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 FCC 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 operatmg 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 FCC 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 FCC 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 the FCC Rules 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 of this part.

§ 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 Subpart J of Part 2 of this chapter.

§ 95.715 MedRadio transmitters.

(a) *Frequency monitoring.* Except as provided in (b) below, 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 10logB(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 millisecond 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 (i) and (ii) 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. Note: 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[deg]C to 45[deg]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) below.

(2) Frequency stability testing shall be performed over the temperature range set forth in (e) above.

(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(e). 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) 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 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(f) regarding maximum transmitter power and measurement procedures.

§ 95.723 Unwanted radiation.

(a) In addition to the procedures in Part 2, 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: (Subparagraphs 1 through 5 pertain to MedRadio transmitters operating in the 402-405 MHz band; subparagraphs 6 through 10 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 Sec. 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 (6) above 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 (7) above. 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 of this chapter) 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, including any rule waivers.

Subpart K – Personal Loeator 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 Subpart J of Part 2 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 discernable 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 this subpart.

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.

§ 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 C.F.R. Part 51. Copies may be inspected at the Federal Communications Commission, 445 12th Street, S.W., Washington, DC 20554 or at the Office of the Federal Register, 800 North Capital Street, N.W., Suite 700, Washington, D.C. 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 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 § 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.

APPENDIX C

Cross-Reference Tables for Existing and Proposed Rules

Ordered by Existing Section Number

Existing	Proposed	Topic
95.1	95.3	GMRS, 218-219 MHz service descriptions
95.3	95.5	License required (GMRS)
95.5	95.5	Eligibility (GMRS)
95.7	95.103	Channel sharing (GMRS)
95.21	Removed	System description (GMRS)
95.23	Removed	Mobile description
95.25	Removed	Land station description
95.27	Removed	Paging receiver
95.29	95.103	GMRS channels
95.33	Removed	Cooperative use (GMRS)
95.45	95.7	Use on federal land (GMRS)
95.51	95.45	Antenna height (GMRS)
95.101	95.7	What GMRS license authorizes
95.103	95.9	Licensee duties (GMRS)
95.105	Removed	License term (GMRS)
95.115	95.11	Station inspection (GMRS)
95.117	95.17	Contacting FCC (GMRS)
95.119	Removed	Station identification (GMRS)
95.129	95.33	Equipment certification (GMRS)
95.135	95.35	Transmitting power (GMRS)
95.139	Removed	Adding a small base or control station (GMRS)
95.141	95.47	Interconnection prohibited (GMRS)
95.143	Removed	Emergency use (GMRS)
95.171	Removed	GMRS operator duties
95.179	Removed	Individuals who may operate station (GMRS)
95.181	95.105	Permissible communications (GMRS)
95.183	95.9	Prohibited communications (GMRS)
95.191	95.5, 95.9	Eligibility, responsibility (FRS)
95.192	95.7	Authorized locations (FRS)
95.193	95.405	Types of communications (FRS)
95.194	95.33	FRS units
95.201	95.3	What is R/C service?

Existing	Proposed	Topic
95.202	Removed	Use of rules (R/C)
95.203	95.203	Eligibility (R/C)
95.204	95.5	License required? (R/C)
95.205	95.7	Authorized locations (R/C)
95.206	95.209	Special location restrictions (R/C)
95.207	95.205	R/C channels
95.208	95.45	Antenna height (R/C)
95.209	95.33	R/C equipment
95.210	95.35	Transmitting power (R/C)
95.211	95.207	Permissible communications (R/C)
95.212	95.207	Prohibited communications (R/C)
95.213	Removed	Pay for use? (R/C)
95.214	95.9	Licensee responsibility (R/C)
95.215	Removed	Length of Communications (R/C)
95.216	Removed	Station identification (R/C)
95.217	95.211	Remote control (R/C)
95.218	95.15	Penalties (R/C)
95.219	95.13	FCC notices and correspondence (R/C)
95.220	95.9	Interference (R/C)
95.221	Removed	Transmitter servicing (R/C)
95.222	95.33	Transmitter changes (R/C)
95.223	95.11	Station inspection (R/C)
95.224	95.11	Station records (R/C)
95.225	95.21	Contacting FCC (R/C)
95.401	95.3	What is CB service?
95.402	Removed	Use of rules (CB)
95.403	95.303	Eligibility (CB)
95.404	95.5	License required? (CB)
95.405	95.7	Authorized locations (CB)
95.406	95.305	Special location restrictions (CB)
95.407	95.307	CB channels
95.408	95.45	Antenna height (CB)
95.409	95.311	CB equipment
95.410	95.35	Transmitting power (CB)
95.411	95.313	Power amplifiers prohibited (CB)
95.412	95.315	Permissible communications (CB)

