

**FEDERAL COMMUNICATIONS COMMISSION****47 CFR Part 95****[WT Docket No. 10–119; FCC 21–90; FRS 45644]****Review of the Commission's Personal Radio Services Rules****AGENCY:** Federal Communications Commission.**ACTION:** Final rule.

**SUMMARY:** In this document, the Federal Communications Commission (Commission) addresses three petitions for reconsideration of the 2017 Report and Order in this proceeding, which reorganized and updated the Personal Radio Services rules. Cobra Electronics Corporation (Cobra), Motorola Solutions, Inc. (Motorola), and Medtronic, Inc. (Medtronic) each filed a petition for reconsideration of particular aspects of the Report and Order regarding specific services. In the *Memorandum Opinion and Order on Reconsideration*, the Commission finds that the public interest will be served by granting the petitions and making some additional rule corrections.

**DATES:** *Effective date:* October 28, 2021.**ADDRESSES:** Federal Communications Commission, 45 L Street NE, Washington, DC 20554.

**FOR FURTHER INFORMATION CONTACT:** Thomas Derenge of the Wireless Telecommunications Bureau, Mobility Division, at (202) 418–2451 or [Thomas.Derenge@fcc.gov](mailto:Thomas.Derenge@fcc.gov), or Melissa Conway of the Wireless Telecommunications Bureau, Mobility Division, at (202) 418–2887 or [Melissa.Conway@fcc.gov](mailto:Melissa.Conway@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's *Memorandum Opinion and Order on Reconsideration* in WT Docket No. 10–119, FCC 21–90, adopted August 3, 2021, and released August 4, 2021. The full text of the *Memorandum Opinion and Order on Reconsideration*, including all Appendices, is available for inspection and copying during normal business hours in the FCC Reference Center, 45 L Street NE, Washington, DC 20554, or available for viewing via the Commission's ECFS website by entering the docket number, WT Docket No. 10–119. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format), by sending an email to [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or calling the Consumer and Governmental Affairs Bureau at (202) 418–0530 (voice), (202) 418–0432 (TTY).

The Commission will send a copy of this *Memorandum Opinion and Order on Reconsideration* in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

**Final Regulatory Flexibility Analysis**

The Regulatory Flexibility Act requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.” In the 2017 Report and Order in this proceeding, the Commission determined that the reorganization of Part 95 and substantive changes made to rules governing certain services would not have a significant economic impact on a substantial number of small entities and included a Final Regulatory Flexibility Certification (FRFC) in the Report and Order which is subject to review in this *Memorandum Opinion and Order on Reconsideration*. No comments or petitions for reconsideration were received on the FRFC. The Commission's actions in this *Memorandum Opinion and Order on Reconsideration* will not have a significant economic impact on a substantial number of small entities. Therefore, the Commission certifies that the requirements of this *Memorandum Opinion and Order on Reconsideration* will not have a significant economic impact on a substantial number of small entities.

**Paperwork Reduction Act**

This *Memorandum Opinion and Order on Reconsideration* does not contain any new or modified information collection requirements subject to the Paperwork Reduction Act of 1985, Public Law 104–13. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198.

**Congressional Review Act**

The Commission will send a copy of this *Memorandum Opinion and Order on Reconsideration*, including the Supplemental Final Regulatory Flexibility Certification, to Congress and the Government Accountability Office pursuant to the Congressional Review Act. *See* 5 U.S.C. 801(a)(1)(A). In addition, the Commission will send a copy of this *Memorandum Opinion and Order on Reconsideration*, including the

Supplemental Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

**Synopsis**

1. *Cobra Petition.* CB Radio Service is a mobile and fixed two-way voice communications service for facilitating personal, business, or voluntary public service activities, including communications to provide assistance to highway travelers. Cobra's petition requests that the Commission permit Frequency Modulation (FM) operation as part of an optional dual modulation scheme for CB radios (*i.e.*, a CB radio could have both Amplitude Modulation (AM) and FM capability). Cobra and others suggest that an FM option will benefit the CB radio user—both professional and recreational—in that it will provide better quality and clarity of communications.

2. The Commission concludes that allowing manufacturers to add FM as an optional modulation scheme will not substantially change the fundamental nature of the CB Radio Service and will improve the user experience. Continuing to mandate AM capability while permitting dual modulation will provide benefits to CB radio users who will have an additional modulation option, while maintaining the basic character of the service. The addition of FM as a permitted mode will not result in additional interference because users who hear unintelligible audio on a particular channel can simply select another channel or switch modes.

