of M/A-COM, Inc. (filed July 22, 2005) (Petition); see also Amended Petition for Clarification or, in the Alternative, Petition for Rulemaking of M/A-COM, Inc. (filed Aug. 23, 2005) (Amended Petition).

<sup>53</sup> See Petition at 1-2.

<sup>54</sup> *Id.* at 2-3.

<sup>55</sup> *Id.* at 3.

<sup>56</sup> *Id.* at 5.

<sup>57</sup> See 4.9 GHz Band Transferred from Federal Government Use, *Memorandum Opinion and Order and Third Report and Order*, 18 FCC Rcd 9152 (2003) (*4.9 GHz Third Report and Order*).

<sup>58</sup> *Id.* at 9165-66 ¶ 33.

need for public safety operations covering larger distances.<sup>59</sup> Such operations were permitted only on a secondary non-interference basis, however, so that traditional or backhaul microwave operations would not exhaust available 4.9 GHz frequencies and relegate safety operations to unlicensed bands that are shared with other uses.<sup>60</sup>

21. Specifically, Section 90.1207 provides that “base and mobile units (including portable and handheld units) and . . . temporary (1 year or less) fixed stations” may operate on a primary basis,<sup>61</sup> but “permanent fixed point-to-point stations” will be authorized only on a secondary basis.<sup>62</sup> M/A-COM contends that the rule does not fully implement the Commission’s intent, or is at least ambiguous, because it does not clearly indicate that fixed links using directional antennas that operate as part of an integrated network with hot spots and mobile links are authorized on a primary basis, and that secondary status attaches only to permanent fixed links used for traditional or backhaul microwave operations.<sup>63</sup> It proposes that the Commission amend its Part 90 rules to grant primary status to fixed links that are part of a 4.9 GHz public safety network.<sup>64</sup> It believes that public safety users and first responders will need integrated networks with scalable network architectures that allow for dynamic routing of traffic over both fixed and mobile links.<sup>65</sup>

22. We seek comment on M/A-COM’s proposal to expressly afford primary status to certain permanent fixed links. Commenters should address whether, given the limited amount of spectrum in the 4.9 GHz band, permitting fixed operations on a primary basis may result in severely limiting the spectral availability and reliability of both permanent and *ad hoc* mobile networks.<sup>66</sup> Would adoption of M/A-COM’s proposal compromise the ability of public safety agencies to utilize the band for temporary “incident scene” operations, a use that received overwhelming support in the record of WT Docket No. 00-32?<sup>67</sup> Would the M/A-COM proposal provide more flexible use of this band? Would such flexibility come at the expense of maintaining adequate spectrum for mission-critical public safety mobile operations?

23. In addition, we propose, as suggested by M/A-COM,<sup>68</sup> to amend Section 90.1215 to reflect the revised measurement procedures subsequently adopted by the Commission for devices that use digital modulation techniques and are regulated by Part 15 of the Rules.<sup>69</sup> Specifically, the Commission modified the Part 15 rules to permit the determination of a device’s output power by using average power

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<sup>59</sup> *Id.* at 9166 ¶ 34.

<sup>60</sup> *Id.*

<sup>61</sup> *See* 47 C.F.R. § 90.1207(c).

<sup>62</sup> *See* 47 C.F.R. § 90.1207(d).

<sup>63</sup> Petition at 5.

<sup>64</sup> *Id.* at 10-11.

<sup>65</sup> *Id.* at 5.

<sup>66</sup> The Commission addressed this issue in the *Third Report and Order* by limiting license availability, thereby reducing the possibility of interference to mission-critical operations. *See 4.9 GHz Third Report and Order*, 18 FCC Rcd at 9160 ¶¶ 18-19.

<sup>67</sup> *Id.* at 9166 ¶ 33.

<sup>68</sup> *See* Petition at 11-12; *see also* Amended Petition at 11-12.

<sup>69</sup> *See* Modification of Parts 2 and 15 of the Commission’s Rules for unlicensed devices and equipment approval, *Report and Order*, ET Docket No. 03-201, 19 FCC Rcd 13539 (2004).

measurements in addition to the existing peak output power measurement method.<sup>70</sup> We agree with M/A-COM's that measurement procedures should remain consistent between the Part 15 rules and the 4.9 GHz rules, given our understanding that manufacturers are considering technologies similar to those covered by Part 15 for use in the 4.9 GHz band. We request comment on this proposal.

### C. Wireless Medical Telemetry Service Issues

24. *Background.* In 2000, the Commission established the Wireless Medical Telemetry Service (WMTS) to enhance the reliability of medical telemetry equipment that is vital to the effective care of patients with acute and chronic health problems.<sup>71</sup> To ensure that wireless medical telemetry devices can operate free of harmful interference,<sup>72</sup> the Commission allocated the 1429-1432 MHz band (and two other bands, for a total of fourteen megahertz of spectrum) to the WMTS on a primary basis.<sup>73</sup> Subsequently, the Commission adopted a "band flip" proposal to facilitate use of the 1427-1432 MHz band for both WMTS and non-medical telemetry: The Commission afforded WMTS operations primary status in the 1427-1429.5 MHz portion of the band and non-medical telemetry primary status in the 1429.5-1432 MHz portion of the band. However, in seven defined geographic areas, WMTS is primary in the 1429-1431.5 MHz portion of the band and non-medical telemetry is primary in the 1427-1429 MHz and 1431.5-1432 MHz portions of the band.<sup>74</sup> The Commission also limited non-medical telemetry licensees to a measured or predicted field strength of no more than 150  $\mu\text{V}/\text{m}$  into the WMTS portion of the band at the site of any WMTS operation.<sup>75</sup>

25. In addition, the Commission provided that each Part 90 frequency coordinator must, within one business day of making a frequency recommendation for non-medical telemetry operations in the 1427-1432 MHz band, notify and provide technical information regarding the proposed operations to the

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<sup>70</sup> *Id.* at 13547 ¶ 34.

<sup>71</sup> See Amendment of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service, *Report and Order*, ET Docket 99-255, 15 FCC Rcd 11206 (2000) (*WMTS Report and Order*). Medical telemetry equipment is used in health care facilities to transmit patient measurement data, such as pulse and respiration rates, to a nearby receiver. By permitting such remote monitoring of patients' vital signs, medical telemetry equipment provides significant benefits to patients in terms of mobility and comfort.

<sup>72</sup> Prior to the establishment of the WMTS, medical telemetry devices could be operated only on an unlicensed basis under Part 15 of the FCC's rules (on vacant VHF and UHF television channels) or on a secondary basis to PLMR operations under Part 90 (in the 450-470 MHz band). See 47 C.F.R. §§ 15.242, 90.238, 90.267. The Commission was concerned that recent regulatory developments – the introduction of digital television service and the rechannelization of the 450-470 MHz band – would result in more intensive use of the spectrum by the services with primary status, subjecting wireless medical telemetry operations to greater interference and perhaps precluding such operations entirely in many instances. See *WMTS Report and Order*, 15 FCC Rcd at 11206-08 ¶¶ 2-6.

<sup>73</sup> See *WMTS Report and Order*, 15 FCC Rcd at 11210 ¶ 11.

<sup>74</sup> See Amendments to Parts 1, 2, 27, and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Report and Order*, WT Docket No. 02-8, 17 FCC Rcd 9980, 9993-94 ¶¶ 25-26 (2003) (*27 MHz Report and Order*); see also Amendments to Parts 1, 2, 27, and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Notice of Proposed Rule Making*, WT Docket No. 02-8, 17 FCC Rcd 2500, 2522 ¶ 51 (2002). The seven carve-out areas are Pittsburgh, Pennsylvania; Washington, D.C.; Richmond/Norfolk, Virginia; Austin/Georgetown, Texas; Battle Creek, Michigan; Detroit, Michigan; and Spokane, Washington. *27 MHz Report and Order* at 9993 n.78; see 47 C.F.R. § 90.259(b)(4).

<sup>75</sup> See *27 MHz Report and Order*, 17 FCC Rcd at 10054-55 ¶ 204.

American Society of Health Care Engineering of the American Hospital Association (ASHE), the WMTS frequency coordinator.<sup>76</sup> The Commission also concluded that ASHE must notify all non-medical telemetry licensees potentially affected by the initial deployment of WMTS equipment in the 1427-1432 MHz band.<sup>77</sup> ASHE sought reconsideration, arguing that it lacked the expertise and resources to identify and notify potentially affected non-medical telemetry licensees.<sup>78</sup> As an alternative, ASHE recommended that upon initial deployment of WMTS equipment, it should be required to notify only the Part 90 frequency coordinators, which, ASHE suggested, are better equipped to identify and notify all potentially affected telemetry licensees.<sup>79</sup> In response, the Commission requested that ASHE and LMCC formulate a mutually agreeable coordination plan.<sup>80</sup>

26. On August 18, 2004, ASHE, with LMCC's concurrence, filed a coordination plan for the 1427-1432 MHz band,<sup>81</sup> which provides as follows:

► *Co-channel frequencies—WMTS and non-medical telemetry both primary:*<sup>82</sup> Prior to recommending a frequency in the 1427-1432 MHz band, the Part 90 frequency coordinators will search ASHE's WMTS database to determine whether there are any co-channel WMTS operations within seventy miles of the proposed non-medical telemetry operations. If there are, the coordinator must perform an interference analysis to ensure that no interference will result, and must communicate the interference analysis to ASHE.

► *Co-channel frequencies—WMTS primary and non-medical telemetry secondary:* Prior to recommending a frequency in the 1427-1432 MHz band, the Part 90 frequency coordinators will search ASHE's WMTS database to determine whether there are any co-channel WMTS operations within seventy miles of the proposed non-medical telemetry operations and, if there are, perform an analysis to confirm that the proposed operations will comply with the 150  $\mu$ V/m field strength limit. The coordinator also must, within twenty-four hours of coordinating the frequency, provide the technical data to ASHE, which will update its WMTS database to reflect the information. If new WMTS deployments within seventy miles could be affected by existing secondary non-medical telemetry operations, ASHE will notify each Part 90 coordinator. The coordinator that provided the technical information to ASHE then must respond regarding whether the existing secondary non-medical telemetry operations will comply with the 150  $\mu$ V/m field strength limit with respect to the new WMTS deployment.

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<sup>76</sup> *Id.* at 10018 ¶ 95.

<sup>77</sup> *I.e.*, those non-medical telemetry licensees that may have to modify their operations to avoid causing harmful interference to WMTS facilities. *See id.* at 10018-19 ¶ 96.

<sup>78</sup> *See* Amendments to Parts 1, 2, 27, and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Memorandum Opinion and Order*, WT Docket No. 02-8, 18 FCC Rcd 16920, 16925 ¶ 11 (2003) (*27 MHz MO&O*).

<sup>79</sup> *Id.*

<sup>80</sup> *See 27 MHz MO&O*, 18 FCC Rcd at 16925 ¶ 11.

<sup>81</sup> Letter dated Aug. 18, 2004 from Lawrence J. Movshin, Wilkinson Barker Knauer, LLP, counsel to ASHE, to Marlene H. Dortch, Secretary, Federal Communications Commission (ASHE Letter).

<sup>82</sup> This situation can occur near the border of a band-flip area.

► *Co-channel frequencies—WMTS secondary and non-medical telemetry primary:* The Part 90 frequency coordinator must, within twenty-four hours of coordinating the frequency, provide the technical data to ASHE.

