FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 27 and 95

[WT Docket No. 10–119; FCC 10–106]

Review of Personal Radio Services Rules

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Commission proposes to update, reorganize, simplify and streamline its Personal Radio Services rules to reflect technological advances and other changes in the way the American public uses the Personal Radio Services. In addition to improving the clarity of the rules, this document includes proposals intended to reduce unnecessary regulatory burdens on users, improve spectrum use, provide for enhanced equipment operating features, and promote the safety and consumer interests of operators. The document also proposes to reclassify one of the existing Personal Radio Services, specifically the 218–219 MHz service, as a Miscellaneous Wireless Communications Service, and accordingly move its rules from one part to another.

DATES: Submit comments on or before September 3, 2010 and reply comments on or before September 20, 2010.

ADDRESSES: You may submit comments, identified by WT Docket No. 10–119, by any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Federal Communications Commission Web site: http://www.fcc.gov/cgb/ecfs.* Follow the instructions for submitting comments.
- *Mail:* Office of the Secretary, Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554. 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.
- *Hand delivery/courier:* Federal Communications Commission, Office of the Secretary, 445 12th Street, SW., Room TW–A325, Washington, DC 20554.
- *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: *FCC504@fcc.gov* or phone: 202–418–0503 or TTY: 202–418–0432. All submissions received must include the agency name and docket numbers for this rulemaking, WT Docket No. 10–119. All comments received will be posted without change to *http://www.fcc.gov/cgb/ecfs.*

For detailed instructions for submitting comments and additional information on the rulemaking process, *see* the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: B.C. "Jay" Jackson, Jr., Mobility Division, Wireless Telecommunications Bureau, *jay.jackson@fcc.gov,* 202–418–1309.

SUPPLEMENTARY INFORMATION: This is a summary of the Federal Communications Commission's (the Commission's) *Notice of Proposed Rulemaking* (NPRM) in WT Docket No. 10–119, FCC 10–106, adopted on June 1, 2010, and released on June 7, 2010. Contemporaneous with this document, the Commission issues a *Memorandum Opinion and Order on Reconsideration* (published elsewhere in this publication). The full text of this document may be downloaded from the FCC Web site (*http://www.fcc.gov*) at *http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-106A1.pdf.* The full text is also available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street, SW., Washington, DC 20554. A copy of the complete text may also be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room CY–B402, Washington, DC 20554. Alternative formats are available to persons with disabilities by sending an e-mail to *FCC504@fcc.gov* or by calling the Consumer & Governmental Affairs Bureau at 202–418–0530 (voice), 202–418–0432 (tty).

Synopsis

1. This *NPRM* proposes to streamline, update and reorganize part 95 of the Federal Communications Commission (FCC) rules, 47 CFR part 95, which provide the regulatory framework for the Personal Radio Services. The Personal Radio Services are a family of radio services that provide for a variety of wireless devices operated by individual persons, primarily for their own personal use, or to provide benefits to other individual persons. For example, in some of the Personal Radio Services, such as the Family Radio Service and the General Mobile Radio Service, the general public may purchase FCC-certified two-way radios (sometimes called "walkie-talkies") that they can use to communicate with each other directly when they are within range (usually a short distance) of each other. Some other Personal Radio Service applications include radio-controlled aircraft and other hobby vehicles, wireless devices to aid persons with hearing difficulties, medical telemetry and implant devices that provide medical benefits to patients, and personal beacons to help search and rescue teams locate persons in distress in wilderness areas. Unlike commercial mobile radio services such as cellular telephone service, the Personal Radio Services are not used by companies to provide interconnected telephone or broadband telecommunications services to subscribers. Because of the very large number of wireless devices used in most of the Personal Radio services, the FCC has authorized the majority of their use by rule, rather than by issuing a separate station license for each device.

2. Part 95 has been amended by the FCC in a piecemeal fashion numerous times during the past three decades, usually to add a subpart to provide for a new Personal Radio Service. As a result, the structure of part 95 has become somewhat disorganized. The FCC has not undertaken a comprehensive review of part 95 in many years and, as a result, it contains many rules that are in effect redundant or inconsistent, or which use outdated technical terminology. The *NPRM* proposes amendments to correct these problems and seeks comment from the public on the proposals. Furthermore, some of the older Personal Radio Services have evolved substantially in technology and usage over the years and the rules for these services also need to be updated. One part 95 service, the 218–219 MHz service, has evolved so much from its original concept that it no longer shares the personal characteristics of the other Personal Radio Services; it has become more like a commercial service. Accordingly, the *NPRM* proposes to transfer all of the rules for this service from part 95 to part 27 of the FCC rules, because it has a regulatory framework that is similar to that of the Miscellaneous Wireless Communications Services.

3. The *NPRM* also proposes to reduce burdens on persons who use Personal Radio Services by authorizing the operation of some or all General Mobile Radio Service (GMRS) stations by rule, or alternatively, by extending GMRS license terms from five to ten years, and by relaxing GMRS eligibility requirements. Additionally, the *NPRM* proposes to improve spectrum use efficiency by providing for the use of narrower emission bandwidths in the GMRS. The *NPRM* further proposes to allow for the transmission of Global Positioning System (GPS) location

information and user-generated text messages on certain GMRS channels, and reviews the technical operating parameters of GMRS equipment. Additionally, the *NPRM* reviews the technical and operating requirements for the Citizens Band (CB) Radio Service and proposes to permit the use of "hands-free" microphones in the CB Radio Service. Finally, the *NPRM* proposes to promote the safety and consumer interests of Personal Radio Service operators by (1) requiring routine evaluation of GMRS portable devices for radio frequency exposure, (2) no longer granting certification of radios that have voice scrambling capability and "combination radios" capable of transmitting in the safety services in addition to the Personal Radio Services, and (3) preventing the marketing of ersatz devices using the term "Personal Locator Beacon", by limiting the use of that term to genuine personal locator beacons that meet the international technical requirements for such devices.

Specific Proposals

4. The following is a list of the specific proposals in the *NPRM,* and the paragraph number in the full text where discussion of the proposal may be found. The FCC invites public comment on any or all of them. In this *NPRM,* the FCC proposes to:

a. Consolidate all similar or duplicative administrative rules into subpart A (para. 10);

b. Consolidate all technical rules into subpart B (para. 12);

c. List the frequencies for each service in a table and designate each frequency by a channel number (para. 12);

d. Express frequency tolerance requirements in terms of parts per million (ppm) of the carrier or reference frequency (para. 14);

e. Revise the emission limit rule to reduce duplication, conform the way requirements are presented and to increase clarity (para. 18);

f. Prohibit voice obscuring or scrambling in the GMRS, FRS and CB Radio Services and no longer certify equipment with such features (para. 20);

g. Eliminate the requirement for individual licensing for GMRS stations and authorize the operation of GMRS stations by rule (para. 27);

h. Extend the term of GMRS licenses from 5 to 10 years, in the event that the FCC decides not to eliminate licenses as proposed (para. 28);

i. Eliminate the minimum age requirement for GMRS (para. 29);

j. Limit the power of portable (hand-held) GMRS transmitters to 2 Watts effective radiated power (ERP) (para. 32);

k. Require routine specific absorption rate (SAR) evaluation for portable GMRS transmitters (para. 33);

l. Change the power limit for GMRS small base stations from 5 Watts ERP to 5 Watts transmitter power output (para. 35);

m. Implement 12.5 kHz narrowbanding (reduction in authorized channel bandwidth) in the GMRS (para. 37);

n. Remove rule (47 CFR 95.29(g)) that allows grandfathered operation for certain fixed GMRS stations authorized before March 18, 1968 (para. 38);

o. Permit transmission of Global Positioning System (GPS) data in the GMRS (para. 42);

p. No longer certify Personal Radio Services equipment that have transmitting capability in services licensed under 47 CFR parts 80, 87, 90 and 97 (para. 47);

q. Allow the use of hands-free microphones that operate under 47 CFR part 15 in the CB Radio Service (para. 53);

r. Consolidate special equipment certification rules that apply to CB Radio equipment (para. 56);

s. Relocate the 218–219 MHz Service rules from 47 CFR part 95 subpart F to a new subpart at the end of 47 CFR part 27 (para. 62);

t. Eliminate the rule (47 CFR 95.813(b)) that prevents licensees that fail to construct a 218–219 MHz system from obtaining any new 218–219 MHz authorization for a period of 3 years, and to instead apply 47 CFR 27.14(a), providing that such licensee would forfeit the license for the unbuilt system and be ineligible to regain it (para. 63);

u. Replace references to analog TV Grade B contour with appropriate references to digital TV in the 218–219 MHz service rules (para. 65);

v. Clarify that the term "PLB" refers only to a personal locator beacon that meets the technical requirements for 406 MHz PLBs, and make unlawful the marketing of non-compliant devices as "PLBs" (para. 68); and,

w. Update the PLB rules to reference the new revised Radio Technical Commission for Maritime (RTCM) 406 MHz PLB standards (para. 69).

Request for Comment on Other Issues

5. In addition to the specific proposals above, in the *NPRM* the FCC specifically invites comment on a number of other issues where it believes that the applicable rules may need revision. The following is a list of the other issues for which the FCC has specifically requested public comment in the *NPRM,* and the paragraph number in the full text where related discussion may be found. The FCC specifically requests comment on:

a. Whether user-friendly fact sheets should be provided on the FCC Web site (para. 10);

b. Whether to retain the existing "plain language" question and answer format used in the rules (para. 11);

c. How transmitting power limits should be expressed in the rules (para. 16);

d. Whether the rule requiring crystal control of the transmitter frequency is still necessary (para. 22);

e. Whether channel sharing requirements developed for the CB Radio service should also apply to the GMRS and FRS (para. 55);

f. Whether the rule limiting the duration of transmissions in the CB Radio service (47 CFR 95.416) should be retained, revised or eliminated (para. 55);

g. Whether the rules prohibiting transmission of music or other entertainment material, sound effects, or sounds to attract attention in the CB Radio service (47 CFR 95.413(a)(6) and 47 CFR 95.416(a)(7)) should be retained, revised or eliminated (para. 55);

h. Whether the rule limiting the distance over which stations may communicate in the CB Radio service (47 CFR 95.413(a)(9)) should be retained, revised or eliminated (para. 57);

i. Whether the transmitting power limit in the CB Radio service should be reduced (para. 57);

j. Whether use of directional antennas in the CB Radio service should be prohibited (para. 57);

k. Whether to retain, eliminate or modify the rule allowing continuous transmissions lasting longer than 3 minutes in the R/C service only when one or more changes are made during each minute of transmission (47 CFR 95.215(b)) (para. 58);

l. What measures could be taken to provide greater operational or technical flexibility in the use of the 218–219 MHz radio service (para. 60);

m. Whether to eliminate the requirement for 218–219 MHz licensees to file a plan analyzing interference potential (para. 64);

n. What changes to make to the 218–219 MHz rules in regard to protection of TV channel 13 reception, in view of the digital television (DTV) conversion (para. 65);

o. What changes may be needed to the rules governing the Low Power Radio Service (LPRS), Wireless Medical Telemetry Service (WMTS), Medical Device Radiocommunication Service

(MedRadio), Multi-Use Radio Service (MURS) and Dedicated Short-Range Communications Service (On-Board Units) (para. 70).

Procedural Matters

6. 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 pursuant to the Commission's rules. *See generally* 47 CFR 1.1202, 1.1203, 1.1206. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, interested parties may file comments and reply comments on or before the dates indicated above. Comments and reply 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, GN Docket No. 97–113, *Report and Order,* 13 FCC Rcd 11322 (1998).

7. *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: *http://fjallfoss.fcc.gov/ecfs2/* or the Federal eRulemaking Portal: *http://www.regulations.gov.*

8. *Paper Filers:* Parties choosing 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, commenters must submit two additional copies for each additional docket or rulemaking number.

9. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW., Room TW–A325, Washington, DC 20554. The filing hours at this location are 8 a.m. to 7 p.m. 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 12th St., 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* or call the Consumer and Governmental Affairs Bureau at 202–418–0530 (voice), 202–418–0432 (tty).

The public may view the documents filed in this proceeding during regular business hours in the FCC Reference Information Center, Federal Communications Commission, 445 12th Street, SW., Room CY–A257, Washington, DC 20554, and on the Commission's Internet Home Page: *http://www.fcc.gov.* Copies of comments and reply comments are also available through the Commission's duplicating contractor: Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone 1–800–378–3160, or via e-mail at: *http://www.bcpiweb.com.*

Regulatory Flexibility Act

10. The Regulatory Flexibility Act (RFA) requires that an agency prepare a regulatory flexibility analysis for notice-and-comment rulemaking proceedings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities." The RFA generally defines "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A "small business concern" is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

11. The two statutorily-mandated criteria that the FCC must apply when determining whether an Initial Regulatory Flexibility Certification is appropriate are: (1) Whether the proposed rules, if adopted, would have a significant economic effect, and (2) if so, whether the economic effect would directly affect a substantial number of small entities. Upon application of these criteria, summarized in the following paragraphs, the FCC finds it appropriate to certify that the proposals in this *NPRM,* if adopted, would not have a significant economic effect on a substantial number of small entities.

12. With respect to the first criterion, the FCC finds that adoption of the proposals in the *NPRM* would not have a significant economic effect. In reaching this determination, the FCC first notes that most of the proposed changes to part 95 in the *NPRM* are editorial and organizational in nature rather than substantive, and as such would not have any economic effect at all on any entities, large or small. Of the remaining proposed changes in the *NPRM,* many of them would directly affect only Personal Radio users, who are individual persons not considered to be small entities for the purpose of the RFA by the FCC, the SBA or Congress.

13. In addition to the editorial rule changes and those that affect only individual persons, however, the *NPRM* also proposes rules that would affect Personal Radio Service equipment manufacturers. Some of these rules would allow equipment manufacturers the flexibility to include certain new features in their future Personal Radio Services products, if they so desire. Because such rules are permissive and not mandatory requirements, any economic effects on these manufacturers, such as an increase in sales or manufacturing cost per unit, would be the result of the equipment manufacturer's decision as to whether to take advantage of the increased options. As stated *supra,* the *NPRM* proposes (1) to require routine evaluation of certain GMRS radios for radio frequency exposure, (2) that the FCC no longer grant certification of certain types of personal radios (those combined with safety service radios and those with voice scrambling capability), and (3) to restrict future marketing use of the term "personal locator beacon". If adopted, these proposed rules could require some equipment manufacturers to make adjustments to their future product plans (in regard to combination and voice-scrambling radios) or to alter product labeling (in regard to personal locator beacons). The FCC believes however, that the cost to manufacturers of implementing any of these proposals would be small in comparison to the costs of design, manufacturing, distribution and marketing of these products. Therefore, the FCC concludes that adoption of the *NPRM* proposals would not have more than a *de minimis,* if any, economic effect on manufacturers.

14. As for the second criterion, the FCC, while not in any way conceding the preceding point, considers *arguendo* the case that one or more proposals in the *NPRM,* if adopted, turns out to have a significant economic effect. In such hypothetical case, the FCC considers whether the economic effect would directly affect a substantial number of small entities. Initially, the FCC notes that the substantive proposals in the *NPRM* would directly affect only

operators of Personal Radio Services stations and entities who seek FCC certification of equipment for use in the Personal Radio Services. The former are individual persons, and that latter are typically large manufacturing organizations, neither of which is considered to be small entities for purposes of the RFA by the FCC, the SBA or Congress. The Personal Radio Services equipment market is a large, nationwide market and most Personal Radio Services devices are mass-marketed directly to the general public as consumer goods. This necessitates a large-volume manufacturing capability that a small entity typically does not have. Although there are small-entities that make accessory devices for the Personal Radio Services, and there are small-entity retailers, such as truck stops, that sell Personal Radio Services equipment (*e.g.* CB radios), the proposals outlined *supra* would not directly affect any of them. In view of these factors, the FCC concludes that the proposals in the *NPRM* would not directly affect any small entities, and thus obviously by reason would not directly affect a substantial number of small entities.

15. The FCC therefore certifies, pursuant to the RFA, that the proposals in this *NPRM,* if adopted, would not have a significant economic impact on a substantial number of small entities. The FCC will send a copy of the *NPRM,* including a copy of this Initial Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the SBA.

Initial Paperwork Reduction Act of 1995 Analysis

16. This document proposes to eliminate an information collection. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

List of Subjects in 47 CFR Parts 1, 27 and 95

Radio.

Federal Communications Commission.

Marlene H. Dortch,

Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR parts 1, 27 and 95 as follows:

PART 1—PRACTICE AND PROCEDURE

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

Authority: 15 U.S.C. 79 *et. seq.;* 47 U.S.C. 151, 154(i), 154(j), 155, 157, 225, 303(r), and 309.