Existing	Proposed	Topic
95.413	95.317	Prohibited communications (CB)
95.414	95.319	Pay for use? (CB)
95.415	95.9	Licensee responsibility (CB)
95.416	95.321	Length of communications (CB)
95.417	Removed	Station identification (CB)
95.418	95.323	Emergency use (CB)
95.419	95.325	Remote control (CB)
95.420	95.327	Telephone interconnect (CB)
95.421	95.15	Penalties (CB)
95.422	95.13	Response to FCC (CB)
95.423	Removed	Interference (CB)
95.424	Removed	Servicing CB equipment
95.425	95.33	Changes to CB transmitter
95.426	95.11	Station inspection (CB)
95.427	95.11	Station records (CB)
95.428	95.17	Contacting FCC (CB)
95.601	95.1	Basis and Purpose
95.603	95.33	Equipment certification required
95.605	95.33	Equipment certification procedures
95.607	95.33	CB transmitter modification
95.621	95.37, 95.103	GMRS channel frequencies
95.623	95.205	R/C channel frequencies
95.625	95.307	CB channel frequencies
95.627	95.403	FRS channel frequencies
95.628	95.715	Medradio transmitters
95.629	95.503	LPRS channel frequencies
95.630	95.603	WMTS channel frequencies
95.631	95.41	Emission types
95.632	95.803	MURS channel frequencies
95.633	95.39	Emission bandwidth
95.635	95.41	Unwanted emissions
95.637	95.43	Modulation standards
95.639	95.35	Transmitting power
95.643	95.33	DSRCS-OBU equipment certification
95.645	95.33	Control accessibility
95.647	95.45	FRS & R/C antennas
95.649	95.35	Power capability
95.651	Removed	Crystal control
95.653	95.33	Instructions & warnings
95.655	95.33	Frequency capability
95.667	Removed	CB transmitter power
95.669	95.33	External controls (CB)
95.671	Removed	Serial number (CB)
95.673	Removed	Copy of rules (CB)

Existing	Proposed	Topic
95.801	27.1401	Scope (218-219 MHz)
95.803	27.1403	Service description (218-219 MHz)
95.805	27.2	Permissible communications (218-219 MHz)
95.807	27.10	Regulatory status (218-219 MHz)
95.811	27.1411	License requirements (218-219 MHz)
95.812	27.13	License term (218-219 MHz)
95.813	27.12	Eligibility (218-219 MHz)
95.815	27.1415	License application (218-219 MHz)
95.816	27.1416	Competitive bidding (218-219 MHz)
95.819	27.1419	License transferability (218-219 MHz)
95.823	27.15	Partitioning, disaggregation (218-219 MHz)
95.831	Removed	Service requirements (218-219 MHz)
95.833	27.14	Construction requirements (218-219 MHz)
95.835	Removed	Station identification (218-219 MHz)
95.837	Removed	Station inspection (218-219 MHz)
95.851	27.51	Equipment certification (218-219 MHz)
95.853	27.5	Frequency segments (218-219 MHz)
95.855	27.50	Transmitting ERP (218-219 MHz)
95.857	27.53	Emission standards (218-219 MHz)
95.859	27.50	Antennas (218-219 MHz)
95.861	27.1410	Interference (218-219 MHz)
95.1001	95.5	Eligibility (LPRS)
95.1003	95.7	Authorized locations (LPRS)
95.1005	Removed	Station identification (LPRS)
95.1007	95.11	Station inspection (LPRS)
95.1009	95.505	Permissible communications (LPRS)
95.1011	Removed	Channel use policy (LPRS)
95.1013	95.45	Antennas (LPRS)
95.1015	95.507	Disclosure policies (LPRS)