3. The Commission grants the Cobra Petition to the extent described in the *Memorandum Opinion and Order on Reconsideration*. Specifically, the Commission amends Section 95.971(a) of the Commission's rules to permit CB Radio Service transmitters to transmit FM voice emissions along with AM. The Commission notes that AM and FM operations are permitted in other Part 95 services under similar technical parameters, so the Commission generally applies the technical rules to FM signals as currently apply to AM signals for the CB Radio Service. In the case of peak frequency deviation, however, the Commission adopts a limit of  $\pm 2$  kHz due to the 10 kHz channel spacing and 8 kHz occupied bandwidth maximum in the CB Radio Service. Although this specific limit differs from those established in other Part 95 services (*e.g.*,  $\pm 5$  kHz for 20 kHz channel bandwidth and  $\pm 2.5$  kHz for 12.5 kHz channel bandwidth in both General Mobile Radio Service (GMRS) and Multi-Use Radio Service (MURS)), it is consistent across Part 95 services

considering the respective occupied bandwidths. The Commission also finds it appropriate to use the common FM emission designator used for Part 95 GMRS and MURS for FM CB Radio Service. These technical rules are implemented through the amendment of Sections 95.967, 95.971, 95.973, 95.975, and 95.979 of the Commission's rules to reflect the addition of FM as an optional additional mode of transmission. The Commission notes that parties planning to incorporate the FM mode into CB radios will have to obtain a valid grant of certification under the Commission's equipment authorization rules.

4. *Motorola Petition.* GMRS is a mobile two-way voice communications service, with limited data applications, for facilitating activities of individual licensees and their family members, including communications during emergencies and natural disasters. Similarly, Family Radio Service (FRS) is a very short-distance, two-way voice communications service, with limited data applications, between low-power hand-held radios, for facilitating individual, family, group, recreational, and business activities. GMRS and FRS co-exist on the same frequencies, except for the GMRS 467 MHz main channels. In its petition, Motorola seeks reconsideration of the Commission's decision in the 2017 Report and Order not to permit automatic or periodic location and data transmissions. It seeks harmonized rule amendments for both the GMRS and FRS, since the two services coexist on the same frequencies. Motorola argues that automatic transmissions should be allowed because almost all of the reasons that support permitting manual data transmissions apply equally to transmissions initiated automatically, except for how frequently a user could transmit the data information. Members of the GMRS community support Motorola's suggestion to permit automatic or periodic location and data transmissions. Motorola contends that allowing automatic data transmissions is in the public interest and will enhance public safety. Motorola explains that automatic location transmissions will provide tracking capabilities for individuals in remote areas where these expanded capabilities will aid search and rescue missions.

5. The Commission concludes that the public interest will be furthered by allowing automatic or periodic location and data transmission on all GMRS channels. Automatic or periodic location and data transmissions will be subject to the same technical limitations as manual data transmissions. Automatic or periodic transmissions

will be limited to no more than once every 30 seconds and no more than one second in duration. Consistent with the Commission's approach to treating GMRS and FRS similarly with regard to digital data transmissions, the Commission amends its rules to permit automatic or periodic location and data transmissions for both GMRS and FRS. Indeed, because FRS operates on channels shared with GMRS, automatic or periodic location and data transmissions would be permitted on those channels even if we did not amend the FRS rules.

6. The Commission finds that the public interest will be furthered by granting the Motorola Petition to the extent described in the *Memorandum Opinion and Order on Reconsideration*. Specifically, the Commission amends Sections 95.531, 95.587, and 95.1787 of its rules to permit FRS and GMRS units to transmit location and data information automatically or periodically, subject to the same restrictions as are currently in place for manual data transmissions. The Commission also corrects a typographical error in the GMRS frequency listings in Section 95.1763(d) as adopted in the 2017 Report and Order by correcting the erroneous entry for 467.5675 MHz to refer to 467.5625 MHz.

7. *Medtronic Petition.* Medtronic points out in its petition that several rule revisions in the 2017 Report and Order meant to be "ministerial" inadvertently may have modified the existing MedRadio Service rules. Medtronic requests that the Commission revise certain rules to fix the inadvertent substantive changes and correct typographical errors.