2. Section 1.1307 is amended by revising paragraph (b)(2) as follows:

§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

* * * * *

(b) * * *

(2) Mobile and portable transmitting devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services (PCS), the Satellite Communications Services, the Wireless Communications Service, the Maritime Services (ship earth stations only), the Specialized Mobile Radio Service, and the 3650 MHz Wireless Broadband Service authorized under parts 22, 24, 25, 27, 80, and 90 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§ 2.1091 and 2.1093 of this chapter. Unlicensed PCS, unlicensed NII and millimeter wave devices are also subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§ 15.253(f), 15.255(g), 15.319(i), and 15.407(f) of this chapter. Portable devices as defined in § 2.1093(b) of this chapter operating in the General Mobile Radio Service (GMRS), the Wireless Medical Telemetry Service (WMTS) and the Medical Device Radiocommunication Service (MedRadio) subparts C, H and I of part 95 of this chapter are subject to radio frequency radiation exposure requirements as specified in §§ 2.1093 and 95.49 of this chapter. Equipment authorized for use in the Medical Device Radiocommunication Service (MedRadio) as a medical implant or body-worn transmitter (as defined in Appendix 1 to part 95, subpart E of this chapter) is subject to routine environmental evaluation for RF exposure prior to equipment authorization, as specified in § 2.1093 of this chapter by finite difference time domain computational modeling or laboratory measurement techniques. Where a showing is based on computational modeling, the Commission retains the discretion to request that specific absorption rate measurement data be submitted. All other mobile, portable, and unlicensed transmitting devices are categorically excluded from routine environmental evaluation for RF exposure under §§ 2.1091, 2.1093 of this chapter except as specified in paragraphs (c) and (d) of this section.

* * * * *

PART 27—MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

Authority: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

3. Section 27.1 is amended by adding paragraph (b)(10) to read as follows:

§ 27.1 Basis and purpose.

* * * * *

(b) * * *

(10) 218–219 MHz.

* * * * *

4. Amend § 27.2 by adding paragraph (d) to read as follows:

§ 27.2 Permissible communications.

* * * * *

(d) *218–219 MHz.* A 218–219 MHz Service system may provide any fixed or mobile communications service to subscribers within its service area on its assigned spectrum, consistent with the Commission's rules and the regulatory status of the system to provide services on a common carrier or private basis.

5. Amend § 27.5 by adding paragraph (j) to read as follows:

§ 27.5 Frequencies.

* * * * *

(j) *218–219 MHz band.* There are two frequency segments available for assignment to the 218–219 MHz Service in each service area. Frequency segment A is 218.000–218.500 MHz. Frequency segment B is 218.501–219.000 MHz.

6. Amend § 27.10 by revising paragraph (a) and by adding paragraph (e) to read as follows:

§ 27.10 Regulatory status.

* * * * *

(a) *Single authorization.* Authorization will be granted to provide any or a combination of the following services in a single license: common carrier, non-common carrier, private internal communications, and broadcast

services. A licensee may render any kind of communications service consistent with the regulatory status in its license and with the Commission's rules applicable to that service. A system in the 218–219 MHz Service may not provide broadcast services. An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status for which authorization is required to provide a specific communications service.

* * * * *

(e) *Pre-existing 218–219 MHz licenses.* Licenses in the 218–219 MHz Service granted before April 9, 2001, are authorized to provide services on a private (non-common carrier) basis. Licensees may modify this initial status pursuant to paragraph (d) of this section.

7. Amend § 27.11 by adding paragraph (j) to read as follows:

§ 27.11 Initial authorization.

* * * * *

(j) *218–219 MHz band.* There are two frequency segments available for assignment to the 218–219 MHz Service in each service area. Frequency segment A is 218.000–218.500 MHz. Frequency segment B is 218.501–219.000 MHz.

8. Amend § 27.13 by adding paragraph (i) to read as follows:

§ 27.13 License period.

* * * * *

(i) *218–219 MHz.* Authorizations for the 218–219 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal. Licenses for individually-licensed cellular transmitter stations will be issued for a period running concurrently with the license of the associated 218–219 MHz Service system with which they are licensed.

9. Amend § 27.14 by redesignating paragraphs (g) through (o) as (h) through (p), and adding paragraphs (g), (q) and (r), to read as follows:

§ 27.14 Construction requirements; criteria for renewal.

* * * * *

(g) Comparative renewal proceedings do not apply to licensees holding authorizations for the 218–219 MHz band. These licensees must file a renewal application in accordance with the provisions set forth in § 1.949 of this chapter.

* * * * *

(q) Each licensee holding authorizations in the 218–219 MHz band must make a showing of "substantial service" within ten years of the license grant. A "substantial service" assessment will be made at renewal pursuant to the provisions and procedures contained in § 1.949 of this chapter.

(r) Each licensee holding authorizations in the 218–219 MHz band must file a report informing the Commission of the service status of its system. The report must be labeled as an exhibit to the renewal application. At minimum, the report must include:

(1) A description of its current service in terms of geographic coverage and population served;

(2) An explanation of its record of expansion, including a timetable of new construction to meet changes in demand for service;

(3) A description of its investments in its 218–219 MHz Service systems;

(4) A list, including addresses, of all component cellular transmission stations constructed; and

(5) Copies of all FCC orders finding the licensee to have violated the Communications Act or any Commission rules or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

10. Amend § 27.50 by adding paragraph (j) to read as follows:

§ 27.50 Power and antenna height limits.

* * * * *

(j) The following power and antenna height requirements apply to stations transmitting in the 218–219 MHz band:

(1) The effective radiated power (ERP) of each cellular transmitter station (CTS) and response transmitter unit (RTU) shall be limited to the minimum necessary for successful communications. No CTS or fixed RTU may transmit with an ERP exceeding 20 watts. No mobile RTU may transmit with an ERP exceeding 4 watts.

(2) The overall height from ground to topmost tip of a CTS antenna shall not exceed the height necessary to assure adequate service. Certain CTS antennas must be individually licensed to the 218–219 MHz System licensee (*see* § 27.1403(b)) and the antenna structures of which they are a part must be registered with the Commission (*see* part 17 of this chapter).

(3) The RTU may be connected to an external antenna not more than 6.1 m (20 feet) above ground or above an existing man-made structure (other than an antenna structure). Connectors that are used to connect RTUs to an external antenna shall not be of the types generally known as "F-type" or "BNC type."

11. Amend § 27.53 by adding paragraph (o) to read as follows:

§ 27.53 Emission limits.

* * * * *

(o) For operations in the 218–219 MHz band, all transmissions by each cellular transmitter station and by each response transmitter unit shall use an emission type that complies with the following standard for unnecessary radiation.

(1) All spurious and out-of-band emissions shall be attenuated:

(i) Zero dB on any frequency within the authorized frequency segment;

(ii) At least 28 dB on any frequency removed from the midpoint of the assigned frequency segment by more than 250 kHz up to and including 750 kHz;

(iii) At least 35 dB on any frequency removed from the midpoint of the assigned frequency segment by more than 750 kHz up to and including 1250 kHz;

(iv) At least 43 + 10 log (P) dB on any frequency removed from the midpoint of the assigned frequency segment by more than 1250 kHz.

(2) When testing for certification, all measurements of unnecessary radiation are performed using a carrier frequency as close to the edge of the authorized frequency segment as the transmitter is designed to be capable of operating.

(3) The resolution bandwidth of the instrumentation used to measure the emission power shall be 100 Hz for measuring emissions up to and including 250 kHz from the edge of the authorized frequency segment, and 10 kHz for measuring emissions more than 250 kHz from the edge of the authorized frequency segment. If a video filter is used, its bandwidth shall not be less than the resolution bandwidth. The power level of the highest emission within the frequency segment, to which the attenuation is referenced, shall be remeasured for each change in resolution bandwidth.

12. Add subpart O to part 27 to read as follows:

Subpart O—218–219 MHz Band

Sec.

Authority: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

§ 27.1401 Scope.

This subpart sets out the regulations governing the licensing and operation of a 218–219 MHz system. This subpart supplements part 1, subpart F of this chapter, which establishes the requirements and conditions under which commercial and private radio stations may be licensed and used in the Wireless Telecommunications Services.

§ 27.1402 218–219 MHz service description.

(a) The 218–219 MHz Service is authorized for system licensees to provide communication service to subscribers in a specific service area.

(b) The components of each 218–219 MHz Service system are its administrative apparatus, its response transmitter units (RTUs), and one or more cell transmitter stations (CTSs). RTUs may be used in any location within the service area. CTSs provide service from a fixed point, and certain CTSs must be individually licensed as part of a 218–219 MHz Service system. *See* § 27.1403.

(c) Each 218–219 MHz Service system service area is one of the cellular markets as defined in § 22.909 of this chapter, unless modified pursuant to § 27.15.

§ 27.1403 License requirements.

(a) Each 218–219 MHz Service system must be licensed in accordance with part 1, subpart F of this chapter.

(b) Each cellular transmitter station (CTS) where the antenna does not exceed 6.1 meters (20 feet) above ground or an existing structure (other than an antenna structure) and is outside the vicinity of certain receiving locations (*see* § 1.924 of this chapter) is authorized under the 218–219 MHz System license. All other CTS must be individually licensed.

(c) All CTSs not meeting the licensing criteria under paragraph (b) of this section are authorized under the 218–219 MHz Service system license.

(d) Each component response transmitter unit (RTU) in a 218–219 MHz Service system is authorized under the system license or if associated with an individually licensed CTS, under that CTS license.

(e) Each CTS (regardless of whether it is individually licensed) and each RTU must be in compliance with the Commission's environmental rules (*see* part 1, subpart I of this chapter) and the Commission's rules pertaining to the construction, marking and lighting of antenna structures (*see* part 17 of this chapter).

§ 27.1404 License application.

(a) In addition to the requirements of part 1, subpart F of this chapter, each application for a 218–219 MHz Service system license must include a plan analyzing the co- and adjacent channel interference potential of the proposed system, identifying methods being used to minimize this interference, and showing how the proposed system will meet the service requirements set forth in § 27.14. This plan must be updated to reflect changes to the 218–219 MHz Service system design or construction.

(b) In addition to the requirements of part 1, subpart F of this chapter, each request by a 218–219 MHz Service system licensee to add, delete, or modify technical information of an individually licensed cellular transmitter station (CTS) (*see* § 27.1403(b)) must include a description of the system after the proposed addition, deletion, or modifications, including the population in the service area, the number of component CTSs, and an explanation of how the system will satisfy the service requirements specified in § 27.14.

§ 27.1405 Competitive bidding proceedings.

(a) Mutually exclusive initial applications for 218–219 MHz Service licenses are subject to competitive bidding. The general competitive bidding procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise provided in this part.

(b) Installment payments. Eligible Licensees that elect resumption pursuant to *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218–219 MHz Service, Report and Order and Memorandum Opinion and Order, FCC 99–239 (released September 10, 1999)* may continue to participate in the installment payment program. Eligible Licensees are those that were current in installment payments (*i.e.,* less than ninety days delinquent) as of March 16, 1998, or those that had properly filed grace period requests under the former installment payment rules. All unpaid interest from grant date through election date will be capitalized into the principal as of Election Day creating a new principal amount. Installment payments must be made on a quarterly basis. Installment payments will be calculated based on new principal amount as of Election Day and will fully amortize over the remaining term of the license. The interest rate will equal the rate for five-year U.S. Treasury obligations at the grant date.

(c) Installment payment provisions for partitioning and disaggregation—(1) Parties not qualified for installment payment plans.

(i) When a winning bidder (partitionor or disaggregator) that elected to pay for its license through an installment payment plan partitions its license or disaggregates spectrum to another party (partitionee or disaggregatee) that would not qualify for an installment payment plan, or elects not to pay for its share of the license through installment payments, the outstanding principal balance owed by the partitionor or disaggregator shall be apportioned according to § 1.2111(e)(3) of this chapter. The partitionor or disaggregator is responsible for accrued and unpaid interest through and including the consummation date.

(ii) The partitionee or disaggregatee shall, as a condition of the approval of the partial assignment application, pay its entire pro rata amount of the outstanding principal balance on or before the consummation date. Failure to meet this condition will result in cancellation of the grant of the partial assignment application.

(iii) The partitionor or disaggregator shall be permitted to continue to pay its pro rata share of the outstanding balance and, if applicable, shall receive loan documents evidencing the partitioning and disaggregation. The original interest rate, established pursuant to § 1.2110(g)(3)(i) of this chapter at the time of the grant of the initial license in the market, shall continue to be applied to the partitionor's or disaggregator's portion of the remaining government obligation.

(iv) A default on the partitionor's or disaggregator's payment obligation will affect only the partitionor's or disaggregator's portion of the market.

(2) Parties qualified for installment payment plans.

(i) Where both parties to a partitioning or disaggregation agreement qualify for installment payments, the partitionee or disaggregatee will be permitted to make installment payments on its portion of the remaining government obligation.

(ii) Each party may be required, as a condition to approval of the partial assignment application, to execute loan documents agreeing to pay its pro rata portion of the outstanding principal balance due, as apportioned according to § 1.2111(e)(3) of this chapter, based upon the installment payment terms for which it qualifies under the rules. Failure by either party to meet this condition will result in the automatic cancellation of the grant of the partial assignment application. The interest rate, established pursuant to § 1.2110(g)(3)(i) of this chapter at the time of the grant of the initial license in

the market, shall continue to be applied to both parties' portion of the balance due. Each party will receive a license for its portion of the partitioned market.

(iii) A default on an obligation will affect only that portion of the market area held by the defaulting party.

(d) Eligibility for small business provisions.

(1) A small business is an entity that, together with its affiliates and controlling interests, has average gross revenues not to exceed $15 million for the preceding three years.

(2) A very small business is an entity that, together with its affiliates and controlling interests, has average gross revenues not to exceed $3 million for the preceding three years.

(e) Bidding credits. A winning bidder that qualifies as a small business, as defined in this subsection, or a consortium of small businesses may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use the bidding credit specified in accordance with § 1.2110(f)(2)(i) of this chapter.

(f) Winning bidders in Auction No. 2, which took place on July 28–29, 1994, that, at the time of auction, met the qualifications under the Commission's rules then in effect, for small business status will receive a twenty-five percent bidding credit pursuant to *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218–219 MHz Service, Report and Order and Memorandum Opinion and Order, FCC 99–239 (released September 10, 1999).*

§ 27.1406 License transferability.

(a) A 218–219 MHz Service system license, together with all of its component cellular transmitter stations (CTS) licenses, may be transferred, assigned, sold, or given away only in accordance with the provisions and procedures set forth in § 1.948 of this chapter. For licenses acquired through competitive bidding procedures (including licenses obtained in cases of no mutual exclusivity), designated entities must comply with §§ 1.2110 and 1.2111 of this chapter (*see* § 1.948(a)(3) of this chapter).

(b) If the transfer, assignment, sale, or gift of a license is approved, the new licensee is held to the construction requirements set forth in § 27.14.

§ 27.1407 Station identification.

No response transmitter unit or cellular transmitter station is required to transmit a station identification announcement.

§ 27.1408 Station inspection.

Upon request by an authorized Commission representative, the 218–219 MHz Service system licensee must make any component cellular transmitter station available for inspection.

§ 27.1409 Certification.

Each cellular transmitter station and response transmitter unit must be certificated for use in the 218–219 MHz Service in accordance with part 2, subpart J of this chapter.

§ 27.1410 Interference.

(a) When a 218–219 MHz Service system suffers harmful interference within its service area or causes harmful interference to another 218–219 MHz Service system, the licensees of both systems must cooperate and resolve the problem by mutually satisfactory arrangements. If the licensees are unable to do so, the Commission may impose restrictions including, but not limited to, specifying the transmitter power, antenna height or area, duty cycle, or hours of operation for the stations concerned.

(b) The use of any frequency segment (or portion thereof) at a given geographical location may be denied when, in the judgment of the Commission, its use in that location is not in the public interest; the use of a frequency segment (or portion thereof) specified for the 218–219 MHz Service system may be restricted as to specified geographical areas, maximum power, or other operating conditions.

(c) A 218–219 MHz Service licensee must provide a copy of the plan required by § 27.1404 (a) to every TV Channel 13 station whose Noise Limited Contour, as determined in § 73.622(e) of this chapter, overlaps the licensed service area for the 218–219 MHz Service system. The 218–219 MHz Service licensee must send the plan to the TV Channel 13 licensee(s) within 10 days from the date the 218–219 MHz Service submits the plan to the Commission, and the 218–219 MHz Service licensee must send updates to this plan to the TV Channel 13 licensee(s) within 10 days from the date that such updates are filed with the Commission pursuant to § 95.815 of this chapter.