► *Adjacent channel frequencies*<sup>83</sup>—*WMTS and non-medical telemetry both primary or both secondary:* The Part 90 frequency coordinator must, within twenty-four hours of coordinating the frequency, provide the technical data to ASHE, which will update its WMTS database to reflect the information.<sup>84</sup>

ASHE requests that we amend Sections 90.176(d) and 95.1113(b)(5) of the Commission's Rules<sup>85</sup> to require ASHE and the Part 90 frequency coordinators to comply with the coordination plan.<sup>86</sup> ASHE also requests a waiver of Section 95.1113(b)(5) to permit the parties to utilize the mutually agreeable coordination plan until such time as the amended rules become effective.<sup>87</sup>

27. *Discussion.* We tentatively conclude that implementation of the joint ASHE-LMCC coordination plan is in the public interest, because it will further our continuing efforts<sup>88</sup> to ensure protection of WMTS operations from harmful interference. We therefore seek comment on ASHE's proposed rule changes, as set forth in Appendix C. We also seek comment on whether the rules should expressly set forth the terms of the agreement, or if it is sufficient to cross-reference the coordination plan, as ASHE proposes. Although ASHE and LMCC support codifying the coordination plan, we also seek comment on whether this is necessary or appropriate, or if codification of the plan would impede ASHE and LMCC in the event that they agree in the future to modify their procedures.

28. With respect to ASHE's request for a waiver of Section 95.1113(b)(5) to permit the parties to implement the coordination plan prior to such time as the amended rules become effective, we conclude that no waiver is necessary. The coordination plan does not impose requirements on ASHE and the Part 90 frequency coordinators beyond those set forth in our rules.<sup>89</sup> Therefore, no waiver is needed.<sup>90</sup> We

<sup>83</sup> *I.e.*, not co-channel but within the 1427-1432 MHz band.

<sup>84</sup> *Id.* at Att. A 1-3. The plan does not mandate any coordination procedures when WMTS and non-medical telemetry operations are not co-channel and one service is primary to the other.

<sup>85</sup> 47 C.F.R. §§ 90.176(d), 95.1113(b)(5).

<sup>86</sup> ASHE Letter at 2, Atts. B, C. ASHE also proposes "non-substantive, clarifying, word changes" to Sections 90.259(b)(4)(ii) and 95.1113(b)(1) and (6), 47 C.F.R. §§ 90.259(b)(4)(ii), 95.1113(b)(1), (6). *See* ASHE Letter at 2 n.4, Atts. B, C.

<sup>87</sup> ASHE Letter at 2.

<sup>88</sup> *See, e.g.*, The Wireless Telecommunications Bureau Extends the Freeze on High Power Use of the 460-470 MHz Band Offset Channels until December 31, 2005, *Public Notice*, 19 FCC Rcd 12414 (WTB PSCID 2004).

<sup>89</sup> For example, our rules require frequency coordinators to notify ASHE of new coordinations in the 1427-1432 MHz band within one business day, while the coordination plan requires such notice within twenty-four hours. *Compare* 47 C.F.R. § 90.176(d) *with* ASHE Letter at Att. A page 2.

<sup>90</sup> We do not believe that the proposal in the coordination plan for ASHE to notify Part 90 frequency coordinators of the deployment of WMTS equipment in the 1427-1432 MHz band conflicts with the requirement in our rules that ASHE notify affected licensees of deployment of WMTS equipment in the 1427-1432 MHz band. *Compare* ASHE Letter at Att. A page 2 *with* 47 C.F.R. § 95.1113(b)(5). Section 95.1113(b)(5) does not require that ASHE notify potentially affected licensees *directly*. Therefore, we believe that it is permissible under the current rule for ASHE to notify a licensee's frequency coordinator if the frequency coordinator relays the necessary information to the licensee.

therefore dismiss ASHE's waiver request as moot.

29. Finally, we note that the WMTS rules do not explicitly permit WMTS systems to operate on a secondary basis in the portion(s) of the 1427-1432 MHz band where non-medical telemetry is primary. The Wireless Telecommunications Bureau has received both a request that it clarify that such operations are permitted,<sup>91</sup> and a request that it clarify that such operations are not permitted.<sup>92</sup> We seek comment on how, if at all, we should amend our rules with respect to this issue. We caution WMTS users, however, that if secondary operations are sanctioned, such operations ordinarily should not be relied upon for functions that are critical to patient safety, because they are not protected from interference from Part 90 operations. We strongly encourage health care providers to utilize the portion of the 1427-1432 MHz band where WMTS operations have primary status if there is any possibility of interference from Part 90 operations. The Commission previously indicated that it does not anticipate designating any additional spectrum for primary WMTS use.<sup>93</sup>

#### D. Editorial Amendments

30. Finally, we take this opportunity to make certain minor editorial amendments to Part 90 to correct errors or omissions of publication, eliminate duplicative language, or conform language among rule sections. We make the following changes to the Public Safety Frequency Table in Section 90.20(c)(3): (1) replace the entries for 530 kHz and 1610 kHz with an entry for 530-1700 kHz to more accurately reflect the frequencies available pursuant to Section 90.242(a); (2) insert a cross-reference to Section 90.20(d)(17) to the entry for frequency 42.40 MHz; (3) correct the entry for frequency 152.0075 MHz to cross-reference Section 90.20(d)(29) instead of Section 90.20(d)(19); (4) correct the permitted station class for frequencies 157.450 MHz and 163.250 MHz to indicate base stations only, rather than base and mobile, in order to reflect the limitation in Section 90.20(d)(13); (5) correct the permitted station class for frequencies 158.805 MHz and 220-222 MHz from "Base and mobile" to "Base or mobile" to conform to the rest of the table; (6) correct the entry for frequency 159.4275 MHz by replacing "158.4275" with "159.4275"; (7) delete obsolete references to Section 90.20(d)(60) and (61); (8) correct the erroneous entry for frequency 460.05626 by replacing it with "460.05625"; and (9) correct the permitted station class for frequency 462.9375 MHz to indicate base or mobile instead of mobile stations only. We also make various other editorial changes, to other rules in Subparts A,<sup>94</sup> B,<sup>95</sup> C,<sup>96</sup> F,<sup>97</sup> G,<sup>98</sup> I,<sup>99</sup>

<sup>91</sup> See Memorandum dated Feb. 22, 2005 from Henry Goldberg, Goldberg, Godles, Wiener & Wright, to John Muleta, Chief, Wireless Telecommunications Bureau.

<sup>92</sup> See Letter dated Jan. 24, 2006 from Jim Pakla and Jill Lyon, Co-Presidents, Land Mobile Communications Council, to Catherine Seidel, Acting Chief, Wireless Telecommunications Bureau.

<sup>93</sup> See *WMTS Report and Order*, 15 FCC Rcd at 11210 ¶ 11.

<sup>94</sup> Specifically, (1) in Section 90.5, delete "of this chapter" from paragraphs (b), (h), and (i) in order to conform them to the other paragraphs in the rule; (2) in Section 90.7, (i) correct "t" to "to" in the definition of *Frequency coordination*; (ii) replace "Minn." with "Minnesota" to be consistent with the treatment of other states set forth in that definition; (iii) eliminate the space between "southern" and "most," correct the spelling of "southward," and eliminate an extraneous ellipsis in the definition of *Line A*; (iv) hyphenate "non-voice" in the definitions of *Location and Monitoring Service* and *Telecommand*; (v) delete the definition of *Navigable waters*, because the term no longer appears in Part 90; (vi) replace "is" with "are" in the last sentence of the definition of *Telephone maintenance licensee*.

<sup>95</sup> Specifically, (1) in Section 90.20(d)(42), insert "La." after "New Orleans" to be consistent with the treatment of geographic locations in other paragraphs of the rule; (2) simplify the language in Section 90.20(d)(62); (3) correct the cross-references in Section 90.20(d)(64); (4) correct typographical errors ("46.075") in the entries in the table in Section 90.20(d)(66)(i) for frequencies 463.075 MHz and 468.075 MHz; (5) in Section 90.20(d)(79), insert "Calif." after "Los Angeles" to be consistent with the treatment of geographic locations in other paragraphs of the rule; (6) (continued ....)

J,<sup>100</sup> K,<sup>101</sup> L,<sup>102</sup> M,<sup>103</sup> N,<sup>104</sup> and O.<sup>105</sup> Because these amendments are editorial changes or corrections of

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delete an extraneous “2006” in Section 90.20(d)(81); (7) in Section 90.20(e)(3), replace "to" with hyphens in the frequency ranges to be consistent with the treatment of other frequency ranges in the rule; (8) in Section 90.20(e)(4), insert “Mich.” after “Detroit,” “Ohio” after “Cleveland,” and “N.Y.” after “Buffalo” to be consistent with the treatment of geographic locations in other paragraphs of the rule; (9) in Section 90.20(g)(5)(iv), insert a space between “exact” and “ERP.”

<sup>96</sup> Specifically, (1) in the table in Section 90.35(b)(3), (i) correct the permitted station class for frequency 33.12 MHz to indicate base stations only, rather than base and mobile, in order to reflect the limitation in Section 90.35(c)(11); (ii) delete the redundant entry for frequency 35.48 MHz; (iii) correct a typographical error (“133” instead of “33”) in the entries for frequencies 158.1225 MHz and 451.01875 MHz; (iv) correct the permitted station class for frequencies 173.250 MHz, 173.300 MHz, 173.350 MHz, and 220-222 MHz from “Base or Mobile” or “Base and mobile” to “Base or mobile” to conform to the rest of the table; (v) replace obsolete references in the entry for frequency 462.9375 MHz to Sections 90.35(c)(67) and (86) with a reference to Section 90.35(c)(88); (2) remove extraneous punctuation and capitalization from Section 90.35(c)(14); (3) remove redundant verbiage from Sections 90.35(c)(20) and (21); (4) renumber the paragraph after Section 90.35(c)(88) as (89) instead of (82), and revise the cross-references in the table in Section 90.35(b)(3) accordingly; (5) remove extraneous verbiage from Sections 90.35(d)(2) and (e)(4); (6) in Section 90.35(g), insert a space between “service” and “to,” and hyphenate “noninterference.”

<sup>97</sup> Specifically, in Section 90.103, (1) remove the obsolete paragraph (c)(7), (2) correct typographical errors in paragraphs (c)(2) (replace “lands” with “land”) and (6) (replace “of” with “or”), and (3) revise the cross-references in paragraph (c)(21).

<sup>98</sup> Specifically, (1) clarify the cross-reference in Section 90.129(i); (2) remove unnecessary verbiage from Section 90.138; (3) in Section 90.157, change “station license” to “authorization” to conform with Section 90.255.

<sup>99</sup> Specifically, (1) insert a space between “after” and “December” in Section 90.203(n); (2) correct a typographical error (change “an” to “and”) in Section 90.207(b); (3) in Section 90.209(b)(5), correct several typographical errors in the table and insert a missing cross-reference; (4) correct a typographical error (“50” instead of “40”) in Section 90.210(l)(6); (5) in Section 90.212(c), revise the cross-reference to reflect that the referenced paragraph has been renumbered as Section 90.207(l); (6) in Section 90.219(c), revise the cross-reference to reflect that the referenced information is now found in Section 90.210.

<sup>100</sup> Specifically, (1) in Section 90.233(c), spell out “automatic vehicle monitoring systems” in lieu of the abbreviation AVM; (2) in Section 90.235(e), replace "two" and "three" in the last sentence with numerals to conform with the usage in the rest of the paragraph; (3) in Section 90.235(l), remove the cross-reference to a rule (Section 90.731) that was removed in 1997; (4) in Section 90.237(a), add a missing word and letters; (5) revise the cross-references in Section 90.237(g) to reflect that the referenced rules have been renumbered; (6) in Section 90.241(a), correct “or” to read “of”; (7) in Section 90.242, correct paragraph (a)(3) to replace “bands” with “band,” and replace references to “Travelers Information Stations” to read “Travelers’ Information Stations”; (8) in Section 90.250, remove extraneous information in paragraph (f) and revise the reference in paragraph (i) to refer to Form 601.