Existing	Proposed	Topic
95.1017	95.33	Labeling requirements (LPRS)
95.1019	95.509	Marketing limitations (LPRS)
95.1101	95.601	Scope (WMTS)
95.1103	95.3	Definitions (WMTS)
95.1105	95.5	Eligibility (WMTS)
95.1107	95.7	Authorized locations (WMTS)
95.1109	95.713	Equipment authorization (WMTS)
95.1111	95.607	Frequency coordination (WMTS)
95.1113	95.609	Frequency coordinator (WMTS)
95.1115	95.35, 95.41	Technical requirements (WMTS)
95.1117	95.41	Types of communications (WMTS)
95.1119	95.611	608-614 MHz band requirements (WMTS)
95.1121	95.613	1395-1400 MHz band requirements (WMTS)
95.1123	95.615	Protection of medical equipment (WMTS)
95.1125	95.727	RF safety (WMTS)
95.1127	Removed	Station identification (WMTS)
95.1129	95.11	Station inspection (WMTS)
95.1201	95.5	Eligibility (MedRadio)
95.1203	95.7	Authorized locations (MedRadio)
95.1205	Removed	Station identification (MedRadio)
95.1207	95.11	Station inspection (MedRadio)
95.1209	95.703	Permissible communications (MedRadio)

Existing	Proposed	Topic
95.1211	95.705	Channel use policy (MedRadio)
95.1213	95.725	Antennas (MedRadio)
95.1215	95.707	Disclosure policies (MedRadio)
95.1217	95.709	Labeling requirements (MedRadio)
95.1219	95.711	Marketing limitations (MedRadio)
95.1301	95.5	Eligibility (MURS)
95.1303	95.7	Authorized locations (MURS)
95.1305	Removed	Station identification (MURS)
95.1307	95.807	Permissible communications (MURS)
95.1309	95.805	Channel use policy (MURS)
95.1311	95.807	Repeaters, boosters prohibited (MURS)
95.1313	95.47	Interconnection prohibited (MURS)
95.1315	95.45	Antenna height (MURS)
95.1317	95.809	Grandfathered stations (MURS)
95.1400	95.1	Basis and purpose (PLB)
95.1401	95.903	Frequency (PLB)
95.1402	95.907	Special requirements (PLB)
95.1501	95.1001	Scope (DSRCS-OBU)
95.1503	95.5	Eligibility (DSRCS-OBU)
95.1505	95.7	Authorized locations (DSRCS-OBU)
95.1507	Removed	Station identification (DSRCS-OBU)
95.1509	95.1003	ASTM E2213-03 standard (DSRCS-OBU)
95.1511	95.1005	Frequencies (DSRCS-OBU)

Ordered by Proposed Section Number

Proposed	Existing	Topic
27.1	27.1	Basis and purpose (add 218-219 MHz)
27.2	95.805	Permissible communications (218-219 MHz)
27.5	95.853	Frequencies (add 218-219 MHz)
27.10	95.807	Regulatory status (add 218-219 MHz)
27.11	95.853	Initial authorization (frequency blocks -- add 218-219 MHz)

Proposed	Existing	Topic
27.13	95.812	License period (add 218-219 MHz)
27.14	95.833	Construction requirements; renewal (add 218-219 MHz)
27.50	95.855, 95.859	Power and antenna height limits (add 218-219 MHz)
27.51	95.851	Equipment certification (218-219 MHz)
27.53	95.857	Emission limits (add 218-219 MHz)

Proposed	Existing	Topic
27.1401	95.801	Scope (218-219 MHz)
27.1403	95.803	Service description (218-219 MHz)
27.1410	95.861	Interference (218-219 MHz)
27.1411	95.811	License requirements (218-219 MHz)
27.1415	95.815	License application (218-219 MHz)
27.1416	95.816	Competitive bidding procedures (218-219 MHz)
27.1419	95.819	License transferability (218-219 MHz)
95.1	95.601, 95.1400	Basis and Purpose
95.3	95.1, 95.1103	Definitions
95.5	95.3, 95.191, 95.204	License requirement, eligibility
95.7	95.45, 95.101, 95.192, 95.205, 95.405, 95.1107, 95.1203, 95.1303, 95.1505	Authorized locations
95.9	95.103, 95.183, 95.191, 95.214, 95.415	Licensee responsibility
95.11	95.119, 95.216, 95.417, 95.1005, 95.1127, 95.1205, 95.1305	Station Inspection
95.13	95.115, 95.223, 95.426, 95.1007, 95.1129, 95.1207	FCC notices, correspondence
95.15	95.224, 95.427	Penalties
95.17	95.219, 95.220, 95.422, 95.423	Contacting FCC
95.31	95.601	Scope