(d) Each 218–219 MHz Service system licensee must provide upon request, and install free of charge, an interference reduction device to any household within a TV Channel 13 station Noise Limited Contour that experiences interference due to a component cellular transmitter station or response transmitter unit (RTU).

(e) Each 218–219 MHz Service system licensee must investigate and eliminate harmful interference to television broadcasting and reception, from its component CTSs and RTSs, within 30 days of the time it is notified in writing, by either an affected television station, an affected viewer, or the Commission, of an interference complaint. Should the licensee fail to eliminate the interference within the 30-day period, the CTS(s) or RTU(s) causing the problem(s) must discontinue operation.

(f) The boundary of the 218–219 MHz Service system, as defined in its authorization, is the limit of interference protection for that 218–219 MHz Service system.

13. Part 95 is revised as follows:

PART 95—Personal Radio Services

Subpart A—General Information

Sec.

Subpart B—Technical Information

Subpart C—General Mobile Radio Service (GMRS)

Subpart D—Radio Control (R/C) Radio Service

Subpart E—Citizens Band (CB) Radio Service

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

Subpart A—General Information

§ 95.1 Basis and purpose.

This section contains a concise general statement of the basis and purpose of the rules in this part, pursuant to 5 U.S.C. 553(c).

(a) *Basis.* These rules are issued pursuant to the Communications Act of 1934, as amended, 47 U.S.C. 151 *et. seq.*

(b) *Purpose.* The purpose of these rules is to establish the requirements and conditions under which radio stations may be licensed and used in the Personal Radio Services.

§ 95.3 Definitions.

Antenna. The radiating system (for transmitting, receiving or both) and the structure holding it up (tower, pole or mast).

Authorized bandwidth. Maximum permissible bandwidth of a transmission.

Automated maritime telecommunications system (AMTS). An automatic maritime communications system administered under part 80 of the Commission's rules.

Base station. A fixed station that communicates with mobile stations.

Carrier power. Average transmitter output power during one RF cycle under condition of no modulation.

Channel center frequencies. Reference frequencies from which the carrier frequency, suppressed or otherwise, may not deviate by more than the specified frequency tolerance.

Citizens Band (CB) Radio Service. The CB Radio Service is a private, two-way, short-distance voice communications service intended primarily for personal activities of the general public. The CB Radio Service may also be used for voice paging.

Citizens Band Radio Services. The Citizens Band Radio Services are the Citizens Band, Family Radio Service, Personal Locator Beacon, Low Power Radio Service, Medical Implant Communications Service, Multi-Use Radio Service, Wireless Medical Telemetry Service, and Dedicated Short-range Communications Service On-Board Units.

CB transmitter. A transmitter that operates or is intended to operate at a station authorized in the CB Radio Service.

Dedicated Short-range Communications Service On-Board Units (DSRCS–OBUs). DSRCS–OBUs may communicate with DSRCS Roadside Units (RSUs), which are authorized under part 90 of this chapter.

Family Radio Service (FRS). The FRS is a private, two-way, very short-distance voice and data communications service for facilitating family and group activities.

General Mobile Radio Service (GMRS). GMRS is a land mobile radio service available to persons for short-distance two-way communications intended primarily to facilitate personal communications.

Health care facility. A health care facility includes hospitals and other establishments that offer services, facilities and beds for use beyond a 24-hour period in rendering medical treatment, and institutions and organizations regularly engaged in providing medical services through clinics, public health facilities, and similar establishments, including government entities and agencies such as Veterans Administration hospitals; except the term health care facility does not include an ambulance or other moving vehicle.

Low Power Radio Service (LPRS). The LPRS is a private, short-distance communications service providing auditory assistance to persons with disabilities, persons who require language translations, and persons in educational settings, health care assistance to the ill, law enforcement tracking services in cooperation with law enforcement, and point-to-point network control communications for Automated Marine Telecommunications System (AMTS) coast stations licensed under part 80 of this chapter.

Mean power. Average transmitter output power over a time interval of at least 0.1 seconds.

Medical Device Radiocommunications Service (MedRadio). An ultra-low power radio service for the transmission of non-voice data for the purpose of facilitating diagnostic and/or therapeutic functions involving implanted and body-worn medical devices.

With regard to MedRadio, the following definitions apply:

(1) *EIRP.* Equivalent Isotropically Radiated Power. Antenna input power times gain for free-space or in-tissue measurement configurations required by MedRadio, expressed in watts, where the gain is referenced to an isotropic radiator.

(2) *Emission bandwidth.* Measured as the width of the signal between the points on either side of carrier center

frequency that are 20 dB down relative to the maximum level of the modulated carrier. Compliance will be determined using instrumentation employing a peak detector function and a resolution bandwidth approximately equal to 1% of the emission bandwidth of the device under test.

(3) *Medical body-worn device.* Apparatus that is placed on or in close proximity to the human body (*e.g.,* within a few centimeters) for the purpose of performing diagnostic or therapeutic functions.

(4) *Medical body-worn transmitter.* A MedRadio transmitter intended to be placed on or in close proximity to the human body (*e.g.,* within a few centimeters) used to facilitate communications with other medical communications devices for purposes of delivering medical therapy to a patient or collecting medical diagnostic information from a patient.

(5) *Medical implant device.* Apparatus that is placed inside the human body for the purpose of performing diagnostic and/or therapeutic functions.

(6) *Medical implant event.* An occurrence or the lack of an occurrence recognized by a medical implant device, or a duly authorized health care professional, that requires the transmission of data from a medical implant transmitter in order to protect the safety or well-being of the person in whom the medical implant transmitter has been implanted.

(7) *Medical implant transmitter.* A MedRadio transmitter in which both the antenna and transmitter device are designed to operate within a human body for the purpose if facilitating communications from a medical implant device.

(8) *MedRadio channel.* Any continuous segment of spectrum that is equal to the emission bandwidth of the device with the largest bandwidth that is to participate in a MedRadio communications session. (**Note:** The rules do not specify a channeling scheme for use by MedRadio systems.)

(9) *MedRadio communications session.* A collection of transmissions, that may or may not be continuous, between MedRadio system devices.

(10) *Medical implant transmitter.* A transmitter authorized to operate in the MedRadio service.

(11) *MedRadio programmer/control transmitter.* A MedRadio transmitter that operates or is designed to operate outside of a human body for the purpose of communicating with a receiver, or for triggering a transmitter, connected to a medical implant device or to a medical body-worn device used in the MedRadio Service; and which also typically includes a frequency monitoring system that initiates a MedRadio communications session.

(12) *MedRadio Service.* Medical Device Radiocommunication Service.

(13) *Multi-Use Radio Service (MURS).* MURS is a private, two-way, short-distance voice, data or image communications service for personal or business activities of the general public.

(14) *Personal Locator Beacon (PLB).* PLBs are intended to provide individuals in remote areas a means to alert others of an emergency situation and to aid search and rescue personnel to locate those in distress.

(15) *Radio Control (R/C) Radio Service.* The R/C Service is a private, one-way, short-distance non-voice communications service for the operation of devices at remote locations.

(16) *R/C transmitter.* A transmitter that operates or is intended to operate at a station authorized in the R/C.

(17) *Wireless medical telemetry.* The measurement and recording of physiological parameters and other patient-related information via radiated bi- or unidirectional electromagnetic signals in the 608–614 MHz, 1395–1400 MHz, and 1427–1429.5 MHz frequency bands.

(18) *Wireless Medical Telemetry Service (WMTS).* The WMTS is a private, short-distance data communication service for the transmission of patient medical information to a central monitoring location in a hospital or other hospital care facility.

§ 95.5 License requirement and eligibility.

Except as set forth in paragraphs (a) through (d), you are authorized by rule (no individual FCC license is required) to operate Personal Radio Service transmitters that have been approved as required in § 95.33.

(a) Stations belonging to and operated by the United States Government, and stations operated by foreign governments or their representatives are not authorized.

(b) Each entity operating a LPRS transmitter for AMTS purposes must hold an AMTS license under part 80 of this chapter.

(c) Authorized health care providers are authorized by rule to operate transmitters in the Wireless Medical Telemetry Service without an individual license issued by the Commission provided the coordination requirements in § 95.607 have been met. Manufacturers of wireless medical telemetry devices and their representatives are authorized to operate wireless medical telemetry transmitters in this service solely for the purpose of demonstrating such equipment to, or installing and maintaining such equipment for, duly authorized health care providers. No entity that is a foreign government or which is active in the capacity as a representative of a foreign government is eligible to operate a WMTS transmitter.

(d) Operation in the MedRadio service is permitted by rule and without an individual license issued by the FCC. Duly authorized health care professionals are permitted to operate MedRadio transmitters. Persons may also operate MedRadio transmitters to the extent the transmitters are incorporated into implanted or body-worn medical devices that are used by the person at the direction of a duly authorized health care professional; this includes medical devices that have been implanted in that person or placed on the body of that person by or under the direction of a duly authorized health care professional. Manufacturers of medical devices that include MedRadio transmitters, and their representatives, are authorized to operate transmitters in this service for the purpose of demonstrating such equipment to duly authorized health care professionals. No entity that is a foreign government or which is acting in its capacity as a representative of a foreign government is eligible to operate a MedRadio transmitter. The term "duly authorized health care professional" means a physician or other individual authorized under state or federal law to provide health care services. Operations that comply with the requirements of this part may be conducted under manual or automatic control.

§ 95.7 Authorized locations.

(a) Provided that you comply with the rules of this chapter, you are authorized to operate a Personal Radio Services transmitter from:

(1) Within the United States and its territories. Those areas include the fifty United States and the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands (50 islets and cays), American Samoa (seven islands), the Commonwealth of Northern Marianna Islands, and Guam Island;

(2) Aboard any vessel or aircraft registered in the United States, with the permission of the captain, that is within or over the United States or its territories, U.S. territorial waters, or upon or over international waters; or

(3) Aboard any unregistered vessel or aircraft owned or operated by a United States citizen or company that is within or over the United States or its

territories, U.S. territorial waters or upon or over international waters.

(b) You may be subject to additional restrictions if you operate your Personal Radio Services transmitter:

(1) Near an FCC field office or in a quiet zone. *See* § 1.924 of this chapter.

(2) In an area subject to an international treaty or agreement.

(3) At an environmentally sensitive site, or in such a manner as to raise environmental problems. *See* §§ 1.1307, 1.1311 and 1.1312 of this chapter.

(4) In an area administered by the United States Government. For example, the Department of Defense may impose restrictions on a station transmitting on its land. Before placing a station at such a point, a licensee should consult with the commanding officer in charge of the land. Anyone intending to operate a Personal Radio Services transmitter on the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra in a manner that could pose an interference threat to the Arecibo Observatory shall notify the Interference Office, Arecibo Observatory, HC3 Box 53995, Arecibo, Puerto Rico 00612, in writing or electronically, of the location of the unit. Operators may wish to consult interference guidelines, which will be provided by Cornell University. Operators who choose to transmit information electronically should send an e-mail to: *prcz@naic.edu.*

(i) The notification to the Interference Office, Arecibo Observatory shall be made 45 days prior to commencing operation of the unit. The notification shall state the geographical coordinates of the unit.

(ii) After receipt of such notifications, the Commission will allow the Arecibo Observatory a period of 20 days for comments or objections. The operator will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory. If the Commission determines that an operator has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, the unit may be allowed to operate.

(c) Wireless Medical Telemetry Service devices shall not operate in mobile vehicles, such as ambulances, even if those vehicles are associated with a health care facility.

§ 95.9 Licensee responsibility.

(a) A licensee (including entities licensed by rule) of a Personal Radio Services transmitter is responsible at all times for the proper operation of the transmitter. Licensees must at all times and on all channels give priority to emergency communications.

(b) You must not use a Personal Radio Service station:

(1) In connection with any activity which is against federal, state or local law;

(2) For the transmission of advertisements or program material associated with television or radio broadcasting;

(3) To intentionally interfere with another station's transmissions;

(4) To transmit sound effects (music, whistling, etc.) or obscene, profane or indecent words, language or meaning; or

(5) To transmit messages for hire or provide a common carrier service;

(6) Additional service-specific prohibitions are set forth in the relevant subparts of this chapter.

§ 95.11 Station inspection.

(a) If an authorized FCC representative requests to inspect your Personal Radio Services station, you must make your station and records available for inspection.

(b) A Personal Radio Service station includes all of the radio equipment you use in connection with that station.

(c) Your station records include the following documents, as applicable:

(1) A copy of each response to an FCC violation notice or an FCC letter.

(2) Each written permission received from the FCC.

§ 95.13 Correspondence and notices from the FCC.

(a) If the FCC sends you a letter asking you questions about your Personal Radio Service radio station or its operation:

(1) You must answer each of the questions with a complete written statement within the time period stated in the letter;

(2) You must not shorten your answer by references to other communications or notices;

(3) You must send your answer to the FCC office which sent you the notice; and

(4) You must keep a copy of your answer in your station records.

(b) If it appears to the FCC that you have violated the Communications Act or these rules, the FCC may send you an official notice concerning the violation.

(1) Within the time period stated in the notice, you must send your answer to the FCC office which sent you the notice and you must answer with:

(i) A complete written statement which fully explains each violation;

(ii) A complete written statement about any action you have taken to correct the violation and to prevent it from happening again; and

(iii) The name of the person operating the station at the time of the violation.

(2) If the FCC informs you that your Personal Radio Service station is causing interference for technical reasons, you must follow all instructions in the official notice. (This notice may require you to have technical adjustments made to your equipment.)

(3) You must comply with any restricted hours of station operation which may be included in the official notice.

(4) You must keep a copy of your answer in your station records.

§ 95.15 Penalties for violating the rules.

(a) If the FCC finds that you have willfully or repeatedly violated the Communications Act or the Commission's rules, you may have to pay as much as $16,000 for each violation, up to a total of $112,500. (*See* § 1.80 of this chapter.)

(b) If the FCC finds that you have violated any section of the Communications Act or the Commission's rules, you may be ordered to stop whatever action caused the violation. (*See* section 312(b) of the Communications Act.)

(c) If a federal court finds that you have willfully and knowingly violated any Commission rules, you may be fined up to $500 for each day you committed the violation. (*See* section 502 of the Communications Act.)

(d) If a federal court finds that you have willfully and knowingly violated any provision of the Communications Act, you may be fined up to $10,000 or you may be imprisoned for one year, or both. (*See* section 501 of the Communications Act.)

§ 95.17 Contact the FCC.

You may contact the FCC in any of the following ways:

(a) FCC National Call Center at 1–888–225–5322, TTY 1–888–835–5322;

(b) FCC World Wide Web homepage: *http://www.fcc.gov;* or

(c) In writing, to FCC, 1270 Fairfield Road, Gettysburg, PA 17325–7245, Attention: Personal Radio Services.

Subpart B—Technical Information

§ 95.31 Scope.

This subpart covers technical standards pertaining to transmitters used or intended to be used in all the part 95 Personal Radio Services.

§ 95.33 Equipment certification requirements.

(a) *General equipment certification requirement.* Except as provided below a Personal Radio Services transmitter must be certified to operate in the radio service in which it is intended to be

used. Any entity may request certification for its transmitter when the transmitter is used in the Personal Radio Services following the procedures in part 2 of this chapter.

(b) *Non-certified transmitters.*

(1) Non-certified R/C transmitters may be used in the R/C Service if they only operate in the 26.995–27.255 MHz band and comply with the part 95 technical standards.

(2) Non-certified medical implant or medical body-worn transmitters that are not marketed for use in the United States, but which otherwise comply with the MedRadio technical requirements, may be used by individuals who have traveled to the United States.

(c) *Modification of certified equipment.* Only the holder of the equipment certification may make modifications to the design of a certificated Personal Radio Services transmitter, and then only pursuant to and in full compliance with the requirements and procedures in part 2 of this chapter. *See* §§ 2.932 and 2.1043 of this chapter.

(1) No person shall make any modification to any certificated Personal Radio Services transmitter that changes or affects the technical operation of that transmitter, including any modification to provide for additional transmitting frequencies, increased modulation level, a different form of modulation, or increased transmitter output power (either mean power or peak envelope power or both). Any such modification would void the certified status of that transmitter and render it unacceptable for use in the Personal Radio Services, pursuant to paragraph (a) of this section.

(2) No person shall willfully and knowingly use any Personal Radio transmitter which has been modified in violation of paragraph (c)(1) of this section.

(d) *Limitations.* No external device or accessory may be added on to a personal radio transmitter that can result in a violation of the rules.

(1) No control, switch or other type of adjustment which, when manipulated, can result in a violation of the rules shall be accessible to the user.

(2) No Personal Radio Services transmitter shall incorporate provisions for increasing its transmitter power to any level in excess of the maximum power permitted under the rules.