<sup>101</sup> Specifically, (1) remove extraneous punctuation from the table in Section 90.257(a)(1); (2) insert an omitted word (“operations”) in Section 90.259(a)(5); (3) insert the effective date in Section 90.261(c); (4) in Section 90.263, correct the reference to the Radiolocation Service; (5) conform Section 90.265(h) to Section 90.266(h) by revising “420 minutes” to read “seven hours.”

<sup>102</sup> Specifically, (1) correct a typographical error (“Banks” for “Bands”) in the table in Section 90.303(b); (2) insert a missing reference and make various punctuation corrections in Section 90.307; (3) correct various typographical errors in Section 90.309(a)(4) and (5); (4) delete unnecessary language from Section 90.315(g), and insert “MHz” at the end of Section 90.315(j).

<sup>103</sup> Specifically, (1) in Section 90.353(e), spell out “automatic vehicle monitoring systems” in lieu of the abbreviation AVM, and correct the cross-reference in Section 90.353(f); (2) correct the cross-reference in Section 90.357(a), and correct “on” to “in”; (3) in Section 90.377, spell out “On-Board Unit” in lieu of the abbreviation OBU.

typographical errors, we find for good cause that public notice and comment on these changes is unnecessary.<sup>106</sup> We ask for comment, however, on any other such errors, clarifications or changes that commenters believe are needed.

### III. PROCEDURAL MATTERS

31. *Regulatory Flexibility Analysis.* The Regulatory Flexibility Act of 1980, as amended (RFA),<sup>107</sup> requires that a regulatory flexibility analysis be prepared for notice-and-comment rule making proceedings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”<sup>108</sup> As required by the RFA,<sup>109</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this *Notice of Proposed Rule Making and Order (NPRM)*. The analysis is found in Appendix A. We request written public comment on the analysis. Comments must be filed in accordance with the same filing deadlines for comments on the *NPRM*, and must have a separate and distinct heading designating them as responses to the IRFA.

32. *Paperwork Reduction Analysis.* This *NPRM* does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, therefore, it does not contain a proposed new or modified “information collection burden for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4).

33. *Ex Parte Presentations.* This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission’s Rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

34. *Alternative formats.* To request materials in alternative formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to <[FCC504@fcc.gov](mailto:FCC504@fcc.gov)> or call the Consumer and Government Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY). This *NPRM* also may be downloaded from the Commission’s web site at <<http://www.fcc.gov/>>.

35. *Comment Dates.* Pursuant to sections 1.415 and 1.419 of the Commission’s Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before the date indicated on the front page of this document. Comments may be filed using: (1) the Commission’s Electronic Comment Filing System (ECFS), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the

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<sup>104</sup> Specifically, (1) correct the cross-reference in Section 90.419(f); (2) correct typographical errors and otherwise streamline Section 90.425(a)(4)(iii), (a)(5), and (c)(2).

<sup>105</sup> Specifically, (1) add missing punctuation to Section 90.465(b) and (c); (2) correct typographical errors in Section 90.483(b)(1)(ii), (b)(2)(i), and (b)(2)(ii).

<sup>106</sup> *See* 5 U.S.C. § 553(b)(B).

<sup>107</sup> The RFA, *see* 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>108</sup> 5 U.S.C. § 605(b).

<sup>109</sup> 5 U.S.C. § 603.



ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.

- For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and include the following words in the body of the message “get form.” A sample form and directions will be sent in response.
- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
- Filings can be sent by hand or messenger delivery, by commercial courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary, Federal Communications Commission.
  - The Commission’s contractor will receive hand-delivered or messenger-delivered paper filings for the Commission’s Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington DC 20002. The filing hours at this location are 8:00 am to 7:00 pm. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
  - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743
  - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12<sup>th</sup> Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

36. Interested parties may view documents filed in this proceeding on the Commission’s Electronic Comment Filing System (ECFS) using the following steps: (1) access ECFS at <http://www.fcc.gov/cgb/ecfs>. (2) In the introductory screen, click on “Search for Filed Comments.” (3) In the “Proceeding” box, enter the numerals in the docket number. (4) Click on the box marked “Retrieve Document List”. A link to each document is provided in the document list. Filings and comments are also available for public inspection and copying during regular business hours at the FCC Reference Information Center, 445 12<sup>th</sup> Street, S.W., Room CY-A257, Washington, DC, 20554. Filings and comments also may be purchased from the Commission’s duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12<sup>th</sup> Street, SW, Room CY-B402, Washington, DC 20554, telephone 1-800-378-3160, or via e-mail [www.bcpweb.com](http://www.bcpweb.com).

37. For further information, contact Mr. Rodney Conway, Mobility Division, Wireless Telecommunications Bureau, (202) 418-2904 or TTY (202) 418-7233; or via e-mail at

Rodney.Conway@fcc.gov.

#### IV. ORDERING CLAUSES

38. Accordingly, IT IS ORDERED, pursuant to sections 4(i), 303(r), and 403 of the Communications Act of 1934, 47 U.S.C. §§ 154(i), 303(r), and 403, that this *Notice of Proposed Rulemaking and Order* is HEREBY ADOPTED.

39. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in this *Notice of Proposed Rulemaking* and that comment is sought on these proposals.

40. IT IS FURTHER ORDERED that the Petition for Clarification or, in the Alternative, Petition for Rulemaking filed on July 22, 2005 by M/A-COM, Inc., and the Petition for Rulemaking filed on August 23, 2006 by the National Public Safety Telecommunications Council ARE GRANTED to the extent indicated herein.

41. IT IS FURTHER ORDERED that the waiver request filed on August 18, 2004 by the American Society of Health Care Engineering of the American Hospital Association IS DISMISSED AS MOOT.

42. IT IS FURTHER ORDERED that Part 90 of the Commission's Rules IS AMENDED as specified in Appendix B, effective 30 days after publication of the *Order* in the Federal Register.

43. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rulemaking and Order*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

## APPENDIX A

## INITIAL REGULATORY FLEXIBILITY ANALYSIS

(Notice of Proposed Rulemaking in WP Docket No. 07-100)

As required by the Regulatory Flexibility Act (RFA),<sup>110</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Notice of Proposed Rule Making* in WP Docket No. 07-100 (*NPRM*). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *NPRM* as provided in paragraph 35 of this *NPRM*. The Commission will send a copy of the *NPRM*, including the IRFA, to the Chief Counsel for Advocacy of the U.S. Small Business Administration.<sup>111</sup> In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.<sup>112</sup>

**A. Need for, and Objectives of, the Proposed Rules**

This proceeding is part of our continuing effort to provide clear and concise rules that facilitate new wireless technologies, devices and services, and are easy for licensees to comprehend and understand. We believe it appropriate to review all of our regulations relating to administering Private Land Mobile Radio (PLMR) Services to determine which regulations can be clarified, streamlined or eliminated. In the *NPRM*, we seek comment on miscellaneous rule amendments that are intended to clarify Part 90 of the Commission's Rules. In addition, the *NPRM* seeks comment on eliminating certain regulatory requirements contained in Part 90 of the Commission's Rules. The *NPRM* also seeks comment regarding changes to the rules governing the Part 95 Wireless Medical Telemetry Service, to clarify those rules and implement a joint coordination agreement among the relevant frequency coordinators. We also solicit comment on other potential Part 90 rules changes, including suggestions to revise or eliminate provisions that are duplicative, outmoded or otherwise unnecessary.

**B. Legal Basis for Proposed Rules**

The proposed action is authorized under sections 4(i), 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 303(r), and 403.

**C. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply**

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."<sup>113</sup> In addition, the term "small business" has the same meaning as the

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<sup>110</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, was amended by the Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAA). Title II of the CWAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

<sup>111</sup> *Id.* § 603(a).

<sup>112</sup> See *id.*

<sup>113</sup> See 5 U.S.C. § 601(6).

term “small business concern” under the Small Business Act.<sup>114</sup> 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).<sup>115</sup> A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>116</sup> Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by the rules changes proposed in this *NPRM*.

*Governmental Entities.* Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.<sup>117</sup> A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>118</sup> Nationwide, as of 2002, there were approximately 1.6 million small organizations.<sup>119</sup> The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”<sup>120</sup> Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.<sup>121</sup> We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.”<sup>122</sup> Thus, we estimate that most governmental jurisdictions are small.

*Public Safety Radio Licensees.* As a general matter, Public Safety Radio Pool licensees include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.<sup>123</sup> The SBA rules contain a definition for cellular and other wireless telecommunications

<sup>114</sup> See 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.

<sup>115</sup> See Small Business Act, 5 U.S.C. § 632 (1996).

<sup>116</sup> See 5 U.S.C. § 601(4).

<sup>117</sup> See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

<sup>118</sup> See 5 U.S.C. § 601(4).

<sup>119</sup> Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

<sup>120</sup> See 5 U.S.C. § 601(5).

<sup>121</sup> U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

<sup>122</sup> We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

<sup>123</sup> See subparts A and B of Part 90 of the Commission's Rules, 47 C.F.R. §§ 90.1-90.22. Police licensees include 26,608 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code), and teletype and facsimile (printed material). Fire licensees include 22,677 licensees comprised of private volunteer or professional fire companies, as well as units under governmental control. Public Safety Radio Pool licensees also include 40,512 licensees that are state, county, or municipal entities that use radio for official purposes. There are also 7,325 forestry service licensees comprised of licensees from state departments of conservation and private forest organizations that set up communications networks among fire lookout towers and ground crews. The 9,480 state and local governments are highway maintenance licensees that provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. Emergency medical licensees (1,460) use these channels for emergency medical service communications related to the delivery of emergency medical treatment. Another 19,478 licensees include medical services, rescue organizations, veterinarians, persons with (continued ....)

companies which encompasses business entities engaged in radiotelephone communications employing no more than 1,500 persons.<sup>124</sup> There are a total of approximately 127,540 licensees within these services.<sup>125</sup> With respect to local governments, in particular, since many governmental entities as well as private businesses comprise the licensees for these services, we include under public safety services the number of government entities affected.

*Private Land Mobile Radio Licensees.* Private land mobile radio (PLMR) 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 a small business size standard specifically applicable to PLMR users. The SBA rules do, however, contain a size standard for small radiotelephone (wireless) companies which encompasses, business entities engaged in radiotelephone communications employing no more than 1,500 persons.<sup>126</sup> The SBA rules contain a definition for cellular and other wireless telecommunications companies which encompasses business entities engaged in radiotelephone communications employing no more than 1,500 persons.<sup>127</sup> 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 bands below 512 MHz.<sup>128</sup>

*Frequency Coordinators.* Neither the Commission nor the SBA has developed a small business size standard specifically applicable to spectrum frequency coordinators. The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"<sup>129</sup> and "Cellular and Other Wireless Telecommunications."<sup>130</sup> Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.<sup>131</sup> Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.<sup>132</sup> Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.<sup>133</sup> Of this total, 1,378 firms had employment of 999 or fewer

(Continued from previous page) \_\_\_\_\_

disabilities, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities.

<sup>124</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>125</sup> There is no information currently available about the number within the 127,540 that have less than 1500 employees.

<sup>126</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>127</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>128</sup> See Federal Communications Commission, 60th Annual Report, Fiscal Year 1994 at 120-121.

<sup>129</sup> See 13 C.F.R. § 121.201, NAICS code 517211.

<sup>130</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>131</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

<sup>132</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

<sup>133</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

employees, and 19 firms had employment of 1,000 employees or more.<sup>134</sup> Thus, under this second category and size standard, the majority of firms can, again, be considered small.

*RF Equipment Manufacturers.* The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.”<sup>135</sup> The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.<sup>136</sup> According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.<sup>137</sup> Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.<sup>138</sup> Thus, under this size standard, the majority of firms can be considered small.

