decision stated that the WIPP will comply with EPA’s radioactive waste disposal regulations at 40 CFR part 191, subparts B and C. The final WIPP certification decision includes conditions that (1) prohibit shipment of TRU waste for disposal at WIPP from any site other than the Los Alamos National Laboratory (LANL) until the EPA determines that the site has established and executed a quality assurance program, in accordance with §§194.22(a)(2)(II), 194.24(c)(3), and 194.24(c)(5) for waste characterization activities and assumptions (Condition 2 of appendix A to 40 CFR part 194); and (2) prohibit shipment of TRU waste for disposal at WIPP from any site other than LANL until the EPA has approved the procedures developed to comply with the waste characterization requirements of §194.22(c)(4) (Condition 3 of appendix A to 40 CFR part 194). The EPA’s approval process for waste generator sites is described in §194.8. As part of EPA’s decision-making process, the DOE is required to submit to EPA appropriate documentation of quality assurance and waste characterization programs at each DOE waste generator site seeking approval for shipment of TRU radioactive waste to WIPP. In accordance with §194.8, EPA will place such documentation in the official Air Docket in Washington, DC, and informational dockets in the State of New Mexico for public review and comment.

EPA will perform an inspection of Hanford’s technical and quality assurance programs for waste characterization in accordance with Conditions 2 and 3 of the WIPP certification. More specifically, we will be focusing on CH-debris and solid waste streams. The inspection is scheduled to take place the week of December 17, 2001.

EPA has placed a number of documents pertinent to the inspection in the public docket described in SUPPLEMENTARY INFORMATION:

Background

DOE is developing the WIPP near Carlsbad in southeastern New Mexico as a deep geologic repository for disposal of TRU radioactive waste. As defined by the WIPP Land Withdrawal Act (LWA) of 1992 (Pub. L. No. 102–579), as amended (Pub. L. No. 104–201), TRU waste consists of materials containing elements having atomic numbers greater than 92 (with half-lives greater than twenty years), in concentrations greater than 100 nanocuries of alpha-emitting TRU isotopes per gram of waste. Much of the existing TRU waste consists of items contaminated during the production of nuclear weapons, such as rags, equipment, tools, and sludges.

On May 13, 1998, EPA announced its final compliance certification decision to the Secretary of Energy (published May 18, 1998, 63 FR 27354). This
Federal Communications Commission, 415 12th Street, SW, TW–A325, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Hugh Van Tuyl, Office of Engineering and Technology, (202) 418–7506.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Notice of Proposed Rule Making and Order, ET Docket—01–278, FCC 01–290, adopted October 2, 2001, and released October 15, 2001. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Information Center, Room CY–A257, 445 12th Street, SW, Washington, DC, and also may be purchased from the Commission’s duplication contractor, Qualex International (202) 863–2893, Room CY–B402, 445 12th Street, SW, Washington, DC 20554.

Summary of the Notice of Proposed Rule Making

1. This Notice of Proposed Rule Making (NPRM) proposes to review and update certain rules sections contained in parts 2, 15 and 18 of our rules. Specifically, we are proposing to: (1) modify limits and restrictions on emissions from certain unlicensed or part 15 devices above 2 GHz; (2) require that radar detectors be subject to emission limits in order to prevent interference to certain satellite operations; (3) eliminate the prohibition on data transmissions and make other changes to rules governing part 15 remote control devices; (4) modify the rules for radio frequency identification systems to harmonize our rules with those in other parts of the world and to allow for improved operation; (5) simplify the labeling requirement for manufacturer self-authorized equipment; and (6) make other changes to update and correct our rules. This item responds to two petitions for rule making, a filing pursuant to the Regulatory Flexibility Act of 1980 and recommendations contained in the Biennial Regulatory Review 2000 Updated Staff Report.