(3) No transmitter will be certified for use in a Personal Radio Service if the radio has the capability to operate on frequencies in a licensed or safety service (frequencies externally accessible). Safety service refers to communications involving the safety of life, property or health.

(e) *Specific equipment certification requirements.*

(1) GMRS, CB, FRS and MURS transmitters may transmit tones to make contact or to continue communications with a particular transmitter. If the tone is audible (more than 300 Hertz), it must last no longer than 15 seconds at one time. If the tone is subaudible (300 Hertz or less), it may be transmitted continuously only while you are talking.

(2) FRS and GMRS units may transmit digital data containing location information, or requesting location information from one or more other units within that service, or containing a brief text message to another specific unit or units. Digital data transmissions must be initiated by a manual action or command of a user, except that an FRS or GMRS unit receiving an interrogation request may automatically respond with its location. Digital data transmissions shall not exceed one second, and shall be limited to no more than one digital transmission within a thirty-second period, except that a unit may automatically respond to more than one interrogation request received within a thirty-second period.

(3) Applications for certification of GMRS transmitters received on or after [EFFECTIVE DATE OF THE FINAL RULE] will be granted only for equipment with a 12.5 kHz bandwidth.

(4) GMRS transmitters that are designed with a maximum channel bandwidth greater than 12.5 kHz shall not be manufactured in, imported into or marketed in the United States after a specified date to be determined in WT Docket 10–119.

(5) FRS units are prohibited from transmitting data in store-and-forward packet operation mode.

(6) An R/C transmitter which incorporates plug-in frequency determining modules which are changed by the user must be certificated with the modules. Each module must contain all of the frequency determining circuitry including the oscillator. Plug-in crystals are not considered modules and must not be accessible to the user.

(7) No transmitter will be certificated for use in the CB service if it is equipped with a frequency capability not listed in § 95.307, unless such transmitter is also certificated for use in another radio service for which the frequency capability is authorized and for which certification is also required (transmitters with frequency capability for the Amateur Radio Services and Military Affiliate Radio System will not be certificated).

(8) No transmitter will be certificated for use in the GMRS if it is equipped with a frequency capability not listed in § 95.103, unless such transmitter is also certificated for use in another radio service for which the frequency capability is authorized and for which certification is also required (transmitters with frequency capability for the Amateur Radio Services and Military Affiliate Radio System will not be certificated).

(9) All frequency determining circuitry (including crystals) and programming controls in each CB transmitter and in each GMRS transmitter must be internal to the transmitter and must not be accessible from the exterior of the transmitter operating panel or from the exterior of the transmitter enclosure.

(10) No add-on device, whether internal or external, the function of which is to extend the transmitting frequency capability of a CB transmitter beyond its original capability, shall be manufactured, sold or attached to any CB station transmitter.

(11) No transmitter will be certificated for use in MURS if it is equipped with a frequency capability not listed in § 95.803.

(f) Enclosures, Instruction Manuals, Disclosures.

(1) A user's instruction manual must be supplied with each Personal Radio Service transmitter marketed. *See* § 2.1033 of this chapter.

(2) The instruction manual must contain all information necessary for the proper installation and operation of the transmitter including:

(i) Instructions concerning all controls, adjustments and switches that may be operated or adjusted without resulting in a violation of the rule and;

(ii) Warnings concerning any adjustment that could result in a violation of the rules or that is recommended to be performed by or under the immediate supervision and responsibility of a person certified as technically qualified to perform transmitter maintenance and repair duties in the private land mobile services and fixed services by an organization or committee representative of users of those services.

(iii) Manufacturers of LPRS transmitters used for auditory assistance, health care assistance, and law enforcement tracking purposes must include with each transmitting device the following statement: "This transmitter is authorized by rule under the Low Power Radio Service (47 CFR part 95) and must not cause harmful interference to TV reception or to the United States Air Force Space

Surveillance System operating in the 216.88–217.08 MHz band. You do not need an FCC license to operate this transmitter. This transmitter may only be used to provide: Auditory assistance to persons with disabilities, persons who require language translation, or persons in educational settings; health care services to the ill; law enforcement tracking services under agreement with a law enforcement agency; or automated maritime telecommunications system (AMTS) network control communications. Two-way voice communications and all other types of uses not mentioned above are expressly prohibited."

(iv) Prior to operating a LPRS transmitter for AMTS purposes, an AMTS licensee must notify, in writing, each television station that may be affected by such operations, as defined in § 80.215(h) of this chapter. The notification provided with the station's license application is sufficient to satisfy this requirement if no new television stations would be affected.

(g) Labeling requirements.

(1) Each LPRS transmitting device shall bear the following statement in a conspicuous location on the device: "This device may not interfere with TV reception or Federal Government radar."

(i) Where LPRS device is constructed in two or more sections connected by wire and marketed together, the statement specified in this section is required to be affixed only to the main control unit.

(ii) When the LPRS device is so small or for such use that it is not practicable to place the statement specified in the section on it, the statement must be placed in a prominent location in the instruction manual or pamphlet supplied to the user or, alternatively, shall be placed on the container in which the device is marketed.

(2) Additional information regarding certification and labeling of PLBs is set forth in § 95.907.

(3) WMTS. Each device shall be labeled with the following statement: "Operation of this equipment requires the prior coordination with a frequency coordinator designated by the FCC for the Wireless Medical Telemetry Service."

§ 95.35 Power.

(a) Use of a transmitter which has power (power output, EIRP, field strength, carrier or peak envelope power) in excess of that specified below voids your authority to operate the station.

(b) *GMRS.*

(1) Except as provided for in paragraph (2) of this section, the maximum power permitted is as follows:

(i) GMRS base stations—50 watts output power;

(ii) GMRS small base stations (operating on even numbered GMRS channels)—5 watts output power;

(iii) GMRS fixed stations—15 watts output power;

(iv) GMRS mobile stations (except portable/handheld units)—50 watts output power; and

(v) GMRS portable/handheld units—2 watts ERP.

(2) Any GMRS station located at a point north of Line A or east of Line C must transmit with no more than 5 watts ERP.

(c) *R/C.* Your R/C station transmitter power output must not exceed the following value under any conditions:

Channel (MHz)	Transmitter power (carrier power) watts
27.255	25
26.995–27.195	4
72–76	0.75

(d) *CB.* Your CB station transmitter power output must not exceed the following values under any conditions: AM (A3)—4 watts (carrier power) SSB—12 watts (peak envelope power).

(e) *FRS.* Regardless of modulation, the power shall not exceed 0.5 watts ERP.

(f) *LPRS.* The maximum allowable ERP for a station in the LPRS other than an AMTS station is 100 mW. The maximum allowable ERP for an AMTS station in the LPRS is 1 W, so long as emissions are attenuated, in accordance with § 80.211 of this chapter, at the band edges.

(g) *WMTS.* The maximum field strength authorized for WMTS stations in the 608–614 MHz band is 200 mV/m, measured at 3 meters using measuring instrumentation with a CISPR quasi-peak detector. For stations in the 1395–1400 MHz and 1427–1429.5 MHz bands, the maximum field strength is 740 mV/m, measured at 3 meters using measuring equipment with an averaging detection and a 1 MHz measurement bandwidth.

(h) *MURS.* Regardless of modulation, the power shall not exceed 2 watts ERP.

(i) *PLB. See* § 95.907.

(j) *DSRCS–OBU.* DSRCS–OBUs are governed under subpart L of this part, except the maximum output power for portable DSRCS–OBUs is 1.0 mW. For purposes of this paragraph, a portable is a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

§ 95.37 Frequency tolerance.

(a) *GMRS.* Each GMRS transmitter for mobile station, small base station and control station operation must be maintained within a frequency tolerance of 5 parts-per-million. Each GMRS transmitter for base station (except small base), mobile relay station or fixed station operation must be maintained within a frequency tolerance of 2.5 parts-per-million.

(b) *R/C.*

(1) Each R/C transmitter that transmits in the 26–27 MHz frequency band with a mean transmitter power of 2.5 W or less and that is used solely by the operator to turn on and/or off a device at a remote location, other than a device used solely to attract attention, must be maintained within a frequency tolerance of 100 parts-per-million.

(2) All other R/C transmitters that transmit in the 26–27 MHz frequency band must be maintained within a frequency tolerance of 5 parts-per-million.

(3) Except as noted in paragraph (b)(4) of this section, R/C transmitters capable of operation in the 72–76 MHz band must be maintained within a frequency tolerance of 50 parts-per-million.

(4) All R/C transmitters capable of operation in the 72–76 MHz band that are manufactured in or imported into the United States, on or after March 1, 1992, or are marketed on or after March 1, 1993, must be maintained within a frequency tolerance of 20 parts-per-million.

(c) *CB.* Each CB transmitter must be maintained within a frequency tolerance of 50 parts-per-million.

(d) *FRS.* Each FRS transmitter must be maintained within a frequency tolerance of 2.5 parts-per-million.

(e) *LPRS.* LPRS transmitters operating on standard band (25 kHz) channels or extra band (50 kHz) channels must be maintained within a frequency stability of 50 parts-per-million. LPRS transmitters operating on narrowband (5 kHz) channels must be maintained within a frequency stability of 1.5 parts-per-million.

(f) *WMTS.* Manufacturers of wireless medical telemetry devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all of the manufacturer's specified conditions.

(g) *MURS.* Each MURS transmitter must maintain a frequency tolerance of 5 parts-per-million, or 2 parts-per-million if designed to operate with a 6.25 kHz bandwidth.

(h) *PLB. See* § 95.907.

§ 95.39 Bandwidth limitations.

(a) *Authorized bandwidths (except as noted below).* The authorized bandwidth (maximum permissible bandwidth of a transmission) for emission type H1D, J1D, R1D, H3E, J3E or R3E is 4 kHz. The authorized bandwidth for emission type A1D or A3E is 8 kHz. The authorized bandwidth for emission type F1D, G1D, F3E or G3E is 20 kHz.

(b) *R/C bandwidths.* The authorized bandwidth for any emission type transmitted by an R/C transmitter is 8 kHz.

(c) *FRS bandwidths.* The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.25 kHz. Additional bandwidths for FRS are listed in paragraph (a) of this section.

(d) *LPRS bandwidths:*

(1) The authorized bandwidth for narrowband frequencies is 4 kHz and the channel bandwidth is 5 kHz.

(2) The channel bandwidth for standard band frequencies is 25 kHz.

(3) The channel bandwidth for extra band frequencies is 50 kHz.

(4) AMTS stations may use the 216.750–217.000 MHz band as a single 250 kHz channel so long as the signal is attenuated as specified in § 95.41.

(e) *MURS bandwidths:*

(1) Emissions on frequencies 151.820 MHz, 151.880 MHz, and 151.940 MHz are limited to 11.25 kHz.

(2) Emissions on frequencies 154.570 and 154.600 MHz are limited to 20.0 kHz.

(3) Provided, however, that all A3E emissions are limited to 8 kHz.

(f) DSRCS–OBUs are governed under subpart L of this part.

§ 95.41 Unwanted emissions.

The requirements in this section apply to each transmitter both with and without the connection of permitted attachments, such as an external speaker, microphone, power cord and/or antenna.

(a) *Emission masks.* Emission masks applicable to transmitting equipment in the Personal Radio Services are defined by the requirements in the following table. The numbers in the attenuation requirements column refer to rule paragraph numbers under paragraph (b) of this section.

Radio service (conditions)	Emission types filter	Attenuation requirements
GMRS	A1D, A3E, F1D, G1D, F3E, G3E With audio filter	(1), (3), (7)
GMRS	A1D, A3E, F1D, G1D, F3E, G3E without audio filter	(5), (6), (7)
GMRS	H1D, J1D, R1D, H3E, J3E, R3E	(2), (4), (7)
FRS	F2D, F3E with filter	(1), (3), (7)
R/C (27 MHz)	Any permitted emission	(1), (3), (7)
R/C (72–76 MHz)	Any permitted emission	(1), (10), (11), (12)
CB	A1D, A3E	(1), (3), (8), (9)
CB	H1D, J1D, R1D, H3E, J3E, R3E	(2), (4), (8), (9)
MURS (151.820, 151.880, 151.940 MHz)	Any permitted emission type	(21), (22)
MURS (154.570 & 154.600 MHz)	Any permitted emission type, with filter	(1), (3), (7)
MURS (154.570 & 154.600 MHz)	Any permitted emission type, without filter	(5), (23), (7)
LPRS (narrow 5 kHz)	Any permitted emission type	(13), (14)
LPRS (standard 25 kHz)	Any permitted emission type	(15), (16)
LPRS (extra 50 kHz)	Any permitted emission type	(17), (18)
LPRS (AMTS 250 kHz)	Any permitted emission type	(19), (20)
MedRadio (402–405 MHz)	Any permitted emission type	(24), (25)
MedRadio (401–402 MHz and 405–406 MHz)	Any permitted emission type	(26), (27)

Note 1: Filtering noted for GMRS and FRS transmitters refers to the requirement in § 95.43.

Note 2: Unwanted emission power may be measured as either mean power or peak envelope power, provided that the transmitter output power is measured the same way.

Note 3: Compliance with the attenuation requirements in paragraphs (b)(24) through (b)(27) of this section is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(b) *Attenuation requirements.* The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth.

(2) 25 dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 150% of the authorized bandwidth.

(3) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 250% of the authorized bandwidth.

(4) 35 dB on any frequency removed from the center of the authorized bandwidth by more than 150% up to and including 250% of the authorized bandwidth.

(5) 83 log (f_d/5) dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5 kHz up to and including 10 kHz.

(6) 116 log (f_d/6.1) dB, or if less, 50 + 10 log (P) dB, on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz), of more than 10 kHz up to and including 250% of the authorized bandwidth.

(7) 43 + 10 log (P) dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

(8) 53 + 10 log (P) dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

(9) 60 dB on any frequency twice or greater than twice the fundamental frequency.

(10) 45 dB on any frequency removed from the center of the authorized bandwidth by more than 100% up to and including 125% of the authorized bandwidth.

(11) 55 dB on any frequency removed from the center of the authorized bandwidth by more than 125% up to and including 250% of the authorized bandwidth.

(12) 56 + 10 log (P) dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

(13) 30 + 20($f_d - 2$) dB, or 55 + 10 log (P) dB, or 65 dB, whichever is least, on any frequency removed from the center

of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 2 kHz up to and including 3.75 kHz.

(14) 55 + 10 log (P) dB on any frequency removed from the center of the authorized bandwidth by more than 3.75 kHz.

(15) 30 dB on any frequency removed from the channel center frequency by 12.5 kHz to 22.5 kHz.

(16) 43 + 10 log (P) dB on any frequency removed from the channel center frequency by more than 22.5 kHz.

(17) 30 dB on any frequency removed from the channel center frequency by 25 kHz to 35 kHz.

(18) 43 + 10 log (P) dB on any frequency removed from the channel center frequency by more than 35 kHz.

(19) 30 dB on any frequency removed from the channel center frequency by 125 kHz to 135 kHz.

(20) 43 + 10 log (P) dB on any frequency removed from the channel center frequency by more than 135 kHz.

(21) $7.27(f_d - 2.88$ kHz) dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 5.625 kHz but no more than 12.5 kHz.

(22) 50 + 10 log (P) dB or 70 dB, whichever is the lesser attenuation, on any frequency removed from the center of the authorized bandwidth by more than 12.5 kHz.

(23) 29 log ($f_d^2 \div 11$) dB or 50 dB, whichever is the lesser attenuation on any frequency removed from the center of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 10 kHz, but not more than 250 percent of the authorized bandwidth.

(24) 20 dB, on any frequency within the 402–405 MHz MedRadio band that is more than 150 kHz away from the center frequency of the spectrum the transmission is intended to occupy.

(25) 20 dB, on any frequency between 401.750 MHz and 402.000 MHz, and on any frequency between 405 MHz and 405.250 MHz.

(26) 20 dB, on any frequency within the 401–402 MHz or 405–406 MHz MedRadio bands that is more than 50 kHz away from the center frequency of the spectrum the transmission is intended to occupy.

(27) 20 dB, on any frequency between 400.900 MHz and 401.000 MHz, and on any frequency between 406.000 MHz and 406.100 MHz.

(c) *Field strength limits for the WMTS.* The following field strength limits apply to WMTS transmitters.

(1) For WMTS transmitters, unwanted emissions on frequencies below 960 MHz are limited to 200 μV/m, measured at a distance of 3 meters using measuring instrumentation with a CISPR quasi-peak detector.

(2) For WMTS transmitters, unwanted emissions on frequencies above 960 MHz are limited to 500 μV/m, measured at a distance of 3 meters using measuring equipment with an averaging detector and a 1 MHz measurement bandwidth.

(d) *Field strength limits for the MedRadio service.* The field strength limits in the table in this paragraph apply to medical device transmitters, subject to the provisions in paragraphs (d)(1) through (d)(4) of this section.