*Hospitals, Nursing Care Facilities, and Other Residential Care Facilities.* The SBA has developed small business size standards for these three categories and other, related categories. For the commercial census category of General Medical and Surgical Hospitals,<sup>139</sup> the SBA deems an entity to be small if it has \$31.5 million or less in annual revenues.<sup>140</sup> Census Bureau data for 2002 show that there were 3,200 firms in this category that operated for the entire year.<sup>141</sup> Of this total, 1,313 firms had revenues of under \$25 million, and 471 had revenues of \$25 million to \$49,999,999.<sup>142</sup> Thus, in this category, over 41 percent of the firms can be considered small. For the category of Nursing Care Facilities,<sup>143</sup> the SBA deems an entity to be small if it has \$12.5 million or less in annual revenues.<sup>144</sup>

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<sup>134</sup> *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

<sup>135</sup> U.S. Census Bureau, 2002 NAICS Definitions, “334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing”; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

<sup>136</sup> See 13 C.F.R. § 121.201, NAICS code 334220.

<sup>137</sup> U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

<sup>138</sup> *Id.* An additional 18 establishments had employment of 1,000 or more.

<sup>139</sup> U.S. Census Bureau, 2002 NAICS Definitions, “622110 General Medical and Surgical Hospitals”; <http://www.census.gov/epcd/naics02/def/ND622110.HTM#N622110>.

<sup>140</sup> See 13 C.F.R. § 121.201, NAICS code 622110.

<sup>141</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Health Care and Social Assistance, “Establishment and Firm Size (Including Legal Form of Organization,” Table 4, NAICS code 622110 (issued Nov. 2005).

<sup>142</sup> *Id.* An additional 1416 firms had revenues of over \$50 million.

<sup>143</sup> U.S. Census Bureau, 2002 NAICS Definitions, “623110 Nursing Care Facilities”; <http://www.census.gov/epcd/naics02/def/ND623110.HTM#N623110>.

<sup>144</sup> See 13 C.F.R. § 121.201, NAICS code 623110.

Census Bureau data for 2002 show that there were 7,826 firms in this category that operated for the entire year.<sup>145</sup> Of this total, 6,594 firms had revenues of under \$10 million, and 871 had revenues of \$10 million to \$24,999,999.<sup>146</sup> Thus, in this category, the majority of firms can be considered small. For the category of Other Residential Care Facilities,<sup>147</sup> the SBA deems an entity to be small if it has \$6.5 million or less in annual revenues.<sup>148</sup> Census Bureau data for 2002 show that there were 3,131 firms in this category that operated for the entire year.<sup>149</sup> Of this total, 2,774 firms had revenues of under \$5 million, and 202 had revenues of \$5 million to \$9,999,999.<sup>150</sup> Thus, in this category, the majority of firms can be considered small.

*Aviation and Marine Radio.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category “Cellular and Other Telecommunications,” which is 1,500 or fewer employees.<sup>151</sup> Also, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.<sup>152</sup> There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them, along with the majority of other aviation and marine radio licensees, qualify as “small” businesses under the above special small business size standards.

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

There are no projected reporting, recordkeeping or other compliance requirements.

#### **E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

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<sup>145</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Health Care and Social Assistance, “Establishment and Firm Size (Including Legal Form of Organization,” Table 4, NAICS code 623110 (issued Nov. 2005).

<sup>146</sup> *Id.* An additional 361 firms had revenues of over \$25 million.

<sup>147</sup> U.S. Census Bureau, 2002 NAICS Definitions, “623990 Other Residential Care Facilities”; <http://www.census.gov/epcd/naics02/def/ND623990.HTM#N623990>.

<sup>148</sup> See 13 C.F.R. § 121.201, NAICS code 623990.

<sup>149</sup> U.S. Census Bureau, 2002 Economic Census, Subject Series: Health Care and Social Assistance, “Establishment and Firm Size (Including Legal Form of Organization,” Table 4, NAICS code 623990 (issued Nov. 2005).

<sup>150</sup> *Id.* An additional 155 firms had revenues of over \$10 million.

<sup>151</sup> See 13 CFR § 121.201, NAICS code 517212.

<sup>152</sup> Amendment of the Commission’s Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

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: (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.<sup>153</sup>

We believe the changes proposed in this *NPRM* will promote flexibility and more efficient use of the spectrum, reduce administrative burdens on both the Commission and licensees, and allow licensees to better meet their communication needs. In this *NPRM*, we seek comment on the proposals to modify the rules. Many of the proposed changes constitute clarification of existing requirements or elimination of existing limitations. Among other proposals, we seek comment on whether multiple licensing is obsolete and whether we should eliminate this administratively burdensome option in light of the various other services that are now more widely available. We also are considering the alternative of retaining the multiple licensing rules. The *NPRM* also seeks comment on the feasibility of including protection to broadcast AM station antenna patterns in Part 90 of our rules, or whether such a rule is unnecessary. We seek comment on our proposal to reissue licenses that contain an invalid station class of FB8T as they come due for renewal with an appropriate station class of FBT (temporary base), indicating that operations are subject to monitoring.

**F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules**

None.

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<sup>153</sup> See 5 U.S.C. § 603(c).



## APPENDIX B

## FINAL RULES

Part 90 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:

1. 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), and 332(c)(7).**

2. Section 90.5 is amended by revising paragraphs (b), (h), and (i) to read as follows:

**§ 90.5 Other applicable rule parts.**

\* \* \* \* \*

(b) Part 1 includes rules of practice and procedure for the filing of applications for stations to operate in the Wireless Telecommunications Services, adjudicatory proceedings including hearing proceedings, and rulemaking proceedings; procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental processing requirements that, if applicable, must be complied with prior to initiating construction.

\* \* \* \* \*

(h) Part 20 contains rules relating to commercial mobile radio services.

\* \* \* \* \*

(i) Part 20 which governs commercial mobile radio service applicable to certain providers in the following services in this part:

\* \* \* \* \*

3. Section 90.7 is amended by revised by removing the definition of Navigable waters, and modifying the definitions of Frequency coordination, Line A, Location and Monitoring Service, Telecommand, and Telephone maintenance licensee as follows:

**§ 90.7 Other applicable rule parts.**

\* \* \* \* \*

*Frequency coordination.* The process of obtaining the recommendation of a frequency coordinator for a frequency(ies) that will most effectively meet the applicant's needs while minimizing interference to licensees already operating within a given frequency band.

\* \* \* \* \*

*Line A.* An imaginary line within the U.S., approximately paralleling the U.S.-Canadian border, north of which Commission coordination with the Canadian authorities in the assignment of frequencies is generally required. It begins at Aberdeen, Washington, running by great circle arc to the intersection of

48° N., 120° W., then along parallel 48° N., to the intersection of 95° W., thence by great circle arc through the southernmost point of Duluth, Minnesota, thence by great circle arc to 45° N., 85° W., thence southward along meridian 85° W. to its intersection with parallel 41° N., to its intersection with meridian 82° W., thence by great circle arc through the southernmost point of Bangor, Maine, thence by great circle arc through the southernmost of Searsport, Maine, at which point it terminates.

\* \* \* \* \*

*Location and Monitoring Service (LMS).* The use of non-voice signaling methods to locate or monitor mobile radio units. LMS systems may transmit and receive voice and non-voice status and instructional information related to such units.

\* \* \* \* \*

*Telecommand.* The transmission of non-voice signals for the purpose of remotely controlling a device.

\* \* \* \* \*

*Telephone maintenance licensee.* Communications common carriers engaged in the provision of landline local exchange telephone service, or inter-exchange communications service, and radio communications common carriers authorized under part 21 of this chapter. Resellers that do not own or control transmission facilities are not included in this category.

\* \* \* \* \*

4. Section 90.20 is amended by revising the table in paragraph (c)(3), and paragraphs (d)(42), (d)(62), (d)(64), (d)(66)(i), (d)(79), (d)(81), (e)(3) and (4), and (g)(5)(iv), to read as follows:

**§ 90.20 Public Safety Pool**

\* \* \* \* \*

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

(3) *Frequencies.* \* \* \*

PUBLIC SAFETY POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
530 to 1700	Base (T.I.S.)	1	PX
* * * * *	* * * * *	* * * * *	* * * * *
42.40	do	2, 3, 16, 17	PP
* * * * *	* * * * *	* * * * *	* * * * *
152.0075	Base	13, 29, 30	PS

*****	*****	*****	*****
157.450	Base	13, 30, 45	PS
158.7225	Base or mobile	44	PP
*****	*****	*****	*****
158.745	do	81	PX
*****	*****	*****	*****
158.790	do	.....	PP
*****	*****	*****	*****
158.805	do	.....	PX
*****	*****	*****	*****
158.850	do	.....	PP
*****	*****	*****	*****
159.465	do	81	PO
159.4725	do	80	PO
163.250	Base	13, 30	PS
166.250	Base or mobile	47	PF
*****	*****	*****	*****
220 to 222	Base or mobile	55	
453.03125	Base or mobile	44, 49, 62, 84	PM
453.0375	do	27, 59, 62, 84	PX
453.04375	do	44, 49, 62, 84	PM
*****	*****	*****	*****
453.08125	Base or mobile	44, 59, 62, 84	PM
453.0875	do	27, 59, 62, 84	PX
453.09375	do	44, 59, 62, 84	PM

*****	*****	*****	*****
453.13125	Base or mobile	44, 59, 62, 84	PM
453.1375	do	27, 59, 62, 84	PX
453.14375	do	44, 59, 62, 84	PM
*****	*****	*****	*****
453.18125	Base or mobile	44, 59, 62	PM
453.1875	do	27, 59, 62	PX
453.19375	do	44, 59, 62	PM
*****	*****	*****	*****
460.050	do		PP
460.05625	do	44	PP
460.0625	do	27	PP
*****	*****	*****	*****
462.9375	do	57	PF
462.950	do	38, 65	PM
*****	*****	*****	*****

\*\*\*\*\*

(d) \*\*\*\*\*

(42) This frequency may not be assigned within 161 km (100) miles of New Orleans, La. (coordinates 29°56'53" N and 90°04'10" W).

\*\*\*\*\*

(62) This frequency is also authorized for use by biomedical telemetry stations. F1B, F1D, F2B, F2D, F3E, G1B, G1D, G2B, G2D, and G3E emissions may be authorized for biomedical transmissions.

\*\*\*\*\*

(64) Use of this frequency is on a secondary basis, limited to 2 watts output power and subject to the provisions of 90.267(h)(1), (h)(2), (h)(3), and (h)(4).

\*\*\*\*\*

(66) \* \* \* \* \*

(i) \* \* \*

Frequencies base and mobile (megahertz)	Mobile only (MHz)	Channel name
* * * * *	* * * * *	* * * * *
463.06875	468.06875	MED-33
463.075	468.075	MED-4
463.08125	468.08125	MED-41
* * * * *	* * * * *	* * * * *

\* \* \* \* \*

(79) This frequency will be secondary to marine port operations within 161 km (100 miles) of Los Angeles, Calif. (coordinates 34°03'15" N and 118°14'28" W).

\* \* \* \* \*

(81) After December 7, 2000 new stations will only be licensed with an authorized bandwidth not to exceed 11.25 kHz. Licensees authorized prior to December 7, 2000 may continue to use bandwidths wider than 11.25 kHz on a co-primary basis until January 1, 2005. After January 1, 2005, all stations operating with an authorized bandwidth greater than 11.25 kHz will be secondary to adjacent channel interoperability operations.

\* \* \* \* \*

(e) \* \* \* \* \*

(3) The frequency bands 31.99-32.00 MHz, 33.00-33.01 MHz, 33.99-34.00 MHz, 37.93-38.00 MHz, 39.99-40.00 MHz, and 42.00-42.01 MHz, are available for assignment for developmental operation subject to the provisions of subpart Q of this part.

(4) Frequencies in the 421-430 MHz band are available in the Detroit, Mich., Cleveland, Ohio and Buffalo, N.Y. areas in accordance with the rules in §§ 90.273 through 90.281.