8. The Commission grants the Medtronic Petition and amends the rules as requested, with a few modifications, to undo inadvertent changes to the MedRadio Service rules. First, Medtronic points out that the new version of Section 95.303 defines the "authorized bandwidth" for Part 95 services in terms of "occupied bandwidth," but the flexible rules applicable to the MedRadio Service do not require the measurement of occupied bandwidth. The Commission resolves this inconsistency by amending the MedRadio rules to remove the incompatible "authorized bandwidth" concept. Specifically, the Commission amends Section 95.2573 to clarify that the emission bandwidth definition in Section 95.2503 should be used for the MedRadio Service and make other conforming edits to indicate the channelization flexibility up to the bandwidth limits outlined in Section 95.2573. Further, the Commission

amends Section 95.2579 to remove the use of the term "occupied bandwidth," which has a specific definition in Section 95.303, and instead refer to the "MedRadio channel the transmission is intended to occupy" in order to make the language consistent with similar language in other MedRadio Service rules. These changes will remove the use of similar yet incompatible terms from the MedRadio rules. The Commission accepts Medtronic's suggested changes to Sections 95.2557(b), (c) and 95.2559(a)(6) because it agrees they return the rules back to their original intent. Further, the Commission corrects certain typographical errors, as suggested by Medtronic and on its own motion, in Sections 95.2503, 95.2509(e)(2), 95.2533(e)(2), and 95.2559(f) of the MedRadio Service rules.

9. Finally, the Commission clarifies the language in Section 95.2569(c) to remove incorrect terminology regarding "SAR Measurement techniques" and return the rule to be closer to its previous language. Section 95.2569(c) is designed to address the measurement of field strength and radiated power of devices that are implanted within a body. SAR measurements, by contrast, are used in connection with the evaluation of radiofrequency exposure and are already addressed in Section 95.2585. Because the original language and measurement guidance accurately described in-body simulations, the Commission corrects Section 95.2569(c) to refer to the "dielectric parameters for the tissue-equivalent material" with regard to measuring energy emitted from implanted devices.

#### List of Subjects in 47 CFR Part 95

Communications, Radio equipment.  
Federal Communications Commission.

**Marlene Dortch,**  
*Secretary.*

#### Final Rules

The Federal Communications Commission amends part 95 of Title 47 of the Code of Federal Regulations (CFR) as set forth below:

#### PART 95—PERSONAL RADIO SERVICES

■ 1. The authority citation for part 95 continues to read as follows:

**Authority:** 47 U.S.C. 154, 303, 307.

■ 2. Section 95.531 is amended by revising paragraph (a) to read as follows:

#### § 95.531 Permissible FRS uses.

\* \* \* \* \*

(a) *Digital data.* In addition to voice conversations, FRS units may transmit digital data containing location information, or requesting location information from one or more other FRS or GMRS units, or containing a brief text message to another specific GMRS or FRS unit. Digital data transmissions may be initiated by a manual action of the operator or on an automatic or periodic basis, and a FRS unit receiving an interrogation request may automatically respond with its location. See also § 95.587(c).

\* \* \* \* \*

■ 3. Section 95.587 is amended by revising paragraph (c)(2) to read as follows:

**§ 95.587 FRS additional requirements.**

\* \* \* \* \*

(c) \* \* \*

(2) Digital data transmissions may be initiated by a manual action or command of the operator or on an automatic or periodic basis, and FRS units may be designed to automatically respond with location data upon receiving an interrogation request from another FRS unit or a GMRS unit.

\* \* \* \* \*

■ 4. Section 95.967 is amended by revising paragraph (a) to read as follows:

**§ 95.967 CBRS transmitter power limits.**

\* \* \* \* \*

(a) When transmitting amplitude modulated (AM) voice signals or frequency modulated (FM) voice signals, the mean carrier power must not exceed 4 Watts.

\* \* \* \* \*

■ 5. Section 95.971 is amended by revising paragraph (a) to read as follows:

**§ 95.971 CBRS emission types.**

\* \* \* \* \*

(a) *Permitted emission types.* CBRS transmitter types must transmit AM voice emission type A3E or SSB voice emission types J3E, R3E or H3E, and may also transmit FM voice emission type F3E.

\* \* \* \* \*

■ 6. Section 95.973 is amended by revising paragraph (a) to read as follows:

**§ 95.973 CBRS authorized bandwidth.**

\* \* \* \* \*

(a) *AM and FM.* The authorized bandwidth for emission types A3E and F3E is 8 kHz.