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
30–88	100	3
88–216	150	3
216–960	200	3
960 and above	500	3

Note: At band edges, the tighter limit applies.

(1) For medical device transmitters operating in the 402–405 MHz MedRadio band, emissions on frequencies below 401.750 MHz or above 405.250 MHz must not exceed the field strength limits in the table in paragraph (d) of this section.

(2) For medical device transmitters operating in the 401–402 MHz or 405–406 MHz MedRadio bands, emissions on frequencies below 400.900 MHz or above 406.000 MHz must not exceed the field strength limits in the table in paragraph (d) of this section.

(3) Compliance with the field strength limits shown in the table in paragraph (d) of this section is based on the use of measurement instrumentation employing a CISPR quasi-peak detector, except that, for emissions on frequencies above 1 GHz, compliance is based on the use of measurement instrumentation employing an average detector. For measurements of emissions on frequencies above 1 GHz, a minimum resolution bandwidth of 1 MHz must be used.

(4) The emissions from a medical device transmitter must be measured to at least the tenth harmonic of the highest fundamental frequency designed to be emitted by the transmitter.

(e) *Harmful interference.* If harmonic or other spurious emissions result in harmful interference, the FCC may require appropriate technical changes in the station equipment to alleviate the interference, including the use of a low pass filter between the transmitter antenna terminals and the antenna feed line.

§ 95.43 Modulation standards.

(a) A GMRS transmitter that transmits emission types F1D, G1D, or G3E must not exceed a peak frequency deviation of plus or minus 5 kHz. A GMRS transmitter that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 5 kHz. A FRS unit that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 2.5 kHz, and the audio frequency response must not exceed 3.125 kHz.

(b) Each GMRS transmitter, except a mobile station transmitter with a power output of 2.5 W or less, must automatically prevent a greater than normal audio level from causing overmodulation. The transmitter also must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of § 95.41 (without filtering). The filter must be between the modulation limiter and the modulated stage of the transmitter. At any frequency (f in kHz) between 3 and 20 kHz, the filter must have an attenuation of at least 60 $\log_{10}$ (f/3) dB greater than the attenuation at 1 kHz. Above 20 kHz, it must have an attenuation of at least 50 dB greater than the attenuation at 1 kHz.

(c) When emission type A3E is transmitted, the modulation must be greater than 85% but must not exceed 100%. Simultaneous amplitude modulation and frequency or phase modulation of a transmitter are not permitted.

(d) When emission type A3E is transmitted by a CB transmitter having a transmitter output power of greater than 2.5 W, the CB transmitter must automatically prevent the modulation from exceeding 100%.

(e) Each CB transmitter that transmits emission type H3E, J3E or R3E must be capable of transmitting the upper sideband. The capability of also transmitting the lower sideband is permitted.

(f) DSRCS–OBUs are governed under subpart L of this part.

§ 95.45 Antenna limits.

(a) *GMRS.*

(1) Certain antenna structures used in a GMRS system and that are more than 60.96 m (200 ft) in height, or are located near or at a public-use airport, must be notified to the FAA and registered with the Commission as required by part 17 of this chapter.

(2) The antenna for a small base or control station must not be more than 6.1 meters (20 feet) above the ground or

above the building or tree on which it is mounted. Each base station and each control station with an antenna height greater than 6.1 meters (20 feet) must be separately identified on Form 605.

(3) Any GMRS station licensed after [EFFECTIVE DATE OF THE FINAL RULE] and located north of Line A or east of Line C must have an antenna no more than 20 feet above ground or above the building or tree on which it is mounted.

(4) The antenna of handheld portable GRMS units must be an integral part of the transmitter. The antenna must have no gain (as compared to a half-wave dipole) and must be vertically polarized.

(b) *R/C.*

(1) The antenna of each R/C station transmitting in the 72–76 MHz band must be an integral part of the transmitter. The antenna must have no gain (as compared to a half-wave dipole) and must be vertically polarized.

(2) For 27 MHz operation, if your antenna is mounted on a hand-held portable unit, none of the following limitations in paragraph (3) of this section apply.

(3) For 27 MHz operation, if your antenna is installed at a fixed location, it (whether receiving, transmitting or both) then the highest point must not be more than 6.10 meters (20 feet) higher than the highest point of the building or tree on which it is mounted; or 18.3 meters (60 feet) above the ground.

(4) If your R/C station is located near an airport, and if your antenna structure is more than 6.10 meters (20 feet) high, you may have to obey additional restrictions. The highest point of your antenna must not exceed one meter above the airport elevation for every hundred meters of distance from the nearest point of the nearest airport runway. Differences in ground elevation between your antenna and the airport runway may complicate this formula. If your R/C station is near an airport, you may contact the nearest FCC field office for a worksheet to help you figure the maximum allowable height of your antenna. Consult part 17 of the Commission's rules for more information.

(c) *CB.*

(1) If your antenna is mounted on a hand-held portable unit, none of the limitations in paragraph (c)(2) of this section apply.

(2) If your antenna is installed at a fixed location, it (whether receiving, transmitting or both), then the highest point must not be more than 6.10 meters (20 feet) higher than the highest point of the building or tree on which it is mounted or 18.3 meters (60 feet) above the ground.

(3) If your CB station is located near an airport, and if your antenna structure is more than 6.1 meters (20 feet) high, you may have to obey additional restrictions. The highest point of your antenna must not exceed one meter above the airport elevation for every hundred meters of distance from the nearest point of the nearest airport runway. Differences in ground elevation between your antenna and the airport runway may complicate this formula. If your CB station is near an airport, you may contact the nearest FCC field office for a worksheet to help you figure the maximum allowable height of your antenna. Consult part 17 of the Commission's rules for more information.

(d) *FRS.* The antenna of each FRS transmitter band must be an integral part of the transmitter. The antenna must have no gain (as compared to a half-wave dipole) and must be vertically polarized.

(e) *LPRS:*

(1) AMTS stations must employ directional antennas.

(2) Antennas used with LPRS units must comply with the following:

(i) For LPRS units operating entirely within an enclosed structure, *e.g.,* a building, there is no limit on antenna height;

(ii) For LPRS units not operating entirely within an enclosed structure, the tip of the antenna shall not exceed 30.5 meters (100 feet) above ground. In cases where harmful interference occurs the FCC may require that the antenna height be reduced; and

(iii) The height limitation in paragraph (e)(2) of this section does not apply to LPRS units in which the antenna is an integral part of the unit.

(f) *MURS.* The highest point of any MURS antenna must not be more than 18.3 meters (60 feet) above the ground or 6.10 meters (20 feet) above the highest point of the structure on which it is mounted.

§ 95.47 Telephone interconnection.

(a) Excepted as noted in paragraph (b) of this section, no station in the Personal Radio Services may be interconnected with the public switched network.

(b) Interconnection Defined. Connection through automatic or manual means of radio stations with the facilities of the public switched telephone network to permit the transmission of messages or signals between points in the wireline or radio network of a public telephone company and persons served by radio stations. Wireline or radio circuits or links furnished by common carriers, which are used by licensees or other authorized persons for transmitter control (including dial-up transmitter control circuits) or as an integral part of an authorized, private, internal system of communication or as an integral part of dispatch point circuits in a radio station are not considered to be interconnection for purposes of this rule part.

§ 95.49 RF safety.

Portable devices as defined in § 2.1093(b) of this chapter operating in the General Mobile Radio Service (GMRS), the Wireless Medical Telemetry Service (WMTS) and the Medical Device Radiocommunication Service (MedRadio) part 95 subparts C, H and I of this chapter are subject to radio frequency radiation exposure requirements as specified in §§ 1.1307(b) and 2.1093 of this chapter. Applications for equipment authorization for these devices must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

Subpart C—General Mobile Radio Service (GMRS)

§ 95.101 Scope.

This subpart contains the operating requirements for GMRS. General and technical information pertaining to this service is contained in subparts A and B of this part.

§ 95.103 Channels available.

(a) GMRS channels listed below in this section are available to GMRS licensees only on a shared basis and will not be assigned for the exclusive use of any licensee. All GMRS licensees must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

Channel No.	Center frequency (MHz)	Station class	Channel No.	Center frequency (MHz)	Station class
1	462.5500	Base or mobile	16	467.5500	Mobile.[1]
2	462.5625	Sm Base or mobile[2]	17		
3	462.5750	Base or mobile	18	467.5750	Mobile.[1]
4	462.5875	Sm Base or mobile[2]	19		
5	462.6000	Base or mobile	20	467.6000	Mobile.[1]
6	462.6125	Sm Base or mobile[2]	21		
7	462.6250	Base or mobile	22	467.6250	Mobile.[1]
8	462.6375	Sm Base or mobile[2]	23		
9	462.6500	Base or mobile	24	467.6500	Mobile.[1]
10	462.6625	Sm Base or mobile[2]	25		
11	462.6750	Base or mobile	26	467.6750	Mobile [1]
12	462.6875	Sm Base or mobile[2]	27		
13	462.7000	Base or mobile	28	467.7000	Mobile.[1]
14	462.7125	Sm Base or mobile[2]	29		
15	462.7250	Base or mobile	30	467.7250	Mobile.[1]

[1] These channels may be used for fixed stations for controlling a repeater station.

[2] Except for a GMRS system licensed to a non-individual, a mobile station or a small base station operating in the simplex mode may transmit on these channels only under the following conditions:

(a) Only voice type emissions may be transmitted;

(b) The station does not transmit one-way pages; and

(c) The station transmits with no more than 5 watts output power.

(b) Operators of GMRS systems suffering or causing harmful interference are expected to cooperate and resolve this problem by mutually satisfactory arrangements. If the operators are unable to do so, the FCC may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations concerned. Further, the use of any frequency at a given geographical location may be denied when, in the judgment of the FCC, its use in that location is not in the public interest; the use of any channel or channel pair may be restricted as to specified geographical areas, maximum power, or other operating conditions.

§ 95.105 Permissible communications.

(a) You may use your GMRS station only to transmit two-way plain language voice communications concerning personal or business activities. Two-way plain language communications are communications without codes or coded messages. Operating signals such as "ten codes" are not considered codes or coded messages.

(b) One way paging is not permitted.

(c) Continuous or uninterrupted transmissions, except for communications involving the immediate safety of life or property, are prohibited.

(d) GMRS units may transmit digital data containing location information, or requesting location information from one or more other units within that service, or containing a brief text message to another specific unit. Digital data transmissions must be initiated by a manual action or command of a user, except that a GMRS unit receiving an interrogation request may automatically respond with its location. Digital data transmissions shall not exceed one second, and shall be limited to no more than one digital transmission within a thirty-second period, except that a unit may automatically respond to more than one interrogation request received within a thirty-second period.

Subpart D—Radio Control (R/C) Radio Service

§ 95.201 Scope.

This subpart contains the operating requirements for the R/C Service. General and technical information pertaining to this service is contained in subparts A and B of this part.

§ 95.203 Channels available.

(a) Your R/C station may transmit only on the following channels (frequencies):

(1) The following channels may be used to operate any kind of device (any object or apparatus, except an R/C transmitter), including a model aircraft device (any small imitation of an aircraft) or a model surface craft device (any small imitation of a boat, car or vehicle for carrying people or objects, except aircraft): 26.995, 27.045, 27.095, 27.145, 27.195 and 27.255 MHz.

(2) The following channels may only be used to operate a model aircraft device:

Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)
1	72.01	11	72.21	21	72.41	31	72.61	41	72.81
2	72.03	12	72.23	22	72.43	32	72.63	42	72.83
3	72.05	13	72.25	23	72.45	33	72.65	43	72.85
4	72.07	14	72.27	24	72.47	34	72.67	44	72.87
5	72.09	15	72.29	25	72.49	35	72.69	45	72.89
6	72.11	16	72.31	26	72.51	36	72.71	46	72.91
7	72.13	17	72.33	27	72.53	37	72.73	47	72.93
8	72.15	18	72.35	28	72.55	38	72.75	48	72.95
9	72.17	19	72.37	29	72.57	39	72.77	49	72.97
10	72.19	20	72.39	30	72.59	40	72.79	50	72.99

(3) The following channels may only be used to operate model surface craft devices:

Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)	Ch No.	Frequency (MHz)
51	75.41	57	75.53	63	75.65	69	75.77	75	75.89
52	75.43	58	75.55	64	75.67	70	75.79	76	75.91
53	75.45	59	75.57	65	75.69	71	75.81	77	75.93
54	75.47	60	75.59	66	75.71	72	75.83	78	75.95
55	75.49	61	75.61	67	75.73	73	75.85	79	75.97
56	75.51	62	75.63	68	75.75	74	75.87	80	75.99

(b) R/C channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All R/C users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

(c) Your R/C station may not transmit simultaneously on more than one channel in the 72–76 MHz band when your operation would cause harmful interference to the operation of other R/C stations.

(d) Your R/C station must stop transmitting if it interferes with:

(1) Authorized radio operations in the 72–76 MHz band; or

(2) Television reception on TV Channels 4 or 5.

(e) Stations in the 26–27 MHz range are not afforded any protection from interference caused by the operation of industrial, scientific or medical devices. Such stations also operate on a shared basis with other stations in the Personal Radio Services.

(f) Stations in the 72–76 MHz range are subject to the condition that interference will not be caused to the remote control of industrial equipment operating on the same or adjacent frequencies. These frequencies are not afforded any protection from interference due to the operation of fixed and mobile stations in other services assigned to the same or adjacent frequencies.

§ 95.207 Permissible communications.

(a) You may only use your R/C station to transmit one-way communications. (One-way communications are transmissions which are not intended to establish communications with another station.)

(b) You may only use your R/C station for the following purposes:

(1) The operator turns on and/or off a device at a remote location; or

(2) A sensor at a remote location turns on and/off an indicating device for the operator. Only frequencies 26.995 to 27.255 MHz may be used for this purpose. (A remote location means a place distant from the operator).

(c) You must not use a R/C station to transmit data. Tone or other signal encoding, however, is not considered to be data when only used either for the purpose of identifying the specific device among multiple devices that the operator intends to turn on/off, or the specific sensor among multiple sensors intended to turn on/off an indicating device for the operator.

§ 95.209 Special restrictions on the location of R/C stations.

(a) If your R/C station is located on premises controlled by the Department of Defense, you may be required to comply with additional regulations imposed by the commanding officer of the installation.

(b) If your R/C station will be constructed on an environmental sensitive site, or will be operated in such a manner as to raise environmental problems, under § 1.1307 of this chapter, you must provide an environmental assessment, as set forth in § 1.1311 of this chapter, and undergo environmental review § 1.1312 of this chapter, before commencement of construction.

(c) Anyone intending to operate an R/C station on the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra in a manner that could pose an interference threat to the Arecibo Observatory shall notify the Interference Office, Arecibo Observatory, HC3 Box 53995, Arecibo, Puerto Rico 00612, in writing or electronically, of the location of the unit. Operators may wish to consult interference guidelines, which will be provided by Cornell University. Operators who choose to transmit information electronically should e-mail to: *prcz@naic.edu.*

(1) The notification to the Interference Office, Arecibo Observatory shall be made 45 days prior to commencing operation of the unit. The notification shall state the geographical coordinates of the unit.

(2) After receipt of such notifications, the Commission will allow the Arecibo Observatory a period of 20 days for comments or objections. The operator will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory. If the Commission determines that an operator has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, the unit may be allowed to operate.

§ 95.211 Operation by remote control.

(a) You may not operate an R/C transmitter by radio remote control.

(b) You may operate an R/C transmitter by wireline remote control if you obtain specific approval in writing from the FCC. To obtain FCC approval, you must show why you need to operate your station by wireline remote control. If you receive FCC approval, you must keep the approval as part of your station records. *See* § 95.11.

(c) Remote control means operation of an R/C transmitter from any place other than the location of the R/C transmitter. Direct mechanical control or direct electrical control by wire from some point on the same premises, craft or vehicles as the R/C transmitter is not considered remote control.

Subpart E—Citizens Band (CB) Radio Service

§ 95.301 Scope.

This subpart contains the operating requirements for the CB Radio Service. Other general and technical information and requirements pertaining to this service are also contained in subparts A and B of this part.

§ 95.303 Am I eligible to operate a CB station?

You are authorized to operate a CB station unless:

(a) You are a foreign government, a representative of a foreign government, or a federal government agency; or

(b) The FCC has issued a cease and desist order to you, and the order is still in effect.

§ 95.305 Are there any special restrictions on the location of my CB station?

(a) If your CB station is located on premises controlled by the Department of Defense you may be required to comply with additional regulations imposed by the commanding officer of the installation.