\* \* \* \* \*

(g) \* \* \* \* \*

(5) \* \* \* \* \*

(iv) The following table, along with the antenna height (HAAT) and power (ERP), must be used to determine the minimum separation required between proposed base stations and co-channel public coast stations licensed prior to July 6, 1998 under Part 80 of this chapter. Applicants whose exact ERP or HAAT are not reflected in the table must use the next highest figure shown.

\* \* \* \* \*

5. Section 90.35 is amended by renumbering the second paragraph (c)(82) as (c)(89), and revising the table in paragraph (b)(3), and paragraphs (c)(14), (20), (21), (89) [as renumbered], (d)(2), (e)(4), and (g), to read as follows:

**§ 90.35 Industrial/Business Pool.**

\* \* \* \* \*

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

(3) *Frequencies.* \* \* \*

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
* * * * *	* * * * *	* * * * *	* * * * *
27.555	Base or mobile	89.	
27.615	do	89.	
27.635	do	89.	
27.655	do	89.	
27.765	do	89.	
27.86	do	82.	
29.71	do		
* * * * *	* * * * *	* * * * *	* * * * *
33.12	Mobile	11.	
* * * * *	* * * * *	* * * * *	* * * * *
35.44	do		
35.48	do		
35.52	do		
* * * * *	* * * * *	* * * * *	* * * * *
151.895	do		
* * * * *	* * * * *	* * * * *	* * * * *

151.955	do		
*****	*****	*****	*****
158.1225	do	33.	IW
*****	*****	*****	*****
173.250	Base or mobile		IP, IW
*****	*****	*****	*****
173.300	Base or mobile		IP, IW
*****	*****	*****	*****
173.350	Base or mobile		
*****	*****	*****	*****
220 to 222	Base or mobile		
*****	*****	*****	*****
451.01875	Base or mobile	33.	IW
*****	*****	*****	*****
462.9375	Mobile	88.	
*****	*****	*****	*****
464.575	do	62.	
*****	*****	*****	*****

\*\*\*\*\*

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

(14) Operation on this frequency is limited to a maximum output power of 1 watt and each station authorized will be classified and licensed as a mobile station. Any units of such a station, however, may provide the operational functions of a base or fixed station on a secondary basis to mobile service operations, provided that the separation between the control point and the center of the radiating portion of the antenna of any units so used does not exceed 8m (25 ft.).

\*\*\*\*\*

(20) In the State of Alaska only, the frequency 44.10 MHz is available for assignment on a primary basis to stations in the Common Carrier Rural Radio Service utilizing meteor burst

communications. The frequency may be used by private radio stations for meteor burst communications on a secondary, non-interference basis. Usage shall be in accordance with parts 22 and 90 of this chapter. Stations utilizing meteor burst communications shall not cause harmful interference to stations of other radio services operating in accordance with the allocation table.

(21) In the State of Alaska only, the frequency 44.20 MHz is available for assignment on a primary basis to private land mobile radio stations utilizing meteor burst communications. The frequency may be used by common carrier stations for meteor burst communications on a secondary, non-interference basis. Usage shall be in accordance with parts 22 and 90 of this chapter. Stations utilizing meteor burst communications shall not cause harmful interference to stations of other radio services operating in accordance with the allocation table.

\* \* \* \* \*

(89) This frequency may be assigned only to entities meeting the definition of a forest product licensee (see § 90.7). Operations are on a secondary basis to Federal Government operations including experimental stations, will not exceed 150 watts output power, and are limited to the states of Washington, Oregon, Maine, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas (eastern portion).

\* \* \* \* \*

(d) \* \* \* \* \*

(2) Frequencies in the band 73.0-74.6 MHz may be assigned to stations authorized on or before December 1, 1961, but no new stations will be authorized in this band, nor will expansion of existing systems be permitted. (See also § 90.257).

\* \* \* \* \*

(e) \* \* \* \* \*

(4) Authorizations for multiple frequencies for geophysical operations will be granted on the frequencies governed by the limitations in paragraphs (c)(3) and (c)(4) of this section. However, each geophysical exploration party may use a maximum of four frequencies at any one time.

\* \* \* \* \*

(g) The frequencies 10-490 kHz are used to operate electric utility Power Line Carrier (PLC) systems on power transmission lines for communications essential to the reliability and security of electric service to the public, in accordance with part 15 of this chapter. Any electric utility that generates, transmits, or distributes electrical energy for use by the general public or by the members of a cooperative organization may operate PLC systems and shall supply to a Federal Communications Commission/National Telecommunications and Information Administration recognized industry-operated entity, information on all existing, changes to existing, and proposed systems for inclusion in a data base. Such information shall include the frequency, power, location of transmitter(s), location of receivers and other technical and operational parameters, which would characterize the system's potential both to interfere with authorized radio users, and to receive harmful interference from these users. In an agreed upon format, the industry-operated entity shall inform the FCC and the NTIA of these system characteristics prior to implementation of any proposed PLC system and shall provide monthly or periodic lists with supplements of PLC systems. The FCC and NTIA will supply appropriate application



and licensing information to the notification activity regarding authorized radio stations operating in the band. PLC systems in this band operate on a non-interference basis to radio systems assigned frequencies by the NTIA or licensed by the FCC and are not protected from interference due to these radio operations.

6. Section 90.103 is amended by revising the table in paragraph (b), and paragraphs (c)(2), (6), (7), and (21) to read as follows:

**§ 90.103 Radiolocation Service.**

\* \* \* \* \*

(b) \* \* \*

Frequency or band	Class of station(s)	Limitation
* * * * *	* * * * *	* * * * *
1750 to 1800	do	5, 6
* * * * *	* * * * *	* * * * *

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

(2) This frequency band is shared with and stations operating in this frequency band in this service are on a secondary basis to the LORAN Navigation System; all operations are limited to radiolocation land stations in accordance with footnote US104, §2.106 of this chapter.

\* \* \* \* \*

(6) Because of the operation of stations having priority on the same or adjacent frequencies in this or in other countries, frequency assignments in this band may either be unavailable or may be subject to certain technical or operational limitations. Therefore, applications for frequency assignments in this band shall include information concerning the transmitter output power, the type and directional characteristics of the antenna and the minimum hours of operation (GMT).

(7) [Reserved]

\* \* \* \* \*

(21) Non-Government radiolocation stations in the band are secondary to the Government Radiolocation Service, the Amateur Radio Service and the Amateur-Satellite Service. Pulse-ranging radiolocation stations in this band may be authorized along the shorelines of Alaska and the contiguous 48 states. Radiolocation stations using spread spectrum techniques may be authorized in the band 420-435 MHz for operation within the contiguous 48 states and Alaska. Also, stations using spread spectrum techniques shall be limited to a maximum output power of 50 watts, shall be subject to the applicable technical standards in §90.209 until such time as more definitive standards are adopted by the Commission and shall identify in accordance with § 90.425(c)(2). Authorizations will be granted on a case-by-case basis; however, operations proposed to be located within the zones set forth in footnote US217, §2.106 of this chapter should not expect to be accommodated.

\* \* \* \* \*

7. Section 90.129 is amended by revising paragraph (i) by to read as follows:

**§ 90.129 Supplemental information to be routinely submitted with applications.**

\* \* \* \* \*

(i) Showings required in connection with the use of frequencies as specified in subpart S of this chapter.

\* \* \* \* \*

8. Section 90.138 is revised to read as follows:

**§ 90.138 Applications for itinerant frequencies.**

An application for authority to conduct an itinerant operation in the Industrial/Business Pool must be restricted to use of itinerant frequencies or other frequencies not designated for permanent use and need not be accompanied by evidence of frequency coordination. Users should be aware that no interference protection is provided from other itinerant operations.

9. Section 90.157 is revised to read as follows:

**§ 90.157 Discontinuance of station operation.**

An authorization shall cancel automatically upon permanent discontinuance of operations. Unless stated otherwise in this part or in a station authorization, for the purposes of this section, any station which has not operated for one year or more is considered to have been permanently discontinued.

10. Section 90.203 is amended by revising paragraph (n) to read as follows:

**§ 90.203 Certification required.**

\* \* \* \* \*

(n) Transmitters designed to operate in the voice mode on channels designated in §§90.531(b)(5) or 90.531(b)(6) that do not provide at least one voice path of 6.25 kHz of spectrum bandwidth shall not be manufactured in or imported into the United States after December 31, 2006. Marketing of these transmitters shall not be permitted after December 31, 2006.

11. Section 90.207 is amended by revising paragraph (b) to read as follows:

**§ 90.207 Types of emissions.**

\* \* \* \* \*

(b) Authorizations to use A3E, F3E, or G3E emission also include the use of emissions for tone signals or signaling devices whose sole functions are to establish and to maintain communications, to provide automatic station identification, and for operations in the Public Safety Pool, to activate

emergency warning devices used solely for the purpose of advising the general public or emergency personnel of an impending emergency situation.

\* \* \* \* \*

12. Section 90.209 is amended by revising the table in paragraph (b) to correct the entry for “216-2205” to read “216-220,” correct the entry for “2450-2483.52” to read “2450-2483.5<sup>2</sup>,” and add note 5 to read as follows:

**§ 90.209 Bandwidth limitations.**

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

(5) \* \* \*

STANDARD CHANNEL SPACING/BANDWIDTH

Frequency band (MHz) Channel spacing (kHz) Authorized bandwidth (kHz)

* * * * *	* * * * *	* * * * *
150-174	<sup>1</sup> 7.5	<sup>1 3</sup> 20/11.25/6
216-220 <sup>5</sup>	6.25	20/11.25/6
220-222	5	4
* * * * *	* * * * *	* * * * *
1427-1432 <sup>5</sup>	12.5	12.5
2450-2483.5 <sup>2</sup>		

Above 2500<sup>2</sup>

<sup>1</sup> For stations authorized on or after August 18, 1995.

<sup>2</sup> 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.

<sup>3</sup> Operations using equipment designed to operate with a 25 kHz channel bandwidth will be authorized a 20 kHz bandwidth. Operations using equipment designed to operate with a 12.5 kHz channel bandwidth will be authorized a 11.25 kHz bandwidth. Operations using equipment designed to operate with a 6.25 kHz channel bandwidth will be authorized a 6 kHz bandwidth.

<sup>4</sup> \* \* \* \* \*

<sup>5</sup> See § 90.259.

\* \* \* \* \*

13. Section 90.210 is amended by revising paragraph (l)(6) to read as follows:

**§ 90.210 Emission masks.**

\* \* \* \* \*

(l) \* \* \*

(6) On any frequency removed from the assigned frequency above 150% of the authorized bandwidth: 40 dB.

\* \* \* \* \*

14. Section 90.212 is amended by revising paragraph (c) to read as follows:

**§ 90.212 Provisions relating to the use of scrambling devices and digital voice modulation.**

\* \* \* \* \*

(c) The transmission of any non-voice information or data under the authorization of F1E or G1E emission is prohibited. However, stations authorized the use of F1E or G1E emission may also be authorized F1D, F2D, G1D or G2D emission for non-voice communication purposes, pursuant to §90.207(l).

\* \* \* \* \*

15. Section 90.219 is amended by revising paragraph (c) to read as follows:

**§ 90.219 Use of signal boosters.**

\* \* \* \* \*

(c) Class A narrowband boosters must meet the out-of-band emission limits of § 90.210 for each narrowband channel that the booster is designed to amplify. Class B broadband signal boosters must meet the emission limits of § 90.210 for frequencies outside of the booster's designed passband.

\* \* \* \* \*

16. Section 90.233 is amended by revising paragraph (c) to read as follows:

**§ 90.233 Base/mobile non-voice operations.**

\* \* \* \* \*

(c) Provisions of this section do not apply to authorizations for paging, telemetry, radiolocation, automatic vehicle monitoring systems (AVM), radioteleprinter, radio call box operations, or authorizations granted pursuant to subpart T of this part.