\* \* \* \* \*

■ 7. Section 95.975 is amended by adding paragraph (c) to read as follows:

**§ 95.975 CBRS modulation limits.**

\* \* \* \* \*

(c) When emission type F3E is transmitted the peak frequency deviation shall not exceed ±2 kHz.

■ 8. Section 95.979(a) is amended by revising the first row of the table to read as follows:

**§ 95.979 CBRS unwanted emissions limits.**

\* \* \* \* \*

(a) \* \* \*

Emission type	Paragraph
A3E, F3E .....	(1), (3), (5), (6).
* * * * *	* * * * *

■ 9. Section 95.1763 is amended by revising paragraph (d) to read as follows:

**§ 95.1763 GMRS channels.**

\* \* \* \* \*

(d) *467 MHz interstitial channels.*

Only hand-held portable units may transmit on these 7 channels. The channel center frequencies are: 467.5625, 467.5875, 467.6125, 467.6375, 467.6625, 467.6875, and 467.7125 MHz.

■ 10. Section 95.1787 is amended by revising paragraph (a)(1) to read as follows:

**§ 95.1787 GMRS additional requirements.**

\* \* \* \* \*

(a) \* \* \*

(1) Digital data transmissions may contain location information, or requesting location information from one or more other GMRS or FRS units, or containing a brief text message to another specific GMRS or FRS unit. Digital data transmissions may be initiated by a manual action of the operator or on an automatic or periodic basis, and a GMRS unit receiving an interrogation request may automatically respond with its location.

\* \* \* \* \*

■ 11. Section 95.2503 is amended by revising the definition of “*Medical implant transmitter*” to read as follows:

**§ 95.2503 Definitions, MedRadio.**

\* \* \* \* \*

*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 of facilitating communications from a medical implant device.

\* \* \* \* \*

■ 12. Section 95.2509 is amended by revising the paragraph (e)(2) to read as follows:

**§ 95.2509 MBAN registration and frequency coordination.**

\* \* \* \* \*

(e) \* \* \*

(2) If the MBAN is within line-of-sight of an AMT receive facility, the MBAN frequency coordinator shall achieve a mutually satisfactory coordination agreement with the AMT frequency coordinator prior to the MBAN beginning operations in the band. Such coordination agreement shall provide protection to AMT receive stations consistent with International Telecommunication Union (ITU) Recommendation ITU-R M.1459, “Protection criteria for telemetry systems in the aeronautical mobile service and mitigation techniques to facilitate sharing with geostationary broadcasting-satellite and mobile-satellite services in the frequency bands 1 452–1 525 and 2 310–2 360 MHz,” May 2000, as adjusted using generally accepted engineering practices and standards that are mutually agreeable to both coordinators to take into account the local conditions and operating characteristics of the applicable AMT and MBAN facilities, and shall specify when the device shall limit its transmissions to segments of the 2360–2390 MHz band or must cease operation in the band. This ITU document is incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Communications Commission must publish a document in the **Federal Register** and the material must be available to the public. Copies of the recommendation may be obtained from ITU, Place des Nations, 1211 Geneva 20, Switzerland, or online at <http://www.itu.int/en/publications/Pages/default.aspx>. You may inspect a copy at the Federal Communications Commission, 445 12th Street SW, Washington, DC 20554, or 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). “Generally accepted engineering practices and standards” include, but are not limited to, engineering analyses and measurement data as well as limiting MBAN operations in the band by time or frequency.

\* \* \* \* \*

■ 13. Section 95.2533 is amended by revising paragraph (e)(2) to read as follows:

**§ 95.2533 Prohibited MedRadio uses.**

\* \* \* \* \*

(e) \* \* \*

(2) A non-radio frequency actuation signal generated by a device external to the body with respect to which the MedRadio implant or body-worn transmitter is used.

■ 14. Section 95.2557 is amended by revising paragraphs (b) and (c) to read as follows:

**§ 95.2557 MedRadio duration of transmissions.**

\* \* \* \* \*

(b) MedRadio transmitters may transmit in the 401–406 MHz band in accordance with the provisions of § 95.2559(b)(2) and § 95.2559(b)(3) for no more than 3.6 seconds in total within a one hour time period.

(c) MedRadio transmitters may transmit in the 401–406 MHz band in accordance with the provisions of § 95.2559(b)(4) for no more than 360 milliseconds in total within a one hour time period.