(b) If your C/B station will be constructed on an environmentally sensitive site, or will be operated in such a manner as to raise environmental problems, under § 1.1307 of this chapter, you must provide an environmental assessment, as set forth in § 1.1311 of this chapter, and undergo the environmental review, § 1.1312 of this chapter, before commencement of construction.

§ 95.307 On what channels may I operate?

(a) Your CB station may transmit only on the following channels (frequencies):

Channel No.	Frequency (MHz)
1	26.965
2	26.975
3	26.985
4	27.005
5	27.015
6	27.025
7	27.035
8	27.055
9	[1] 27.065
10	27.075
11	27.085
12	27.105
13	27.115
14	27.125
15	27.135
16	27.155
17	27.165
18	27.175
19	27.185
20	27.205
21	27.215
22	27.225
23	27.255
24	27.235
25	27.245
26	27.265
27	27.275
28	27.285
29	27.295
30	27.305
31	27.315
32	27.325
33	27.335
34	27.345
35	27.355
36	27.365
37	27.375
38	27.385
39	27.395
40	27.405

[1] *See* paragraph (c) of this section.

(b) CB channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All CB users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

(c) Channel 9 may be used only for emergency communications or for traveler assistance.

(d) You may use any channel for emergency communications or for traveler assistance.

§ 95.309 Do I have any antenna limitations?

(a) If your antenna is mounted on a hand-held portable unit, none of the following limitations apply.

(b) If your antenna (whether receiving, transmitting or both) is installed at a fixed location, at its highest point, it must not be more than 6.10 meters (20 feet) higher than the highest point of the building or tree on which it is mounted; or at its highest point, it must not be higher than 18.3 meters (60 feet) above the ground.

(c) If your CB station is located near an airport, and if your antenna structure is more than 6.1 meters (20 feet) high, you may have to obey additional restrictions. The highest point of your antenna must not exceed one meter above the airport elevation for every hundred meters of distance from the nearest point of the nearest airport runway. Differences in ground elevation between your antenna and the airport runway may complicate this formula. If your CB station is near an airport, you may contact the nearest FCC field office for a worksheet to help you figure the maximum allowable height of your antenna. Consult part 17 of the Commission's rules for more information.

§ 95.311 What equipment may I use at my CB station?

(a) You must use an FCC certificated CB transmitter at your CB station. You can identify an FCC certificated transmitter by the certification label placed on it by the manufacturer. You may examine a list of certificated equipment at any FCC Field Office or at FCC Headquarters. Use of a transmitter which is not FCC certificated voids your authority to operate the station.

(b) You must not make, or have made, any modifications to a certificated CB transmitter that changes or affects the technical operation of that transmitter, including any modification to provide for additional transmitting frequencies, increased modulation level, a different form of modulation, or increased transmitter output power (either mean power or peak envelope power or both). Any internal modification to a certificated CB transmitter cancels the certification, and use of such a transmitter voids your authority to operate the station.

§ 95.313 May I use power amplifiers?

(a) You may not attach the following items (power amplifiers) to your certificated CB transmitter in any way:

(1) External radio frequency (RF) power amplifiers (sometimes called linears or linear amplifiers); or

(2) Any other devices which, when used with a radio transmitter as a signal source, are capable of amplifying the signal.

(b) There are no exceptions to this rule and use of a power amplifier voids your authority to operate the station.

(c) The FCC will presume you have used a linear or other external RF power amplifier if—

(1) It is in your possession or on your premises; and

(2) There is other evidence that you have operated your CB station with more power than allowed.

(d) Paragraph (c) of this section does not apply if you hold a license in another radio service which allows you to operate an external RF power amplifier.

§ 95.315 What communications may be transmitted?

(a) You may use your CB station to transmit two-way plain language communications. Two-way plain language communications are communications without codes or coded messages. Operating signals such as "ten codes" are not considered codes or coded messages. You may transmit two-way plain language communications only to other CB stations, to units of your own CB station or to authorized government stations on CB frequencies.

(b) You must not use a CB station to communicate with stations in other countries, except General Radio Service stations in Canada.

(c) You may use your CB station to transmit one-way communications (messages which are not intended to establish communications between two or more particular CB stations) only for emergency communications, traveler assistance, brief tests (radio checks) or voice paging.

(d) You may use your CB station to transmit a tone signal only when the signal is used to make contact or to continue communications. (Examples of circuits using these signals are tone operated squelch and selective calling circuits.) If the signal is an audible tone, it must last no longer than 15 seconds at one time. If the signal is a subaudible

tone, it may be transmitted continuously only as long as you are talking.

§ 95.317 What communications are prohibited?

(a) You must not use a CB station—

(1) In connection with any activity which is against federal, state or local law;

(2) To transmit obscene, indecent or profane words, language or meaning;

(3) To interfere intentionally with the communications of another CB station;

(4) To transmit one-way communications, except for emergency communications, traveler assistance, brief tests (radio checks), or voice paging;

(5) To advertise or solicit the sale of any goods or services;

(6) To transmit music, whistling, sound effects or any material to amuse or entertain;

(7) To transmit any sound effect solely to attract attention;

(8) To transmit the word "MAYDAY" or any other international distress signal, except when your station is located in a ship, aircraft or other vehicle which is threatened by grave and imminent danger and you are requesting immediate assistance;

(9) To communicate with, or attempt to communicate with, any CB station more than 250 kilometers (155.3 miles) away;

(10) To advertise a political candidate or political campaign; (you may use your CB radio for the business or organizational aspects of a campaign, if you follow all other applicable rules);

(11) To communicate with stations in other countries, except General Radio Service stations in Canada; or

(12) To transmit a false or deceptive communication.

(b) You must not use a CB station to transmit communications for live or delayed rebroadcast on a radio or television broadcast station. You may use your CB station to gather news items or to prepare programs.

§ 95.319 May I be paid to use my CB station?

(a) You may not accept direct or indirect payment for transmitting with a CB station.

(b) You may use a CB station to help you provide a service, and be paid for that service, as long as you are paid only for the service and not for the actual use of the CB station.

§ 95.321 Do I have to limit the length of my communications?

(a) You must limit your CB communications to the minimum practical time.

(b) If you are communicating with another CB station or stations, you, and the stations communicating with you, must limit each of your conversations to no more than five continuous minutes.

(c) At the end of your conversation, you, and the stations communicating with you, must not transmit again for at least one minute.

§ 95.323 How do I use my CB station in an emergency or to assist a traveler?

(a) You must at all times and on all channels, give priority to emergency communications.

(b) You may use your CB station for communications necessary to assist a traveler to reach a destination or to receive necessary services.

(c) You may use your CB station to transmit one-way communications concerning highway conditions to assist travelers.

§ 95.325 May I operate my CB station transmitter by remote control?

(a) You may not operate a CB station transmitter by radio remote control. The use of a hands-free wireless microphone authorized under part 15 of this chapter to operate a part 95 transmitter in the immediate vicinity is not considered operation by radio remote control for the purposes of this section.

(b) You may operate a CB transmitter by wireline remote control if you obtain specific approval in writing from the FCC. To obtain FCC approval, you must show why you need to operate your station by wireline remote control. If you receive FCC approval, you must keep the approval as part of your station records.

(c) Remote control means operation of a transmitter from any place other than the location of the transmitter. Direct mechanical control or direct electrical control by wire from some point on the same premises, craft or vehicle as the transmitter is not considered remote control.

§ 95.327 May I connect my CB station transmitter to a telephone?

(a) You may connect your CB station transmitter to a telephone if you comply with all of the following:

(1) You or someone else must be present at your CB station and must—

(i) Manually make the connection (the connection must not be made by remote control);

(ii) Supervise the operation of the transmitter during the connection;

(iii) Listen to each communication during the connection; and

(iv) Stop all communications if there are operations in violation of the Commission's rules.

(2) Each communication during the telephone connection must comply with all of the Commission's rules.

(3) You must obey any restriction that the telephone company places on the connection of a CB transmitter to a telephone.

(b) The CB transmitter you connect to a telephone must not be shared with any other CB station.

(c) If you connect your CB transmitter to a telephone, you must use a phone patch device which has been registered with the FCC.

Subpart F—Family Radio Service (FRS)

§ 95.401 Scope.

This subpart contains the operating requirements for the FRS. General and technical information pertaining to this service is contained in subparts A and B.

§ 95.403 Channels available.

(a) The FRS unit channel frequencies are:

Channel No.	Frequency (MHz)
1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125

(b) FRS channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All FRS users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

§ 95.405 Permissible communications.

You may use an FRS unit to conduct two-way voice communications with another person. You may use the FRS unit to transmit one-way communications only to establish communications with another person, send an emergency message, provide traveler assistance, provide location information, transmit a brief text message, make a voice page, or to conduct a brief test.

Subpart G—Low Power Radio Service (LPRS)

§ 95.501 Scope.

This subpart contains the operating requirements for the LPRS. General and

technical information pertaining to this service is contained in subparts A and B of this part.

§ 95.503 Channels available.

(a) LPRS transmitters may operate on any frequency listed in paragraphs (b), (c), and (d) of this section. Channels 19, 20, 50, and 151–160 are available exclusively for law enforcement tracking purposes. AMTS transmissions are limited to the 216.750–217.000 MHz band for low power point-to-point network control communications by AMTS coast stations. Other AMTS transmissions in the 216–217 MHz band are prohibited.

(b) The following table indicates standard band frequencies (the channel bandwidth is 25 kHz):

Channel No.	Center frequency (MHz)
1	216.0125
2	216.0375
3	216.0625
4	216.0875
5	216.1125
6	216.1375
7	216.1625
8	216.1875
9	216.2125
10	216.2375
11	216.2625
12	216.2875
13	216.3125
14	216.3375
15	216.3625
16	216.3875
17	216.4125
18	216.4375
19	216.4625
20	216.4875
21	216.5125
22	216.5375
23	216.5625
24	216.5875
25	216.6125
26	216.6375
27	216.6625
28	216.6875
29	216.7125
30	216.7375
31	216.7625
32	216.7875
33	216.8125
34	216.8375
35	216.8625
36	216.8875
37	216.9125
38	216.9375
39	216.9625
40	216.9875

(c) The following table indicates extra band frequencies (the channel bandwidth is 50 kHz):

Channel No.	Center frequency (MHz)
41	216.025
42	216.075
43	216.125
44	216.175
45	216.225
46	216.275
47	216.325
48	216.375
49	216.425
50	216.475
51	216.525
52	216.575
53	216.625
54	216.675
55	216.725
56	216.775
57	216.825
58	216.875
59	216.925
60	216.975

(d) The following table indicates narrowband frequencies (the channel bandwidth is 5 kHz and the authorized bandwidth is 4 kHz):

Channel No.	Center frequency (MHz)
61	216.0025
62	216.0075
63	216.0125
64	216.0175
65	216.0225
66	216.0275
67	216.0325
68	216.0375
69	216.0425
70	216.0475
71	216.0525
72	216.0575
73	216.0625
74	216.0675
75	216.0725
76	216.0775
77	216.0825
78	216.0875
79	216.0925
80	216.0975
81	216.1025
82	216.1075
83	216.1125
84	216.1175
85	216.1225
86	216.1275
87	216.1325
88	216.1375
89	216.1425
90	216.1475
91	216.1525
92	216.1575
93	216.1625
94	216.1675
95	216.1725
96	216.1775
97	216.1825
98	216.1875
99	216.1925
100	216.1975
101	216.2025
102	216.2075
103	216.2125
104	216.2175
105	216.2225
106	216.2275
107	216.2325
108	216.2375
109	216.2425
110	216.2475
111	216.2525
112	216.2575
113	216.2625
114	216.2675
115	216.2725
116	216.2775
117	216.2825
118	216.2875
119	216.2925
120	216.2975
121	216.3025
122	216.3075
123	216.3125
124	216.3175
125	216.3225
126	216.3275
127	216.3325
128	216.3375
129	216.3425
130	216.3475
131	216.3525
132	216.3575
133	216.3625
134	216.3675
135	216.3725
136	216.3775
137	216.3825
138	216.3875
139	216.3925
140	216.3975
141	216.4025
142	216.4075
143	216.4125
144	216.4175
145	216.4225
146	216.4275
147	216.4325
148	216.4375
149	216.4425
150	216.4475
151	216.4525
152	216.4575
153	216.4625
154	216.4675
155	216.4725
156	216.4775
157	216.4825
158	216.4875
159	216.4925
160	216.4975
161	216.5025
162	216.5075
163	216.5125
164	216.5175
165	216.5225
166	216.5275
167	216.5325
168	216.5375
169	216.5425
170	216.5475
171	216.5525
172	216.5575
173	216.5625
174	216.5675
175	216.5725

Channel No.	Center frequency (MHz)
176	216.5775
177	216.5825
178	216.5875
179	216.5925
180	216.5975
181	216.6025
182	216.6075
183	216.6125
184	216.6175
185	216.6225
186	216.6275
187	216.6325
188	216.6375
189	216.6425
190	216.6475
191	216.6525
192	216.6575
193	216.6625
194	216.6675
195	216.6725
196	216.6775
197	216.6825
198	216.6875
199	216.6925
200	216.6975
201	216.7025
202	216.7075
203	216.7125
204	216.7175
205	216.7225
206	216.7275
207	216.7325
208	216.7375
209	216.7425
210	216.7475
211	216.7525
212	216.7575
213	216.7625
214	216.7675
215	216.7725
216	216.7775
217	216.7825
218	216.7875
219	216.7925
220	216.7975
221	216.8025
222	216.8075
223	216.8125
224	216.8175
225	216.8225
226	216.8275
227	216.8325
228	216.8375
229	216.8425
230	216.8475
231	216.8525
232	216.8575
233	216.8625
234	216.8675
235	216.8725
236	216.8775
237	216.8825
238	216.8875
239	216.8925
240	216.8975
241	216.9025
242	216.9075
243	216.9125
244	216.9175
245	216.9225
246	216.9275
247	216.9325
248	216.9375
249	216.9425
250	216.9475
251	216.9525
252	216.9575
253	216.9625
254	216.9675
255	216.9725
256	216.9775
257	216.9825
258	216.9875
259	216.9925
260	216.9975

(e) LPRS channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All LPRS users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

(f) Operation is subject to the conditions that no harmful interference is caused to the United States Air Force Space Surveillance system (operating in the band 216.88–217.08 MHz) or to TV reception within the Grade B contour of any TV Channel 13 station or within the 68 dBμV/m predicted contour of any low power TV or TV translator station operating on Channel 13.

§ 95.505 Permissible communications.

(a) LPRS stations may transmit voice, data, or tracking signals as permitted in this section. Two-way voice communications are prohibited.

(b) Auditory assistance communications (including but not limited to applications such as assistive listening devices, audio description for the blind, and simultaneous language translation) for:

(1) Persons with disabilities. In the context of the LPRS, the term "disability" has the meaning given to it by section 3(2)(A) of the Americans with Disabilities Act of 1990 (42 U.S.C. 2102(2)(A)), *i.e.,* persons with a physical or mental impairment that substantially limits one or more of the major life activities of such individuals;

(2) Persons who require language translation; or

(3) Persons who may otherwise benefit from auditory assistance communications in educational settings.

(c) Health care related communications for the ill.

(d) Law enforcement tracking signals (for homing or interrogation) including the tracking of persons or stolen goods under authority or agreement with a law enforcement agency (federal, state, or local) having jurisdiction in the area where the transmitters are placed.

(e) AMTS point-to-point network control communications.

§ 95.507 Notification requirement.

Prior to operating a LPRS transmitter for AMTS purposes, an AMTS licensee must notify, in writing, each television station that may be affected by such operations, as defined in § 80.215(h) of this chapter. The notification provided with the station's license application is sufficient to satisfy this requirement if no new television stations would be affected.

§ 95.509 Marketing limitations.

Transmitters intended for operation in the LPRS may be marketed and sold only for those uses described in § 95.505(a) through (d).

Subpart H—Wireless Medical Telemetry Service (WMTS)

§ 95.601 Scope.

This subpart sets out the regulations governing the operation of Wireless Medical Telemetry Devices in the 608–614 MHz, 1395–1400 MHz and 1427–1429.5 MHz frequency bands.

§ 95.603 Channels available.

(a) WMTS transmitters may operate on any channel within frequency bands 608–614 MHz, 1395–1400 MHz, and 1427–1432 MHz, as specified in paragraph (b) of this section.

(b) In the 608–614 MHz band, wireless medical telemetry devices utilizing broadband technologies such as spread spectrum shall be capable of operating within one or more of the following channels of 1.5 MHz each, up to a maximum of 6 MHz, and shall operate on the minimum number of channels necessary to avoid harmful interference to any other wireless medical telemetry devices.

Channel number	Channel bandwidth
1	608.0–609.5 MHz
2	609.5–611.0 MHz
3	611.0–612.5 MHz
4	612.5–614.0 MHz

(c) WMTS channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All WMTS users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

(d) Operations in the 608–614 MHz band (television Channel 37) are not protected from adjacent band

interference from broadcast television operating on Channels 36 and 38.