2. On September 19, 2000, the Commission issued a staff report summarizing an extensive review of the Commission’s rules undertaken as part of the 2000 Biennial Review. On January 17, 2001, the Commission released an updated report (“Updated Staff Report”) taking into account comments received in response to the initial report. In developing the reports, the staff from each Commission Bureau and Office reviewed all rules pertinent to its operations to determine whether to recommend that the Commission modify or eliminate any rules. The review was not limited to the rules implicated by section 11 and section 202(h). Accordingly, the staff reviewed part 15 to determine whether there were any rules that could be modified or eliminated, even though a review of that part was not required by statute. Updated Staff Report recommended that the Commission consider a number of changes to part 15 and other parts of the rules. Specifically, it recommended that the Commission:

   • Review the limits for radio frequency emissions above 2 GHz.
   • Permit data transmission by transmitters operating under § 15.231.
   • Simplify the labeling requirements for equipment approved under the Declaration of Conformity procedure.
   • Incorporate a new test procedure for unlicensed Personal Communication Services (PCS) transmitters into the rules.
   • Clarify the measurement requirements in 47 CFR part 2 of the rules for Family Radio Service transmitters.
   • Clarify the requirements for scanning receivers to prevent the reception of cellular telephone frequencies.

3. In addition, the National Council for Information Technology Standardization Technical Committee B10 (NCTIS B10) and SAVI Technology, Inc. (SAVI) filed petitions for rule making requesting changes to the part 15 requirements for radio frequency identification systems.

Proposed Revisions to Part 15

1. Part 15 Emission Limits Above 2 GHz

4. 47 CFR part 15 of the rules contains the technical requirements for radiofrequency devices that may be operated without individual licenses. The requirements include radiated emission limits for intentional radiators, such as transmitters, and for unintentional radiators, such as radio receivers, computers and VCRs. The limits are intended to minimize the possibility of unlicensed part 15 devices causing interference to licensed radio services. The last significant change to these limits was made in 1989, so they have been essentially unchanged for over ten years. During this period, the commercial use of spectrum above 2 GHz has increased significantly. Licensed and unlicensed devices operating above 2 GHz have proliferated, in part because advances in technology have made such devices more affordable.

5. The Updated Staff Report recommends that we review the emission limits above 2 GHz to determine whether any changes are warranted. We have identified two specific areas where we believe changes may be warranted. The first concerns emission limits in the frequency range above 38.6 GHz, and the second concerns certain types of receivers operating above 960 MHz that are exempt from equipment authorization and from complying with the emission limits for unintentional radiators.

6. Restricted frequency bands above 38.6 GHz. The entire frequency range above 38.6 GHz is currently listed as a restricted band of operation under part 15. Frequency bands are designated as restricted to protect certain sensitive radio services, such as those that protect safety-of-life or those that use very low received levels, such as satellite downlinks or radio astronomy. With certain exceptions, part 15 permits only spurious emissions in restricted frequency bands, and the emissions must comply with the limits in section 15.209. These limits are lower than the out-of-band emission limits permitted by some other rule sections in part 15. For this reason, compliance with the rules may be more difficult to achieve for devices that produce harmonic emissions above 38.6 GHz, including field disturbance sensors operating in the 10.5 and 24 GHz bands and other transmitters operating in the 24 GHz band. The maximum permitted level of harmonics from these devices would be significantly higher if they did not fall in restricted bands. The rules allow some relaxation of the harmonic limits for field disturbance sensors under certain conditions, but the limits are still lower than they would be if the emissions were not in restricted bands.

7. There are a number of sensitive radio services operating above 38.6 GHz, but we believe it is not necessary to restrict the entire spectrum above this frequency. At the time the entire frequency range above 38.6 GHz was designated as a restricted band, there was no requirement in our rules to make measurements above 40 GHz because of limitations in measurement technology. Designating the entire band above 38.6 GHz as restricted, rather than restricting designated segments, was simply a matter of administrative convenience and had no impact on manufacturers because measurements were not required at those frequencies. However, due to advancements in measurement technology, the Commission now requires measurements above 40 GHz for some devices, which means these devices must now comply with the restricted band limits. In light of this, we believe the strict limits of section...
15.209 are not appropriate for all frequency bands above 38.6 GHz. We seek comments on the need for changes to the restricted bands above 38.6 GHz and the potential benefits to manufacturers of such changes. We also seek comment on whether there are any other part 15 rules designed to protect sensitive services such as government operations that should be modified.