Proposed	Existing	Topic
95.33	95.129, 95.194, 95.209, 95.222, 95.409, 95.425, 95.603, 95.605, 95.607, 95.643, 95.645, 95.653, 95.655, 95.669, 95.1015, 95.1017, 95.1109	Equipment Certification requirements
95.35	95.25, 95.135, 95.210, 95.410, 95.411, 95.639, 95.649, 95.1115	Transmitting power
95.37	95.621	Frequency tolerance and stability
95.39	95.633	Bandwidth limitations
95.41	95.631, 95.635, 95.1115, 95.1117	Unwanted emissions
95.43	95.637	Modulation standards
95.45	95.25, 95.51, 95.208, 95.408, 95.647, 95.1013, 95.1213, 95.1315	Antenna limits
95.47	95.141, 95.420, 95.1313	Telephone interconnection prohibited
95.49	95.1125	RF safety
95.101	new	Scope (GMRS)
95.103	95.7, 95.29, 95.621	GMRS Channels
95.105	95.181	Permissible communications
95.201	95.201	Scope (R/C)
95.203	95.203	R/C Channels

Proposed	Existing	Topic
95.207	95.211, 95.212, 95.213	Permissible communications (R/C)
95.209	95.206	Special location restrictions (R/C)
95.211	95.217	Remote control (R/C)
95.301	New	Scope (CB)
95.303	95.403	Eligibility to use CB radios
95.305	95.406	Special location restrictions CB
95.307	95.407	CB channels
95.309	95.419	CB antenna limitations
95.311	95.409	CB equipment
95.313	95.411	RF power amplifiers prohibited (CB)
95.315	95.412	Permitted communications (CB)
95.317	95.413	Prohibited communications (CB)
95.319	95.414	Pay for use of CB
95.321	95.416	Length of communications (CB)
95.323	95.418	Travelers assistance (CB)
95.325	95.419	Remote control (CB)
95.327	95.420	Telephone interconnection (CB)
95.401	95.191	Scope (FRS)
95.403	95.627	FRS channels
95.405	95.193	Permissible communications (FRS)
95.501	New	Scope (LPRS)
95.503	95.629	LPRS channels
95.505	95.1009	Permissible communications (LPRS)
95.507	95.1015	LPRS notification requirement
95.509	95.1019	LPRS marketing limitation
95.601	95.1101	Scope (WMTS)
95.603	95.1105	WMTS channels
95.605	95.630, 95.1115	Permissible communications (WMTS)
95.607	95.1111	Frequency coordination (WMTS)
95.609	95.1113	Frequency coordinator (WMTS)
95.611	95.1119	Coordination with radio astronomy (WMTS)

Proposed	Existing	Topic
95.613	95.1119	Coordination with federal government facilities (WMTS)
95.615	95.1123	Advisory w/re to interference to medical equipment
95.701	None	Scope (MedRadio)
95.703	95.1209	Permissible communications (Medradio)
95.705	95.1211	Medradio channel use policy
95.707	95.1215	Medradio disclosure policies
95.709	95.1217	Medradio Labeling requirements
95.711	95.1219	Marketing limitations (Medradio)
95.713	95.1109	Equipment certification procedures
95.715	95.628	Medradio transmitters
95.717	95.639	Transmitting power (Medradio)
95.719	95.631	Emission types (Medradio)
95.721	95.633	Emission bandwidth (Medradio)
95.723	95.635	Unwanted radiation (Medradio)
95.725	95.1213	Antennas (Medradio)
95.727	95.1125	RF exposure (Medradio)
95.801	new	Scope (MURS)
95.803	95.1301	MURS channels
95.805	95.632, 95.1309	Permissible communications (MURS)
95.807	95.1307, 95.1311	Repeaters, boosters prohibited (MURS)
95.809	95.1317	Grandfathered stations (MURS)
95.901	95.1400	Scope (PLB)
95.903	95.1401	PLB channels
95.905	95.1401	Permissible communications (PLB)
95.907	95.1402	Technical and performance standards (PLB)
95.909	new	Marketing limitations (PLB)
95.1001	95.1501	Scope (DSRCS-OBUs)
95.1003	95.1509	Technical standard (DSRCS)
95.1005	95.1511	DSRCS channels