§ 95.605 Permissible communications.

(a) All types of communications except voice and video are permitted, on both a unidirectional and bidirectional basis, provided that all such communications are related to the provision of medical care. Waveforms such as electrocardiograms (ECGs) are not considered video.

(b) Operations that comply with the requirements of this part may be conducted under manual or automatic control, and on a continuous basis.

§ 95.607 Frequency coordination.

(a) Prior to operation, authorized health care providers who desire to use wireless medical telemetry devices must register all devices with a designated frequency coordinator. The registration must include the following information:

(1) Specific frequencies or frequency range(s) used;

(2) Modulation scheme used (including occupied bandwidth);

(3) Effective radiated power;

(4) Number of transmitters in use at the health care facility as of the date of registration including manufacturer name(s) and model numbers;

(5) Legal name of the authorized health care provider;

(6) Location of transmitter (coordinates, street address, building); and

(7) Point of contact for the authorized health care provider (name, title, office, phone number, fax number, e-mail address).

(b) An authorized health care provider shall notify the frequency coordinator whenever a medical telemetry device is permanently taken out of service, unless the device is replaced with another transmitter utilizing the same technical characteristics as those reported on the effective registration. An authorized health care provider shall maintain the information contained in each registration current in all material respects, and shall notify the frequency coordinator when any change is made in the location or operating parameters previously reported which is material.

§ 95.609 Frequency coordinator.

(a) The Commission's frequency coordinator(s) to manage the usage of the frequency bands for the operation of medical telemetry devices is (are):

John T. Collins, Director of Engineering and Compliance, American Hospital Association, One North Franklin, Chicago, IL 60606, P: 312–422–3805, F: 312–422–4571, E: *jcollins@aha.org.*

Updated information on the Commission's frequency coordinator can be found at: *http://wireless.fcc.gov/services/index.htm?job=licensing_1&id=wireless_medical_telemetry*

(b) The frequency coordinator shall:

(1) Review and process coordination requests submitted by authorized health care providers as required in § 95.609;

(2) Maintain a database of WMTS use;

(3) Notify users of potential conflicts;

(4) Coordinate WMTS operation with radio astronomy observatories and Federal Government radar systems as specified in §§ 95.613 and 95.615.

(5) Notify licensees—who are operating in accordance with § 90.259(b) of this chapter—of the need to comply with the field strength limit of § 90.259(b)(11) of this chapter prior to initial activation of WMTS equipment in the 1427–1432 MHz band.

(6) Notify licensees—who are operating in 1392–1395 MHz band in accordance with part 27, subpart I of this chapter—of the need to comply with the field strength limit of § 27.804 of this chapter prior to initial activation of WMTS equipment in the 1395–1400 MHz band.

§ 95.611 Special requirements for operating in the 608–614 MHz band.

For a wireless medical telemetry device operating within the frequency range 608–614 MHz and that will be located near the radio astronomy observatories listed below, operation is not permitted until a WMTS frequency coordinator specified in § 95.609 has coordinated with, and obtained the written concurrence of, the director of the affected radio astronomy observatory before the equipment can be installed or operated.

(a) Within 80 kilometers of:

(1) National Astronomy and Ionosphere Center, Arecibo, Puerto Rico: 18°-20′-38.28″ North Latitude, 66°-45′-09.42″ West Longitude;

(2) National Radio Astronomy Observatory, Socorro, New Mexico: 34°-04′-43″ North Latitude, 107°-37′-04″ West Longitude; or

(3) National Radio Astronomy Observatory, Green Bank, West Virginia: 38°-26′-08″ North Latitude, 79°-49′-42″ West Longitude.

(b) Within 32 kilometers of the National Radio Astronomy Observatory centered on:

Very long baseline array stations	Latitude (north)	Longitude (west)
Pie Town, NM	34°-18′	108°-07′
Kitt Peak, AZ	31°-57′	111°-37′
Los Alamos, NM	35°-47′	106°-15′
Fort Davis, TX	30°-38′	103°-57′
North Liberty, IA	41°-46′	91°-34′
Brewster, WA	48°-08′	119°-41′
Owens Valley, CA ..	37°-14′	118°-17′
Saint Croix, VI	17°-46′	64°-35′
Mauna Kea, HI	19°-49′	155°-28′
Hancock, NH	42°-56′	71°-59′

The National Science Foundation point of contact for coordination is: Spectrum Manager, Division of Astronomical Sciences, NSF Room 1045, 4201 Wilson Blvd., Arlington, VA 22230, telephone: 703–306–1823.

§ 95.613 Specific requirements for wireless medical telemetry devices operating in the 1395–1400 and 1427–1429.5 MHz bands.

Due to the critical nature of communications transmitted under this part, the frequency coordinator in consultation with the National Telecommunications and Information Administration shall determine whether there are any Federal Government systems whose operations could affect, or could be affected by, proposed wireless medical telemetry operations in the 1395–1400 MHz and 1427–1429.5 MHz bands. The locations of government systems in these bands are specified in footnotes US351 and US352 of § 2.106 of this chapter.

§ 95.615 Protection of medical equipment.

The manufacturers, installers and users of WMTS equipment are cautioned that the operation of this equipment could result in harmful interference to other nearby medical devices.

Subpart I—Medical Device Radio Communications Service (MedRadio)

§ 95.701 Scope.

This subpart contains the operating requirements for the MedRadio. General information pertaining to this service is contained in subpart A of this part.

§ 95.703 Permissible communications.

(a) Except for the purposes of testing and for demonstrations to health care professionals, MedRadio programmer/control transmitters may transmit only non-voice data containing operational, diagnostic and therapeutic information associated with a medical implant device or medical body-worn device that has been implanted or placed on the person by or under the direction of a duly authorized health care professional.

(b) Except in response to a medical implant event, or except as provided in § 95.715(b)(3), in the 402–405 MHz band no medical implant transmitter shall transmit except in response to a transmission from a medical implant programmer/control transmitter or in response to a non-radio frequency actuation signal generated by a device external to the body in which the medical implant transmitter is implanted or is to be implanted.

(c) MedRadio programmer/control transmitters may be interconnected with other telecommunications systems including the public switched telephone network.

(d) For the purpose of facilitating MedRadio system operation during a MedRadio communications session, as defined in § 95.3, MedRadio transmitters may transmit in accordance with the provisions of § 95.715(a) for no more than 5 seconds without the communications of data; MedRadio transmitters may transmit in accordance with the provisions of § 95.715(b)(3) for no more than 3.6 seconds in total within a one hour time period without the communications of data; MedRadio transmitters may transmit in accordance with the provisions of § 95.715(b)(2) for no more than 360 milliseconds in total within a one hour time period without the communications of data.

(e) MedRadio programmer/control transmitters may not be used to relay information to a receiver that is not included with a medical implant or medical body-worn device. Wireless retransmission of information intended to be transmitted by a MedRadio programmer/control transmitter or information received from a medical implant or medical body-worn transmitter shall be performed using other radio services that operate in spectrum outside of the MedRadio band.

§ 95.705 Channel use policy.

(a) The channels authorized for MedRadio operation by this part of the Commission's rules are available on a shared basis only and will not be assigned for the exclusive use of any entity.

(b) To reduce interference and make the most effective use of the authorized facilities, MedRadio transmitters must share the spectrum in accordance with § 95.715.

(c) MedRadio operation is subject to the condition that no harmful interference is caused to stations operating in the 400.150–406.000 MHz band in the Meteorological Aids, Meteorological Satellite, or Earth Exploration Satellite Services. MedRadio stations must accept any interference from stations operating in the 400.150–406.000 MHz band in the Meteorological Aids, Meteorological Satellite, or Earth Exploration Satellite Services. MedRadio devices should take the necessary steps to prevent the disruption of time sensitive medical communication sessions that could result from interference caused by the federal systems operating in the band.

§ 95.707 Disclosure polices.

Manufacturers of MedRadio transmitters must include with each transmitting device the following statement:

"This transmitter is authorized by rule under the Medical Device Radiocommunication Service (in part 95 of the Commission's rules) and must not cause harmful interference to stations operating in the 400.150–406.000 MHz band in the Meteorological Aids (*i.e.,* transmitters and receivers used to communicate weather data), the Meteorological Satellite, or the Earth Exploration Satellite Services and must accept interference that may be caused by such stations, including interference that may cause undesired operation. This transmitter shall be used only in accordance with the Commission's rules governing the Medical Device Radiocommunication Service. Analog and digital voice communications are prohibited. Although this transmitter has been approved by the Federal Communications Commission, there is no guarantee that it will not receive interference or that any particular transmission from this transmitter will be free from interference."

§ 95.709 Labeling requirements.

(a) MedRadio programmer/control transmitters shall be labeled as provided in part 2 of this chapter and shall bear the following statement in a conspicuous location on the device:

"This device may not interfere with stations operating in the 400.150–406.000 MHz band in the Meteorological Aids, Meteorological Satellite, and Earth Exploration Satellite Services and must accept any interference received, including interference that may cause undesired operation."

The statement may be placed in the instruction manual for the transmitter where it is not feasible to place the statement on the device.

(b) Where a MedRadio programmer/control transmitter is constructed in two or more sections connected by wire and marketed together, the statement specified in this section is required to be affixed only to the main control unit.

(c) MedRadio transmitters shall be identified with a serial number. The FCC ID number associated with a medical implant transmitter and the information required by § 2.925 of this chapter may be placed in the instruction manual for the transmitter and on the shipping container for the transmitter, in lieu of being placed directly on the transmitter.

§ 95.711 Marketing limitations.

Transmitters intended for operation in the MedRadio Service may be marketed and sold only for the permissible communications described in § 95.703.

§ 95.713 Certification procedures.

Any entity may request certification for its transmitter when the transmitter is used in the GMRS, FRS, R/C, CB, 218–219 MHz Service, LPRS, MURS, or MedRadio Service following the procedures in part 2 of this chapter. Dedicated Short-Range Communications Service On-Board Units (DSRCS–OBUs) must be certified in accordance with subpart L of this part and part 2, subpart J of this chapter.

§ 95.715 MedRadio transmitters.

(a) *Frequency monitoring.* Except as provided in paragraph (b) of this section, all MedRadio programmer/control transmitters operating in the 401–406 MHz band must operate under the control of a monitoring system that incorporates a mechanism for monitoring the channel or channels that the MedRadio system devices intend to occupy. The monitoring system antenna shall be the antenna normally used by the programmer/control transmitter for a communications session. Before the monitoring system of a MedRadio programmer/control transmitter initiates a MedRadio communications session, the following access criteria must be met:

(1) The monitoring system bandwidth measured at its 20 dB down points must be equal to or greater than the emission bandwidth of the intended transmission.

(2) Within 5 seconds prior to initiating a communications session, circuitry associated with a MedRadio programmer/control transmitter must monitor the channel or channels the system devices intend to occupy for a minimum of 10 milliseconds per channel.

(3) Based on use of an isotropic monitoring system antenna, the monitoring threshold power level must not be more than $10\log B(\mathrm{Hz}) - 150$ (dBm/Hz) + G(dBi), where B is the emission bandwidth of the MedRadio communications session transmitter

having the widest emission and G is the MedRadio programmer/control transmitter monitoring system antenna gain relative to an isotropic antenna. For purposes of showing compliance with the above provision, the above calculated threshold power level must be increased or decreased by an amount equal to the monitoring system antenna gain above or below the gain of an isotropic antenna, respectively.

(4) If no signal in a MedRadio channel above the monitoring threshold power level is detected, the MedRadio programmer/control transmitter may initiate a MedRadio communications session involving transmissions to and from a medical implant or medical body-worn device on that channel. The MedRadio communications session may continue as long as any silent period between consecutive data transmission bursts does not exceed 5 seconds. If a channel meeting the criteria in paragraph (a)(3) of this section is unavailable, the channel with the lowest ambient power level may be accessed.

(5) When a channel is selected prior to a MedRadio communications session, it is permissible to select an alternate channel for use if communications are interrupted, provided that the alternate channel selected is the next best choice using the above criteria. The alternate channel may be accessed in the event a communications session is interrupted by interference. The following criteria must be met:

(i) Before transmitting on the alternate channel, the channel must be monitored for a period of at least 10 milliseconds.

(ii) The detected power level during this 10 milliseconds or greater monitoring period must be no higher than 6 dB above the power level detected when the channel was chosen as the alternate channel.

(iii) In the event that this alternate channel provision is not used by the MedRadio system or if the criteria in paragraph (5)(i) and (5)(ii) of this section above are not met, a channel must be selected using the access criteria specified in paragraphs (a)(1) through (a)(4) of this section.

(6) As used in this section, the following definitions apply:

(i) *Emission bandwidth*—Measured as the width of the signal between the points on either side of carrier center frequency that are 20 dB down relative to the maximum level of the modulated carrier. Compliance will be determined using instrumentation employing a peak detector function and a resolution bandwidth approximately equal to 1% of the emission bandwidth of the device under test.

(ii) *MedRadio channel*—Any continuous segment of spectrum in the MedRadio band that is equal to the emission bandwidth of the device with the largest bandwidth that is to participate in a MedRadio communications session.

Note: The rules do not specify a channeling scheme for use by MedRadio systems.

(iii) *MedRadio communications session*—A collection of transmissions that may or may not be continuous between MedRadio system devices.

(b) *Exceptions to frequency monitoring criteria.* MedRadio devices or communications sessions that meet any one of the following criteria are not required to use the access criteria set forth in paragraph (a) of this section:

(1) MedRadio communications sessions initiated by a medical implant event.

(2) MedRadio devices operating in either the 401–401.85 MHz or 405–406 MHz bands, provided that the transmit power is not greater than 250 nanowatts EIRP and the duty cycle for such transmissions does not exceed 0.1%, based on the total transmission time during a one-hour interval.

(3) MedRadio devices operating in the 401.85–402 MHz band, provided that the transmit power is not greater than 25 microwatts EIRP and the duty cycle for such transmissions does not exceed 0.1%, based on the total transmission time during a one-hour interval.

(4) MedRadio devices operating with a total emission bandwidth not exceeding 300 kHz centered at 403.65 MHz, provided that the transmit power is not greater than 100 nanowatts EIRP and the duty cycle for such transmissions does not exceed 0.01%, based on the total transmission time during a one-hour interval.

(c) *Operating frequency.* MedRadio stations authorized under this part may operate on frequencies in the 401–406 MHz band as follows provided that the out-of-band emissions are attenuated in accordance with § 95.723:

(1) MedRadio stations associated with medical implant devices, which incorporate a frequency monitoring system as set forth in paragraph (a) of this section, may operate on any of the frequencies in the 401–406 MHz band,

(2) MedRadio stations associated with medical implant devices, which do not incorporate a frequency monitoring system as set forth in paragraph (a) of this section, may operate on any frequency in 401–402 MHz or 405–406 MHz bands, or at 403.65 MHz in the 402–405 MHz band.

(3) MedRadio stations associated with medical body-worn devices, regardless of whether a frequency monitoring system as set forth in paragraph (a) this section is employed, may operate on any of the frequencies in the 401–402 MHz or 405–406 MHz bands.

(4) MedRadio stations that are used externally to evaluate the efficacy of a more permanent medical implant device, regardless of whether a frequency monitoring system as set forth in paragraph (a) of this section is employed, may operate on any of the frequencies in the 402–405 MHz band, provided that:

(i) Such external body-worn operation is limited solely to evaluating with a patient the efficacy of a fully implanted permanent medical device that is intended to replace the temporary body-worn device;

(ii) RF transmissions from the external device must cease following the patient evaluation period, which may not exceed 30 days, except where a health care practitioner determines that additional time is necessary due to unforeseen circumstances;

(iii) The maximum output power of the temporary body-worn device shall not exceed 200 nW EIRP; and

(iv) The temporary body-worn device must comply fully with all other MedRadio rules applicable to medical implant device operation in the 402–405 MHz band.

(d) *Authorized bandwidth.* The authorized bandwidth of the emission from a MedRadio station operating between 402–405 MHz shall not exceed 300 kHz, and no communications session involving MedRadio stations shall use more than a total of 300 kHz of bandwidth during such a session. The authorized bandwidth of the emission from a MedRadio station operating between 401–401.85 MHz or 405–406 MHz shall not exceed 100 kHz, and no communications session involving MedRadio stations shall use more than a total of 100 kHz of bandwidth during such a session. The authorized bandwidth of the emission from a MedRadio station operating between 401.85–402 MHz shall not exceed 150 kHz, and no communications session involving MedRadio stations shall use more than a total of 150 kHz of bandwidth during such a session. This provision does not preclude full duplex or half duplex communications provided that the total amount of bandwidth utilized by all of the MedRadio channels employed in such a MedRadio communications session does not exceed 300 kHz in the 402–405 MHz band, or 100 kHz in the 401–402 MHz and 405–406 MHz bands.