17. Section 90.235 is amended by revising paragraphs (e) and (l) to read as follows:

**§ 90.235 Secondary fixed signaling operations.**

\* \* \* \* \*

(e) Until December 31, 1999, for systems in the Public Safety Pool authorized prior to June 20, 1975, and Power and Petroleum licensees as defined in §90.7 authorized prior to June 1, 1976, the maximum duration of any signaling transmission shall not exceed 6 seconds and shall not be repeated more than 5 times. Such systems include existing facilities and additional facilities which may be authorized as a clear and direct expansion of existing facilities. After December 31, 1999, all signaling systems shall be required to comply with the 2 second message duration and 3 message repetition requirements.

\* \* \* \* \*

(l) Secondary fixed signaling operations conducted in accordance with the provisions of §§90.317(a) or 90.637 are exempt from the foregoing provisions of this section.

\* \* \* \* \*

18. Section 90.237 is amended by revising paragraphs (a) and (g) to read as follows:

**§ 90.237 Interim provisions for operation of radioteleprinter and radiofacsimile devices.**

(a) Information must be submitted with an application to establish that the minimum separation between a proposed radioteleprinter or radiofacsimile base station and the nearest co-channel base station of another licensee operating a voice system is 120 km (75 mi) for a single frequency mode of operation, or 56 km (35 mi) for two frequency mode of operation. Where this minimum mileage separation cannot be achieved, either agreement to the use of F1B, F2B, F3C, G1B, G2B or G3C emission must be received from all existing co-channel licensees using voice emission within the applicable mileage limits, or if agreement was not received, the licensee of the radioteleprinter or radiofacsimile system is responsible for eliminating any interference with preexisting voice operations. New licensees of voice operations will be expected to share equally any frequency occupied by established radioteleprinter or radiofacsimile operations.

\* \* \* \* \*

(g) For single sideband operations in accordance with § 90.266, transmitters certified under this part for use of J3E emission may also be used for A2B and F2B emissions for radioteleprinter transmissions. Transmitters certified under this part for use of J3E emission in accordance with §§ 90.35(c)(1)(A), 90.35(c)(1)(B), 90.35(c)(1)(C) and 90.257(a) may also be used for A1B, A2B, F1B, F2B, J2B, and A3C emissions to provide standby backup circuits for operational telecommunications circuits which have been disrupted, where so authorized in other sections of this part.

\* \* \* \* \*

19. Section 90.241 is amended by revising paragraph (a) to read as follows:

**§ 90.241 Radio call box operations.**

(a) The frequencies in the 72-76 MHz band listed in § 90.257(a)(1) may be assigned in the Public Safety Pool for operation of radio call boxes to be used by the public to request fire, police, ambulance, road service, and other emergency assistance, subject to the following conditions and limitations:

\* \* \* \* \*

20. Section 90.242 is amended by revising paragraphs (a)(2)(i), (a)(2)(ii), (a)(3), (a)(4), (a)(6), and (a)(7) to read as follows:

**§ 90.242 Travelers' information stations.**

(a) \* \* \* \* \*

(2) \* \* \* \* \*

(i) A statement certifying that the transmitting site of the Travelers' Information Station will be located at least 15 km (9.3 miles) measured orthogonally outside the measured 0.5 mV/m daytime contour (0.1 mV/m for Class A stations) of any AM broadcast station operating on a first adjacent channel or at least 130 km (80.6 miles) outside the measured 0.5 mV/m daytime contour (0.1 mV/m for Class A stations) of any AM broadcast station operating on the same channel, or, if nighttime operation is proposed, outside the theoretical 0.5 mV/m-50% nighttime skywave contour of a U.S. Class A station. If the measured contour is not available, then the calculated 0.5 mV/m field strength contour shall be acceptable. These contours are available at the concerned AM broadcast station and FCC offices in Washington, DC.

(ii) In consideration of possible cross-modulation and inter-modulation interference effects which may result from the operation of a Travelers' Information Station in the vicinity of an AM broadcast station on the second or third adjacent channel, the applicant shall certify that it has considered these possible effects and, to the best of its knowledge, does not foresee interference occurring to broadcast stations operating on second or third adjacent channels.

\* \* \* \* \*

(3) Travelers' Information Stations will be authorized on a secondary basis to stations authorized on a primary basis in the band 510-1715 kHz.

(4) A Travelers' Information Station authorization may be suspended, modified, or withdrawn by the Commission without prior notice or right to hearing if necessary to resolve interference conflicts, to implement agreements with foreign governments, or in other circumstances warranting such action.

\* \* \* \* \*

(6) A Travelers' Information Station shall normally be authorized to use a single transmitter. However, a system of stations, with each station in the system employing a separate transmitter, may be authorized for a specific area provided sufficient need is demonstrated by the applicant.

(7) Travelers' Information Stations shall transmit only noncommercial voice information pertaining to traffic and road conditions, traffic hazard and travel advisories, directions, availability of lodging, rest stops and service stations, and descriptions of local points of interest. It is not permissible to identify the commercial name of any business whose service may be available within or outside the coverage area of a Travelers' Information Station. However, to facilitate announcements concerning departures/arrivals and parking areas at air, train, and bus terminals, the trade name identification of carriers is permitted.

\* \* \* \* \*

21. Section 90.250 is amended by revising paragraphs (f) and (i) to read as follows:

**§ 90.250 Meteor burst communications.**

\* \* \* \* \*

(f) The maximum authorized bandwidth is 20 kHz.

\* \* \* \* \*

(i) Stations employing meteor burst communications shall not cause interference to other stations operating in accordance with the allocation table. New authorizations will be issued subject to the Commission's developmental grant procedure as outlined in subpart Q of this part. Prior to expiration of the developmental authorization, application Form 601 should be filed for issuance of a permanent authorization.

22. Section 90.257 is amended by revising paragraph (a)(1) to read as follows:

**§ 90.257 Assignment and use of frequencies in the band 72-76 MHz.**

(a) \* \* \* \* \*

(1) The following frequencies in the band 72-76 MHz may be used for fixed operations:

*MHz*

72.02	72.80
72.04	72.82
72.06	72.84
72.08	72.86
72.10	72.88
72.12	72.90
72.14	72.92
72.16	72.94
72.18	72.96
72.20	72.98
72.22	75.42
72.24	75.46
72.26	75.50
72.28	75.54
72.30	75.58
72.32	75.62
72.34	75.64
72.36	75.66
72.38	75.68
72.40	75.70
72.42	75.72
72.46	75.74
72.50	75.76
72.54	75.78
72.58	75.80
72.62	75.82

72.64	75.84
72.66	75.86
72.68	75.88
72.70	75.90
72.72	75.92
72.74	75.94
72.76	75.96
72.78	75.98

\* \* \* \* \*

23. Section 90.259 is amended by revising paragraph (a)(5) to read as follows:

**§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.**

(a) \* \* \* \* \*

(5) In the 217-220 MHz band, base, mobile, and operational fixed operations are permitted.

\* \* \* \* \*

24. Section 90.261 is amended by revising paragraph (c) to read as follows:

**§ 90.261 Assignment and use of frequencies in the band 450-470 MHz for fixed operations.**

(c) All fixed systems are limited to one frequency pair with 5 MHz spacing and must employ directional antennas with a front-to-back ratio of 15dB, except that omnidirectional antennas having unity gain may be employed by stations communicating with a minimum of three receiving locations encompassed in a sector of at least 160° in azimuth. Stations authorized for secondary fixed operations prior to July 13, 1992, may continue to operate under the conditions of their initial authorization.

\* \* \* \* \*

25. Section 90.263 is amended to read as follows:

**§ 90.263 Substitution of frequencies below 25 MHz.**

Frequencies below 25 MHz when shown in the radio pool frequency listings under this part will be assigned to base or mobile stations only upon a satisfactory showing that, from a safety of life standpoint, frequencies above 25 MHz will not meet the operational requirements of the applicant. These frequencies are available for assignment in many areas; however, in individual cases such assignment may be impracticable due to conflicting frequency use authorized to stations in other services by this and other countries. In such cases, a substitute frequency, if found available, may be assigned from the following bands: 1705-1750 kHz, 2107-2170 kHz, 2194-2495 kHz, 2506-2850 kHz, 3155-3400 kHz, or 4438-4650 kHz. Since such assignments are in certain instances subject to additional technical and operation limitations, it is necessary that each application also include precise information concerning transmitter output power, type and directional characteristics, if any, of the antenna, and the minimum necessary hours of operation. (This section is not applicable to the Radiolocation Service, subpart F of this part.)



26. Section 90.264 is amended by revising paragraph (h) to read as follows:

**§ 90.266 Disaster communications between 2 and 10 MHz.**

\* \* \* \* \*

(h) Training exercises which require use of these frequencies for more than seven hours a week, cumulative, are not authorized without prior written approval from the Commission.

27. Section 90.303 is amended by revising the table in paragraph (b) to read as follows:

**§ 90.303 Availability of frequencies.**

(b) \* \* \*

Urbanized area	Geographic center		Bands (MHz)	TV channels
	North Latitude	West Longitude		
Boston, MA	42° 21' 24.4"	71° 03' 23.2"	470-476, 482-488	14, 16
Chicago, IL <sup>1</sup>	41° 52' 28.1"	87° 38' 22.2"	470-476, 476-482	14, 15
Cleveland, OH <sup>2</sup>	41° 29' 51.2"	81° 49' 49.5"	470-476, 476-482	14, 15
Dallas/Fort Worth, TX	32° 47' 09.5"	96° 47' 38.0"	482-488	16
Detroit, MI <sup>3</sup>	42° 19' 48.1"	83° 02' 56.7"	476-482, 482-488	15, 16
Houston, TX	29° 45' 26.8"	95° 21' 37.8"	488-494	17
Los Angeles, CA <sup>4</sup>	34° 03' 15.0"	118° 14' 31.3"	470-476, 482-488, 506-512	14, 16, 20
Miami, FL	25° 46' 38.4"	80° 11' 31.2"	470-476	14
New York, NY/NE NJ	40° 45' 06.4"	73° 59' 37.5"	470-476, 476-482, 482-488	14, 15, 16
Philadelphia, PA	39° 56' 58.4"	75° 09' 19.6"	500-506, 506-512	19, 20
Pittsburgh, PA	40° 26' 19.2"	79° 59' 59.2"	470-476, 494-500	14, 18
San Francisco/Oakland, CA	37° 46' 38.7"	122° 24' 43.9"	482-488, 488-494	16, 17
Washington, DC/MD/VA	38° 53' 51.4"	77° 00' 31.9"	488-494, 494-500	17, 18

<sup>1</sup> In the Chicago, IL, urbanized area, channel 15 frequencies may be used for paging operations in addition to low power base/mobile usages, where applicable protection requirements for ultrahigh frequency television stations are met.

<sup>2</sup> Channels 14 and 15 are not available in Cleveland, OH, until further order from the Commission.

<sup>3</sup> Channels 15 and 16 are not available in Detroit, MI, until further order from the Commission.

<sup>4</sup> Channel 16 is available in Los Angeles, CA, for use by eligibles in the Public Safety Radio Pool.

\* \* \* \* \*

28. Section 90.307 is revised to read as follows:

**§ 90.307 Protection criteria.**

The tables and figures listed in § 90.309 shall be used to determine the effective radiated power (ERP) and antenna height of the proposed land mobile base station and the ERP for the associated control station (control station antenna height shall not exceed 31 meters (100 feet) above average terrain (AAT)).

(a) Base stations operating on the frequencies available for land mobile use in any urbanized area and having an antenna height (AAT) less than 152 meters (500 feet) shall afford protection to co-channel and adjacent channel television stations in accordance with the values set out in tables A and E of § 90.309, except for channel 15 in New York, NY, and Cleveland, OH, and channel 16 in Detroit, MI, where protection will be in accordance with the values set forth in tables B and E in 47 CFR § 90.309.