\* \* \* \* \*

■ 15. Section 95.2559 is amended by revising paragraphs (a)(6) introductory text, (a)(6)(iii) and the paragraph heading to paragraph (f) to read as follows:

**§ 95.2559 MedRadio channel access requirements.**

\* \* \* \* \*

(a) \* \* \*

(6) 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 criteria specified in paragraphs (a)(1) through (5) of this section. The alternate channel may be accessed in the event a communications session is interrupted by interference. The following criteria must be met:

\* \* \* \* \*

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

\* \* \* \* \*

(f) *Requirements for MBANs.* \* \* \*

■ 16. Section 95.2569 is amended by revising paragraph (c) to read as follows:

**§ 95.2569 MedRadio field strength measurements.**

\* \* \* \* \*

(c) For a MedRadio transmitter intended to be implanted in a human body, radiated emissions and M–EIRP measurements for transmissions by stations authorized under this section may be made in accordance with an FCC-approved human body simulator and test technique. Guidance regarding dielectric parameters for the tissue-equivalent material can be found in the Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB).

■ 17. Section 95.2573 is revised to read as follows:

**§ 95.2573 MedRadio authorized bandwidths.**

Each MedRadio transmitter type must be designed such that the MedRadio emission bandwidth (as defined in § 95.2503) does not exceed the applicable limits set forth in this section.

(a) For MedRadio transmitters operating in the 402–405 MHz band, the maximum MedRadio emission bandwidth is 300 kHz. Such transmitters must not use more than 300 kHz of bandwidth (total) during a MedRadio communications session. This provision does not preclude full duplex or half duplex communications provided that the total bandwidth of all of the channels employed in a MedRadio communications session does not exceed 300 kHz.

(b) For MedRadio transmitters operating in the 401–401.85 MHz band or the 405–406 MHz band, the maximum MedRadio emission bandwidth is 100 kHz. Such transmitters must not use more than 100 kHz of bandwidth (total) during a MedRadio communications session. This provision does not preclude full duplex or half duplex communications provided that the total bandwidth of all of the channels employed in a MedRadio communications session does not exceed 100 kHz.

(c) For MedRadio transmitters operating in the 401.85–402 MHz band, the maximum MedRadio emission bandwidth is 150 kHz. Such transmitters must not use more than 150 kHz of bandwidth (total) during a MedRadio communications session. This provision does not preclude full duplex or half duplex communications, provided that the total bandwidth of all of the channels employed in a MedRadio communications session does not exceed 150 kHz.

(d) For MedRadio transmitters operating in the 413–419 MHz, 426–432

MHz, 438–444 MHz or 451–457 MHz bands, the maximum MedRadio emission bandwidth is 6 MHz.

(e) For MedRadio transmitters operating in the 2360–2400 MHz band, the maximum MedRadio emission bandwidth is 5 MHz.

(f) Lesser emission bandwidths may be employed, provided that the unwanted emissions are attenuated as provided in § 95.2579. See also § 95.2567 regarding maximum radiated power limits, § 95.2565 on frequency accuracy, § 95.2569 on field strength measurements, and § 95.2585 on RF exposure.

■ 18. Section 95.2579 is amended by revising paragraphs (c)(1), (d) introductory text, (d)(1)(i) and (ii), and (g) to read as follows:

**§ 95.2579 MedRadio unwanted emissions limits.**

\* \* \* \* \*

(c) \* \* \*

(1) 20 dB, on any frequency within the 402–405 MHz band that is more than 150 kHz away from the center frequency of the MedRadio channel the transmission is intended to occupy;

\* \* \* \* \*

(d) *Attenuation requirements, 401–402 MHz, 405–406 MHz.* For MedRadio transmitter types designed to operate in the 401–402 MHz band or 405–406 MHz band, the power of unwanted emissions must be attenuated below the maximum permitted transmitter output power by at least:

(1) \* \* \*

(i) More than 75 kHz away from the center frequency of the MedRadio channel the transmission is intended to occupy if the MedRadio transmitter type is operating on a frequency between 401.85 and 402 MHz; or,

(ii) More than 50 kHz away from the center frequency of the MedRadio channel the transmission is intended to occupy and 100 kHz or less below 401 MHz or above 406 MHz.

\* \* \* \* \*

(g) *Measurements.* Compliance with the limits in paragraphs (c), (d) and (e) of this section is based on the use of measurement instrumentation using a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.