(e) *Frequency stability.* Each transmitter in the MedRadio service

must maintain a frequency stability of ±100 ppm of the operating frequency over the range:

(1) 25 °C to 45 °C in the case of medical implant transmitters; and

(2) 0°C to 55°C in the case of MedRadio programmer/control transmitters and MedRadio body-worn transmitters.

(f) *Shared access.* The provisions of this section shall not be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum for other MedRadio systems.

(g) Measurement procedures.

(1) MedRadio transmitters shall be tested for frequency stability, radiated emissions and EIRP limit compliance in accordance with paragraphs (g)(2) and (g)(3) of this section.

(2) Frequency stability testing shall be performed over the temperature range set forth in paragraph (e) of this section.

(3) Radiated emissions and EIRP limit measurements limit may be determined by measuring the radiated field from the equipment under test at 3 meters and calculating the EIRP. The equivalent radiated field strength at 3 meters for 25 microwatts, 250 nanowatts, and 100 nanowatts EIRP is 18.2, 1.8, or 1.2 mV/meter, respectively, when measured on an open area test site; or 9.1, 0.9, or 0.6 mV/meter, respectively, when measured on a test site equivalent to free space such as a fully anechoic test chamber. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved peak power technique, or the following. Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. 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 peak measurement for the emission in question over the full bandwidth of the channel.

(i) For a transmitter intended to be implanted in a human body, radiated emissions and EIRP measurements for transmissions by stations authorized under this section may be made in accordance with a Commission-approved human body simulator and test technique. A formula for a suitable tissue substitute material is defined in OET Bulletin 65 Supplement C (01–01).

(ii) For a transmitter intended to be body-worn, and for programmer/control transmitters, use standard ANSI C63.4 test setup and test method.

§ 95.717 Maximum transmitter power.

In the MedRadio Service for transmitters that are not excepted under § 95.715(b) from the frequency monitoring requirements of § 95.715(a), the maximum radiated power in any 300 kHz bandwidth by MedRadio transmitters operating at 402–405 MHz, or in any 100 kHz bandwidth by MedRadio transmitters operating at 401–402 MHz or 405–406 MHz shall not exceed 25 microwatts EIRP. For transmitters that are excepted under § 95.715(b) from the frequency monitoring requirements of § 95.715(a), the power radiated by any station operating in 402–405 MHz shall not exceed 100 nanowatts EIRP confined to a maximum total emission bandwidth of 300 kHz centered at 403.65 MHz. For transmitters that are excepted under § 95.715(b) from the frequency monitoring requirements of § 95.715(a), the power radiated by any station operating in 401–401.85 MHz or 405–406 MHz shall not exceed 250 nanowatts EIRP in any 100 kHz bandwidth and in 401.85–402 MHz shall not exceed 25 microwatts in the 150 kHz bandwidth. *See* § 95.721(a). The antenna associated with any MedRadio transmitter must be supplied with the transmitter and shall be considered part of the transmitter subject to equipment authorization. Compliance with these EIRP limits may be determined as set forth in § 95.715(g).

§ 95.719 Emission types.

A MedRadio station may transmit any emission type appropriate for communications in this service. Voice communications, however, are prohibited.

§ 95.721 Emission bandwidth.

(a) For MedRadio Service stations operating in 402–405 MHz, the maximum authorized emission bandwidth is 300 kHz. For stations operating in 401–401.85 MHz or 405–406 MHz, the maximum authorized emission bandwidth is 100 kHz, and for stations operating in 401.85–402 MHz, the maximum authorized emission bandwidth is 150 kHz.

(b) Lesser emission bandwidths may be employed, provided that the unwanted emissions are attenuated as provided in § 95.723. *See* §§ 95.715(g) and 95.717 regarding maximum transmitter power and measurement procedures.

§ 95.723 Unwanted radiation.

(a) In addition to the procedures in part 2 of this chapter, the following requirements apply to each transmitter both with and without the connection of all attachments acceptable for use with the transmitter, such as an external speaker, power cord, antenna, etc.

(b) For transmitters designed to operate in the MedRadio service, emissions shall be attenuated in accordance with the following (paragraphs (b)(1) through (b)(5) of this section pertain to MedRadio transmitters operating in the 402–405 MHz band; paragraphs (b)(6) through (b)(10) of this section pertain to MedRadio transmitters operating in the 401–402 MHz or 405–406 MHz bands):

(1) Emissions from a MedRadio transmitter more than 250 kHz outside of the 402–405 MHz band shall be attenuated to a level no greater than the following field strength limits:

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
30–88	100	3
88–216	150	3
216–960	200	3
960 and above	500	3

Note: At band edges, the tighter limit applies.

(2) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except that above 1 GHz, the limit is based on measurements employing an average detector. Measurements above 1 GHz shall be performed using a minimum resolution bandwidth of 1 MHz. *See* also § 95.713.

(3) The emissions from a MedRadio transmitter must be measured to at least the tenth harmonic of the highest fundamental frequency designed to be emitted by the transmitter.

(4) Emissions within the 402–405 MHz band more than 150 kHz away from the center frequency of the spectrum the transmission is intended to occupy will be attenuated below the transmitter output power by at least 20 dB. Compliance with this limit is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(5) Emissions 250 kHz or less that are above and below the 402–405 MHz band will be attenuated below the maximum permitted output power by at least 20 dB. Compliance with this limit is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(6) Emissions from medical device transmitters operating in the 401–402 MHz or 405–406 MHz bands at more than 100 kHz outside of the MedRadio bands (401–406 MHz) and all emissions in the band 406.000–406.100 MHz shall be attenuated to a level no greater than the following field strength limits:

Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
30–88	100	3
88–216	150	3
216–960	200	3
960 and above	500	3

Note: At band edges, the tighter limit applies.

(7) The emission limits shown in paragraph (b)(6) of this section are based on measurements employing a CISPR quasi-peak detector except that above 1 GHz, the limit is based on measurements employing an average detector. Measurements above 1 GHz shall be performed using a minimum resolution bandwidth of 1 MHz. *See also* § 95.713.

(8) The emissions from a medical device transmitter operating in the MedRadio bands (between 401–402 MHz or 405–406 MHz) must be measured to at least the tenth harmonic of the highest fundamental frequency designed to be emitted by the transmitter.

(9) Emissions within the MedRadio bands more than 50 kHz away from the center frequency of the spectrum the transmission is intended to occupy, shall be attenuated below the transmitter output power by at least 20 dB except as noted in paragraph (b)(7) of this section. Compliance with this limit is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(10) Emissions 100 kHz or less below 401 MHz shall be attenuated below the maximum permitted output power by at least 20 dB. Compliance with this limit is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

§ 95.725 Antennas.

No antenna for a MedRadio transmitter shall be configured for permanent outdoor use. In addition, any MedRadio antenna used outdoors shall not be affixed to any structure for which the height to the tip of the antenna will exceed three (3) meters (9.8 feet) above ground.

§ 95.727 RF exposure.

MedRadio medical implant or medical body-worn transmitters (as defined in § 95.3) are subject to the radiofrequency radiation exposure requirements specified in §§ 1.1307 and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of implant devices operating under this section must contain a finite difference time domain (FDTD) computational modeling report showing compliance with these provisions for fundamental emissions. The Commission retains the discretion to request the submission of specific absorption rate measurement data.

Subpart J—Multi-Use Radio Service (MURS)

§ 95.801 Scope.

This subpart contains the operating requirements for the MURS. General and technical information pertaining to this service is contained in subparts A and B.

§ 95.803 Channels available.

(a) Channels available:

Channel No.	Frequency (MHz)
1	151.820
2	151.880
3	151.940
4	154.570
5	154.600

(b) MURS channels are available only on a shared basis and will not be assigned for the exclusive use of any user. All MURS users must cooperate in the selection and use of channels, including limiting communications to the minimum practical time, to reduce interference and to make the most effective use of the facilities.

§ 95.805 Permissible communications.

(a) MURS stations may transmit voice, data or image signals as permitted in this subpart.

(b) MURS frequencies may be used for remote control and telemetering functions. Stations used to control remote objects or devices may be operated on the continuous carrier transmit mode, except on frequency 154.600 MHz.

(c) MURS users shall take reasonable precautions to avoid causing harmful interference. This includes monitoring the transmitting frequency for communications in progress and such other measures as may be necessary to minimize the potential for causing interference.

§ 95.807 Repeater operations and signal boosters prohibited.

MURS stations are prohibited from operating as a repeater station or as a signal booster. This prohibition includes store-and-forward packet operation.

§ 95.809 Grandfathered MURS Stations.

Stations that were licensed under part 90 of the Commission's rules to operate on MURS frequencies as of November 13, 2000, are granted a license by rule

that authorizes continued operations under the terms of such nullified part 90 authorizations of this chapter, including any rule waivers.

Subpart K—Personal Locator Beacon (PLB)

§ 95.901 Scope.

This subpart sets out the regulations governing PLBs. PLBs are intended to provide individuals in remote areas a means to alert others of an emergency situation and to aid search and rescue personnel to locate those in distress. General and technical information pertaining to this service is contained in subparts A and B.

§ 95.903 Channels available.

PLB transmitters must operate in the 406.0–406.1 MHz band.

§ 95.905 Permissible communications.

Use of PLB frequencies under this part is limited to the transmission of distress and safety communications.

§ 95.907 Special requirements for 406 MHz PLBs.

(a) All 406 MHz PLBs must meet all the technical and performance standards contained in the Radio Technical Commission for Maritime (RTCM) Service document " RTCM Standard 11010.2 for 406 MHz Satellite Personal Locator Beacons (PLBs)," Version 1.1, RTCM Paper 114–2008–SC110–STD, dated July 10, 2008. This RTCM document is incorporated by reference in accordance with 5 U.S.C. 552(a), and 1 CFR part 51. Copies of the document are available and may be obtained from the Radio Technical Commission for Maritime Services, 1800 N. Kent St., Suite 1060, Arlington, Virginia 22209–2901. The document is available for inspection at Commission headquarters at 445 12th Street SW., Washington, DC 20554. Copies may also be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal-register/code-of-federal-regulations/ibr-locations.html.*

(b) The 406 MHz PLB must contain, as an integral part, a homing beacon operating only on 121.500 MHz and meeting all requirements described in the RTCM Recommended Standards document described in paragraph (a) of this section. The 121.500 MHz homing beacon must have a continuous duty cycle that can be interrupted only during the transmission of the 406 MHz signal. The 406 MHz PLB shall transmit a unique identifier (Morse code "P") on the 121.500 MHz signals.

(c) Before a 406 MHz PLB certification application is submitted to the Commission, the applicant must have obtained certification from a test facility, recognized by one of the COSPAS/SARSAT Partners, that the PLB satisfies the standards contained in the COSPAS/SARSAT document COSPAS/SARSAT 406 MHz Distress Beacon Type Approval Standard (C/S T.007). Additionally, an independent test facility must certify that the PLB complies with the electrical and environmental standards associated with the RTCM Recommended Standards.

(d) The procedures of Notification by the equipment manufacturer and Certification from either the Commission or designated Telecommunications Certification Body are contained in part 2, subpart J of this chapter.

(e) An identification code, issued by the National Oceanic and Atmospheric Administration (NOAA), the United States Program Manager for the 406 MHz COSPAS/SARSAT satellite system, must be programmed in each PLB unit to establish a unique identification for each PLB station. With each marketable PLB unit, the manufacturer or grantee must include a postage pre-paid registration card printed with the PLB identification code addressed to: SARSAT Beacon Registration, NOAA, NESDIS, E/SP3, Room 3320, FB–4, 5200 Auth Road, Suitland, Maryland 20746–4303. The registration card must request the owner's name, address, telephone number, alternate emergency contact and include the following statement: "WARNING—failure to register this PLB with NOAA could result in a monetary forfeiture order being issued to the owner."

(f) To enhance protection of life and property, it is mandatory that each 406 MHz PLB be registered with NOAA and that information be kept up-to-date. In addition to the identification plate or label requirements contained in §§ 2.925 and 2.926 of this chapter, each 406 MHz PLB must be provided on the outside with a clearly discernible permanent plate or label containing the following statement: "The owner of this 406 MHz PLB must register the NOAA identification code contained on this label with the National Oceanic and Atmospheric Administration (NOAA) whose address is: SARSAT Beacon Registration, NOAA, NESDIS, E/SP3, Room 3320, FB–4, 5200 Auth Road, Suitland, Maryland 20746–4303." Owners shall advise NOAA in writing upon change of PLB ownership, or any other change in registration information. NOAA will provide registrants with proof of registration and change of registration postcards.

(g) For 406 MHz PLBs with identification codes that can be changed after manufacture, the identification code shown on the plate or label must be easily replaceable using commonly available tools.

§ 95.909 Marketing limitations.

No device may be marketed or sold in the United States as a PLB or Personal Locator Beacon unless it complies with the requirements of subpart K of this part.

Subpart L—Dedicated Short-Range Communications Service On-Board Units (DSRCS–OBUs)

§ 95.1001 Scope.

This subpart sets out the regulations governing Dedicated Short-Range Communications Service On-Board Units (DSRCS–OBUs) in the 5850–5925 MHz band. DSRCS Roadside Units (RSUs) are authorized under part 90 of this chapter and DSRCS, RSU, and OBU are defined in § 90.7 of this chapter. General information pertaining to this service is also contained in subparts A and B of this part.

§ 95.1003 ASTM E2213–03 DSRC Standard.

On-Board Units operating in the 5850–5925 MHz band shall comply with the following technical standards, which are incorporated by reference: American Society for Testing and Materials (ASTM) E2213–03, Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems—5 GHz Band Dedicated Short-range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications published September 2003 (ASTM E2213–03 DSRC Standard). The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC 20554 or at the Office of the Federal Register, 800 North Capital Street, NW., Suite 700, Washington, DC 20001. For information on the availability of this material at the Office of the Federal Register, call 202 741–6000 or send an e-mail to *fedreg.info@nara.gov.* Copies of the ASTM E2213–03 DSRC Standard can be obtained from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428–2959. Copies may also be obtained from ASTM via the Internet at *http://www.astm.org.*

§ 95.1005 Channel designations of frequencies available.

(a) The following table indicates the channel designations of frequencies available for assignment to eligible applicants within the 5850–5925 MHz band for On-Board Units (OBUs):

Channel No.	Channel use	Frequency range (MHz)
170	Reserved	5850–5855
172	Service Channel	5855–5865
174	Service Channel	5865–5875
175	Service Channel [FN1]	5865–5885
176	Service Channel	5875–5885
178	Control Channel	5885–5895
180	Service Channel	5895–5905
181	Service Channel [FN1]	5895–5915
182	Service Channel	5905–5915
184	Service Channel	5915–5925

FN1 Channel Nos. 174/176 may be combined to create a twenty megahertz channel, designated Channel No. 175. Channels 180/182 may be combined to create a twenty megahertz channel designated Channel No. 181.

(b) Except as provided in paragraph (c) of this section, non-reserve DSRCS channels are available on a shared basis only for use in accordance with the Commission's rules. All licensees shall cooperate in the selection and use of channels in order to reduce interference. This includes monitoring for communications in progress and any other measures as may be necessary to minimize interference. Licensees suffering or causing harmful interference within a communications zone are expected to cooperate and resolve this problem by mutually satisfactory arrangements. If the licensees are unable to do so, the Commission may impose restrictions including specifying the transmitter power, antenna height and direction, additional filtering, or area or hours of operation of the stations concerned. Further, the use of any channel at a given geographical location may be denied when, in the judgment of the Commission, its use at that location is not in the public interest; the use of any channel may be restricted as to specified geographical areas, maximum power, or such other operating conditions, contained in this part or in the station authorization.

(c) *Safety/public safety priority.* The following access priority governs all DSRCS operations:

(1) Communications involving the safety of life have access priority over all other DSRCS communications; and

(2) Subject to a Control Channel priority system management strategy (*see* ASTM E2213–03 DSRC Standard at section 4.1.1.2(4)) DSRCS communications involving public safety have access priority over all other DSRC communications not listed in paragraph (c)(1) of this section. On-Board Units (OBUs) operated by state or local governmental entities are presumptively engaged in public safety priority communications.

(d) Non-priority communications. DSRCS communications not listed in paragraph (c) of this section are non-priority communications. If a dispute arises concerning non-priority DSRCS–OBU communications with Roadside Units (RSUs), the provisions of § 90.377(e) and (f) of this chapter will apply. Disputes concerning non-priority DSRCS–OBU communications not associated with RSUs are governed by paragraph (b) of this section.

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