(b) For base stations having antenna heights between 152 and 914 meters (500-3000 feet) above average terrain, the effective radiated power must be reduced below 1 kilowatt in accordance with the values shown in the power reduction graph in Figure A in § 90.309, except for channel 15 in New York, NY, and Cleveland, OH, and channel 16 in Detroit, MI, where the effective radiated power must be reduced in accordance with Figure B in § 90.309. For heights of more than 152 meters (500 feet) above average terrain, the distance to the radio path horizon will be calculated assuming smooth earth. If the distance so determined equals or exceeds the distance to the Grade B contour of a co-channel TV station (Grade B contour defined in § 73.683(a)), an authorization will not be granted unless it can be shown that actual terrain considerations are such as to provide the desired protection at the Grade B contour, or that the effective radiated power will be further reduced so that, assuming free space attenuation, the desired protection at the Grade B contour will be achieved.

(c) Mobile units and control stations operating on the frequencies available for land mobile use in any given urbanized area shall afford protection to co-channel and adjacent channel television stations in accordance with the values set forth in table C in § 90.309 and paragraph (d) of this section except for channel 15 in New York, NY, and Cleveland, OH, and channel 16 in Detroit, MI, where protection will be in accordance with the values set forth in table D in § 90.309 and paragraph (d) of this section.

(d) The minimum distance between a land mobile base station which has associated mobile units and a protected adjacent channel television station is 145 km (90 miles).

(e) The television stations to be protected (co-channel, adjacent channel, IM, and IF) in any given urbanized area, in accordance with the provisions of paragraphs (a), (b), (c), and (d) of this section, are identified in the Commission's publication "TV stations to be considered in the preparation of Applications for Land Mobile Facilities in the Band 470-512 MHz." The publication is available at the offices of the Federal Communications Commission in Washington, D.C. or upon the request of interested persons.

29. Section 90.309 is modified by revising paragraph (a)(4) and the table in paragraph (a)(5) to read as follows:

**§ 90.309 Table and figures.**

(a) \* \* \* \* \*

(4) In determining the average elevation of the terrain, the elevations between 3.2 kilometers (2 miles) and 16 kilometers (10 miles) from the antenna site are employed. Profile graphs shall be drawn for a minimum of eight radials beginning at the antenna site and extending 16 kilometers (10 miles). The radials should be drawn starting with true north. At least one radial should be constructed in the direction of the nearest co-channel and adjacent channel UHF television stations. The profile graph for each radial shall be plotted by contour intervals of from 12.2 meters (40 feet) to 30.5 meters (100 feet) and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. For very rugged terrain, 61 meters (200 feet) to 122 meters (400 foot) contour intervals may be used. Where the terrain is uniform or gently sloping, the smallest contour interval indicated on the topographic

chart may be used. The average elevation of the 12.8 kilometer (8 mile) distance between 3.2 kilometers (2 miles) and 16 kilometers (10 miles) from the antenna site should be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded by 50 percent of the distance) in sectors and averaging those values. In the preparation of the profile graphs, the elevation or contour intervals may be taken from U.S. Geological Survey Topographic Maps, U.S. Army Corps of Engineers Maps, or Tennessee Valley Authority Maps. Maps with a scale of 1:250,000 or larger (such as 1:24,000) shall be used. Digital Terrain Data Tapes, provided by the National Cartographic Institute, U.S. Geologic Survey, may be utilized in lieu of maps, but the number of data points must be equal to or exceed that specified above. If such maps are not published for the area in question, the next best topographic information should be used.

(5) \* \* \*

TABLE B--BASE STATION--COCHANNEL FREQUENCIES (40 dB PROTECTION) MAXIMUM EFFECTIVE RADIATED POWER (ERP)<sup>1</sup>

Distance in kilometers (miles): <sup>2</sup>	Antenna height in meters (feet) (AAT)									
	15 (50)	30.5 (100)	45 (150)	61 (200)	76 (250)	91.5 (300)	106 (350)	122 (400)	137 (450)	152.5 (500)
209 (130)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
201 (125)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	850	750	725
193 (120)	1,000	1,000	1,000	1,000	900	750	675	600	550	500
185 (115)	1,000	1,000	800	725	600	525	475	425	375	350
177 (110)	850	700	600	500	425	375	325	300	275	225
169 (105)	600	475	400	325	275	250	225	200	175	150
161 (100)	400	325	275	225	175	150	140	125	110	100
153 (95)	275	225	175	125	110	95	80	70	60	50
145 (90)	175	125	100	75	50	.....	.....	.....	.....	.....

<sup>1</sup> The effective radiated power (ERP) and antenna height above average terrain shall not exceed the values given in this table.

<sup>2</sup> At this distance from the transmitter site of protected UHF television station

\* \* \* \* \*

30. Section 90.315 is amended by revising paragraphs (g) and (j) to read as follows:

**§ 90.315 Special provisions governing use of frequencies in the 476-494 MHz band (TV Channels 15, 16, and 17) in the Southern Louisiana-Texas Offshore Zone.**

\* \* \* \* \*

(g) To provide adjacent channel protection to television stations, no shore or offshore station shall be allowed within 128 kilometers (80 miles) of the adjacent channel television station.

\* \* \* \* \*

(j) The following frequency bands are available for assignment in all services for use in the Zones defined in paragraph (a) of this section.

PAIRED FREQUENCIES (MHz)

Zone	Transmit (or receive)	Receive (or transmit)
A.....	490.01875-490.98125	493.01875-493.98125
B.....	484.01875-484.98125	487.01875-487.98125
C.....	478.01875-478.98125	481.01875-481.98125

Only the first and last assignable frequencies are shown. Frequencies shall be assigned in pairs with 3 MHz spacing between transmit and receive frequencies. Assignable frequency pairs will occur in increments of 6.25 kHz. The following frequencies will be assigned for a maximum authorized bandwidth of 6 kHz: 478.01875, 478.98125, 484.01875, 484.98125, 490.01875, 490.98125, 481.01875, 481.98125, 487.01875, 487.98125, 493.01875, and 493.98125 MHz.

\* \* \* \* \*

31. Section 90.353 is amended by revising paragraphs (e) and (f) to read as follows:

**§ 90.353 LMS operations in the 902-928 MHz band.**

(e) Multilateration EA-licensed systems and grandfathered automatic vehicle monitoring service (AVM) systems (see § 90.363) are authorized on a shared basis and must cooperate in the selection and use of frequencies in accordance with § 90.173(b).

(f) Multilateration EA licensees may be authorized to operate on both the 919.75-921.75 MHz and 921.75-927.25 MHz bands within a given EA (see § 90.210(b)(5)).

\* \* \* \* \*

32. Section 90.357 is revised to read as follows:

**§ 90.357 Frequencies for LMS systems in the 902-928 MHz band.**

(a) Multilateration LMS systems will be authorized in the following LMS sub-bands:

LMS Sub-band	Forward Link <sup>1</sup>
904.000-909.750 MHz	927.750-928.000 MHz
919.750-921.750 MHz <sup>2</sup>	927.500-927.750 MHz
921.750-927.250 MHz	927.250-927.500 MHz

<sup>1</sup> Forward links for the LMS systems may also be contained within the LMS sub-band. However, the maximum allowable power in these sub-bands is 30 watts ERP in accordance with § 90.205(k).

<sup>2</sup> The frequency band 919.750-921.750 MHz is shared co-equally between multilateration and non-multilateration LMS systems.

(b) Non-multilateration LMS systems will be authorized in the following frequency bands:

*LMS Sub-band*<sup>1</sup>

902.000-904.000 MHz

909.750-921.750 MHz

<sup>1</sup> Applicants for non-multilateration LMS systems should request only the minimum amount of bandwidth necessary to meet their operational needs.

33. Section 90.377 is amended by revising paragraph (a) to read as follows:

**§ 90.377 Frequencies available; maximum EIRP and antenna height, and priority communications.**

(a) Licensees shall transmit only the power (EIRP) needed to communicate with an On-Board Unit (OBU) within the communications zone and must take steps to limit the Roadside Unit (RSU) signal within the zone to the maximum extent practicable.

\* \* \* \* \*

34. Section 90.419 is amended by revising paragraph (f) to read as follows:

**§ 90.419 Points of communication.**

\* \* \* \* \*

(f) CMRS licensees in the SMR categories of part 90, subpart S, CMRS providers authorized in the 220 MHz service of part 90, subpart T, CMRS paging operations as defined by part 90, subpart P and for-profit interconnected business radio services with eligibility defined by section 90.35 are permitted to utilize their assigned spectrum for fixed services on a co-primary basis with their mobile operations.

35. Section 90.425 is amended by revising paragraphs (a)(4)(iii), (a)(5), and (c)(2) to read as follows:

**§ 90.425 Station identification.**

\* \* \* \* \*

(a) \* \* \* \* \*

(4) \* \* \* \* \*

(iii) In the Industrial/Business Pool, railroad licensees (as defined in § 90.7) may identify stations by the name of the railroad and the train number, caboose number, engine number, or the name of the fixed wayside station. If none of these forms is practicable, any similar name or number may be designated by the railroad concerned for use by its employees in the identification of fixed points or mobile units, provided that a list of such identifiers is maintained by the railroad. An abbreviated name or the initials of the railroad may be used where such are in general usage. In those areas where it is shown

that no difficulty would be encountered in identifying the transmission of a particular station (as, for example, where stations of one licensee are located in a yard isolated from other radio installations), approval may be given to a request from the licensee for permission to omit the station identification.

(5) Use of identifiers in addition to assigned call signs. Nothing in this section shall be construed as prohibiting the transmission of station or unit identifiers which may be necessary or desirable for system operation, provided that they are transmitted in addition to the assigned station call sign or other permissible form of identification.

\* \* \* \* \*

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

(2) Stations in the Radiolocation Service operating on frequencies above 3400 kHz that employ spread spectrum techniques shall transmit a two letter manufacturer's designator, authorized by the Commission on the station authorization, at the beginning and ending of each transmission and once every 15 minutes during periods of continuing operation. The designator shall be transmitted in International Morse Code at a speed not exceeding 25 words per minute, and the spread spectrum mode of operation shall be maintained while the designator is being transmitted. The identifying signal shall be clearly receivable in the demodulated audio of a narrow-band FM receiver.

\* \* \* \* \*

36. Section 90.465 is amended by revising paragraphs (b) and (c) to read as follows:

**§ 90.465 Control of systems of communication.**

\* \* \* \* \*

(b) In internal systems, as defined in § 90.7, control may be maintained by conforming the system to the requirements of §§ 90.471-90.475.

(c) In interconnected systems, as defined in § 90.7, control may be maintained by conforming operation and system design to that permitted in §§ 90.477-90.483.

37. Section 90.475 is amended by revising paragraph (a)(2) to read as follows:

**§ 90.475 Operation of internal transmitter control systems in special equipped systems.**

(a) \* \* \* \* \*

(2) An internal transmitter control system may be used in conjunction with other approved methods of transmitter control and interconnection so long as the internal transmitter control system, itself, is neither accessed from telephone positions in the public switched telephone network (PSTN), nor uses dial-up circuits in the PSTN. Licensees with complex communications systems involving fixed systems whose base stations are controlled by such systems may automatically access these base stations through the microwave or operational fixed systems from positions in the PSTN, so long as the base stations and mobile units meet the requirements of § 90.483 and if a separate circuit is provided for each mode of transmitter operation (i.e., conventional, dial-up or internet).

\* \* \* \* \*

38. Section 90.483 is amended by revising paragraphs (b)(1)(ii), (b)(2)(i), and (b)(2)(ii) to read as follows:

**§ 90.483 Permissible methods and requirements of interconnecting private and public systems of communications.**

\* \* \* \* \*

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

(1) \* \* \* \* \*

(ii) When a frequency is shared by more than one system, automatic monitoring equipment must be installed at the base station to prevent activation of the transmitter when signals of co-channel stations are present and activation would interfere with communications in progress. Licensees may operate without the monitoring equipment if they have obtained the consent of all co-channel licensees located within a 120 kilometer (75 mile) radius of the interconnected base station transmitter. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems on frequencies above 800 MHz are exempt from this requirement.

(2) \* \* \* \* \*

(i) When a frequency is shared by more than one system, automatic monitoring equipment must be installed at the base station to prevent activation of the transmitter when signals of co-channel stations are present and activation would interfere with communications in progress. Licensees may operate without this equipment if they have obtained the consent of all co-channel licensees located within a 120 kilometer (75 mile) radius of the interconnected base station transmitter. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems on frequencies above 800 MHz are exempt from this requirement.

(ii) Initial access points within the public switched telephone network must be limited to transmission of a 3-second tone, after which time the transmitter shall close down. No additional signals may be transmitted until acknowledgement from a mobile station of the licensee is received. Licensees

are exempt from this requirement if they have obtained the consent of all co-channel licensees located within a 120 kilometer (75 mile) radius of the interconnected base station transmitter. However, licensees may choose to set their own time limitations. A statement must be submitted to the Commission indicating that all co-channel licensees have consented to operate without the monitoring equipment. If a licensee has agreed that the use of monitoring equipment is not necessary, but later decides that the monitoring equipment is necessary, the licensee may request that the co-channel licensees reconsider the use of monitoring equipment. If the licensee cannot reach an agreement with co-channel licensees, the licensee may request that the Commission consider the matter and assign it to another channel. If a new licensee is assigned to a frequency where all the co-channel licensees have agreed that the use of monitoring equipment is not necessary, and the new licensee does not agree, the new licensee may request the co-channel licensees to reconsider the use of monitoring equipment. If the new licensee cannot reach an agreement with co-channel licensees, it should request a new channel from the Commission. Systems on frequencies above 800 MHz are exempt from this requirement.

39. Section 90.613 is amended by revising channel 139 of the Table of 896-901/935-940 MHz Channel Designations to read as follows:

**§ 90.613 Frequencies available.**

TABLE OF 896-901/935-940 MHZ CHANNEL DESIGNATIONS

Channel No.	Base frequency (MHz)
139 .....	.7375

\* \* \* \* \*



APPENDIX C

PROPOSED RULES

Parts 2, 90 and 95 of Chapter 1 of Title 47 of the Code of Federal Regulations are amended as follows:

1. The authority citation for Part 2 continues to read as follows:

**Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.**

2. Section 2.106 is amended by revising the table in note US350 to read as follows:

**§ 2.106 Table of Frequency Allocations**

\* \* \* \* \*

US350 \* \* \*

Location  
(see § 90.259(b)(4) of this chapter  
for a detailed description)

	1427-1429 MHz 1431.5-1432 MHz	1429-1431.5 MHz
Austin/Georgetown, Texas .....	Non-Government	Government and
Battle Creek, Michigan .....	land mobile	non-
Detroit, Michigan .....	service is limited	Government
Pittsburgh, Pennsylvania .....	to telemetry and	land mobile
Richmond/Norfolk, Virginia .....	telecommand	service is
Spokane, Washington .....	operations.	limited to
Washington, DC metropolitan area	Government and	medical
	non-Government	telemetry and
	medical telemetry	telecommand
	and telecommand	operations.
	use is permitted	Non-
	on a secondary	Government
	basis.	telemetry and
		telecommand
		use is permitted
		on a secondary
		basis.
	1427-1429.5 MHz	1429.5-1432 MHz
Rest of U.S.....	Government and	Non-
	non-Government	Government
	land mobile	land mobile
	service is limited	service is
	to medical	limited to
	telemetry and	telemetry and

telecommand operations. Non-Government telemetry and telecommand use is permitted on a secondary basis.

telecommand operations. Government and non-Government medical telemetry and telecommand use is permitted on a secondary basis.

3. 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), and 332(c)(7).**

4. Section 90.20 is amended by adding paragraph (a)(2)(xiv) to read as follows:

**§ 90.20 Public Safety Pool.**

(a) \* \* \* \* \*

(2) \* \* \* \* \*

(xiv) Persons or organizations providing local or regional multiple-occupancy-vehicle passenger services over regular routes under contract or similar arrangement with a governmental entity for the transmission of messages pertaining to either the efficient operation of the service or the safety or general welfare of the passengers they are engaged in transporting. Each transit system operator may be authorized to operate one base station and a number of mobile units not in excess of the total of the number of passenger vehicles and maintenance vehicles regularly engaged in the operation. Additional base stations or mobile units will be authorized only in exceptional circumstances when the applicant can show a specific need.

\* \* \* \* \*

5. Section 90.175 is amended by adding paragraph (j)(17) to read as follows:

**§ 90.175 Frequency coordinator requirements.**

\* \* \* \* \*

(j) \* \* \* \* \*

(17) Applications requesting to modify a license to authorize commercial operations pursuant to Section 90.621(e)(2), or to reverse such a modification, if there is no change in technical parameters.

6. Section 90.176 is amended by revising paragraph (d) to read as follows:

**§ 90.176 Coordinator notification requirements on frequencies below 512 MHz, at 764-776/794-806 MHz, or at 1427-1432 MHz.**

\* \* \* \* \*

(d) Frequencies in the 1427-1432 MHz band. Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (g) of this section to the WMTS frequency coordinator designated in § 95.1112 and to all other frequency coordinators who are also certified to coordinate that frequency. In addition, the frequency coordinator must ensure compliance with all coordination requirements incorporated in the joint WMTS-Part 90 coordination plan filed in WT Docket No. 02-8 on August 18, 2004.

\* \* \* \* \*

7. Section 90.243 is amended by revising paragraph (b)(1) to read as follows:

**§ 90.243 Mobile relay stations.**

\* \* \* \* \*

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

(1) In the Public Safety Pool, systems that operate in the 150 MHz band are permitted to be cross-banded for mobile and central stations operations with mobile relay stations authorized to operate in the 450 and 800 MHz bands.

\* \* \* \* \*

8. Section 90.247 is amended by removing and reserving paragraph (b).

**§ 90.247 Mobile repeater stations.**

\* \* \* \* \*

(b) [Reserved]

\* \* \* \* \*

9. Section 90.259 is amended by revising paragraphs (b)(3) and (b)(4)(ii) to read as follows:

**§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.**

\* \* \* \* \*

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

(3) All operations authorized under this section in the 1429.5-1432 MHz band are primary in status (and Wireless Medical Telemetry Service operations are secondary) except in the locations specified in paragraph (b)(4) of this section. At the locations specified in paragraph (b)(4) of this section, all operations authorized under this section are primary in status (and

Wireless Medical Telemetry Service operations are secondary) in the 1427-1429 MHz and 1431.5-1432 MHz bands.

(4) \* \* \* \* \*

(ii) Washington, DC metropolitan area—Counties of Montgomery, Prince George’s and Charles in Maryland; Arlington, Prince William, Fauquier, Loudon, and Fairfax, and Cities of Alexandria, Falls Church, Fairfax, Manassas and Manassas Park in Virginia; and District of Columbia.

\* \* \* \* \*

10. Section 90.1215 is amended by revising paragraph (a) and adding paragraph (e) to read as follows:

**§ 90.1215 Power Limits**

\* \* \* \* \*

(a) The maximum conducted output power should not exceed:

Channel Bandwidth (MHz)	Low power peak transmitter power (dBm)	High power peak transmitter power (dBm)
1	7	20
5	14	27
10	17	30
15	18.8	31.8
20	20	33

High power devices are also limited to a peak power spectral density of 20 dBm per one MHz. High power devices using channel bandwidths other than those listed above are permitted; however, they are limited to a maximum conducted power spectral density of 20 dBm/MHz. If transmitting antennas of directional gain greater than 9 dBi are used, both the maximum conducted output power and the peak power spectral density should be reduced by the amount in decibels that the directional gain of the antenna exceeds 9 dBi. However, high power point-to-point and point-to-multipoint operation (both fixed and temporary-fixed rapid deployment) may employ transmitting antennas with directional gain up to 26 dBi without any corresponding reduction in the maximum conducted output power or spectral density. Corresponding reduction in the transmit power and peak power spectral density should be the amount in decibels that the directional gain of the antenna exceeds 26 dBi.

(b) Low power devices are also limited to a peak power spectral density of 8 dBm per one MHz. Low power devices using channel bandwidths other than those listed above are permitted; however, they

are limited to a peak power spectral density of 8 dBm/MHz. If transmitting antennas of directional gain greater than 9 dBi are used, both the maximum conducted output power and the peak power spectral density should be reduced by the amount in decibels that the directional gain of the antenna exceeds 9 dBi.

(c) The maximum conducted power is measured as a conducted emission over any interval of continuous transmission calibrated in terms of an RMS-equivalent voltage. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true maximum conducted power measurement conforming to the definitions in this paragraph for the emission in question.

\* \* \* \* \*

(e) The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

11. Section 90.XXX is added to read as follows:

**§ 90.XXX Disturbance of AM broadcast station antenna patterns.**

Public Safety Pool and Industrial/Business Pool licensees that construct or modify towers in the immediate vicinity of AM broadcast stations are responsible for measures necessary to correct disturbance of the AM station antenna pattern which causes operation outside of the radiation parameters specified by the FCC for the AM station, if the disturbance occurred as a result of such construction or modification.

(a) Non-directional AM stations. If tower construction or modification is planned within 1 kilometer (0.6 mile) of a non-directional AM broadcast station tower, the Public Safety Pool or Industrial/Business Pool licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The Public Safety Pool or Industrial/Business Pool licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper non-directional performance of the AM station tower.

(b) Directional AM stations. If tower construction or modification is planned within 3 kilometers (1.9 miles) of a directional AM broadcast station array, the Public Safety Pool or Industrial/Business Pool licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The Public Safety Pool or Industrial/Business Pool licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper performance of the AM station array.

12. The authority citation for Part 95 continues to read as follows:

**Authority: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303.**

13. Section 95.630 is amended to read as follows:

**§ 95.630 WMTS transmitter frequencies.**

WMTS transmitters may operate in the frequency bands specified as follows:

608-614 MHz

1395-1400 MHz

1427-1432 MHz (see § 90.259(b) of this part regarding where WMTS operations are primary in status, and where they are secondary to Part 90 operations)

14. Section 95.1101 is amended to read as follows:

**§ 95.1101 Scope.**

This subpart sets out the regulations governing the operation of Wireless Medical Telemetry Devices in the 608-614 MHz, 1395-1400 MHz, and 1427-1432 MHz frequency bands.

15. Section 95.1113 is amended by revising paragraphs (b)(1), (5), and (6) to read as follows:

**§ 95.1113 Frequency coordinator.**

\* \* \* \* \*

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

(1) Review and process registration requests submitted by authorized health care providers as required in § 95.1111;

\* \* \* \* \*

(5) Upon receipt of a registration request for WMTS equipment operating in the 1427-1432 MHz band, notify all Part 90 frequency coordinators of the intended activation in accordance with the joint WMTS-Part 90 coordination plan filed in WT Docket No. 02-8 on August 18, 2004. The Part 90 frequency coordinators shall, in turn, determine potentially affected Part 90 licensees and notify those Part 90 licensees operating in the 1427-1432 MHz band in accordance with § 90.259 of their obligation to ensure compliance with the field strength limit of § 90.259(b)(11), as measured at the WMTS site.

(6) Upon receipt of a registration request for WMTS equipment operating in the 1395-1400 MHz band, notify each party licensed to operate in the 1392-1395 MHz band in the applicable geographic area pursuant to subpart I of part 27 of this chapter of the need to comply with the field strength limit set forth in § 27.804.