8. Receivers operating above 960 MHz. In addition to possible changes in the restricted bands, we believe that changes to the requirements for radio receivers operating above 960 MHz may be warranted. Most receivers contain one or more oscillators that generate radio frequency signals used in tuning the received signal. This generated signal can radiate from the receiver and could interfere with other nearby receivers. For this reason, part 15 requires certain receivers to meet radiated emission limits to minimize the possibility of interference. The rules currently require only receivers that tune in the range of 30–960 MHz and Citizens’ Band receivers to comply with the limits. Other receivers are not required to comply with the limits, but the rules require the operation of any receiver to cease if it causes interference. In the past, most receivers used in the home only tuned below 960 MHz and were subject to emission limits to minimize the possibility of interference to other radio equipment. Above 960 MHz, the emissions generated by radio receivers tend to be more directional and the propagation losses are higher. There is less probability of such receivers causing interference, so the rules have not required receivers that tune above 960 MHz to meet emission limits or to receive an equipment authorization. Historically, these rules have generally worked well.

9. Radar detectors are currently exempt from complying with the part 15 emission limits because they tune above 960 MHz. They are designed to monitor for the presence of police radar in several frequency bands, including the 10.50–10.55 GHz, 24.05–24.25 GHz and 33.4–36.0 GHz bands. The oscillator signals internally generated by some radar detectors’ tuning circuitry are being radiated and causing interference to VSATs. The level of these signals is typically far above the Part 15 limits. The potential for interference to VSATs caused by radar detectors has recently increased because manufacturers have begun using swept frequency oscillators at different frequencies than previously used. The purpose of these changes is to enhance detection of police radar while making it more difficult for police to detect the presence of radar detectors in vehicles.

10. We invite comment on whether there is a need to require radar detectors to comply with emission limits to minimize the possibility of interference, and if so, what are the appropriate limits. We also seek comments on whether there are any other receivers that tune above 960 MHz that should be required to comply with emission limits. If so, we seek comments on the appropriate limits, and whether the limits should apply in all frequency bands or only certain bands where interference may be more likely to occur, such as the VSAT bands. Furthermore, we seek comment, especially from small entities, concerning the timeframe that should be required to comply with any new emission limits.

Data Transmission by Remote Control Devices

11. Section 15.231 of the rules allows the operation of remote control devices in the 40 MHz band and above 70 MHz. There are two separate provisions for operation under this section. Paragraph (a) contains field strength limits for transmitters that transmit control signals, such as those used with alarm systems, door openers and remote switches. A transmitter operated under this paragraph must cease transmission within 5 seconds after being activated automatically or after a manually operated switch is released. Continuous transmissions such as voice and video are not permitted, and data transmissions are not permitted except for recognition codes to identify specific transmitters in a system. There is a prohibition on periodic transmissions at regular predetermined intervals, although transmissions are permitted once per hour to verify the integrity of security transmitters. Paragraph (e) of this section allows any type of transmission, including data and transmissions at regular periodic intervals. However, this paragraph contains lower field strength limits than paragraph (a), and it places strict timing requirements on periodic transmissions.

12. We believe that the prohibition on data transmissions in paragraph (a) is unnecessarily constraining and can be an impediment to the development of new types of devices. We do not believe that removing this restriction will result in an increased potential for interference. Based on the lack of a record of interference complaints from devices operating under this section, we tentatively propose that existing limits on field strength and duration of transmissions are sufficient to prevent harmful interference. Because the interference potential of a device is a function of the permitted signal strength and duration of the transmissions rather than the type of information sent, there should be no difference between the interference potential of a device transmitting recognition codes as permitted by paragraph (a) as compared to a device transmitting data that represents other kinds of information. Accordingly, we are proposing to remove the prohibition on the transmission of data in § 15.231(a). We are also proposing to remove the prohibition on voice and video transmissions. Data representing voice or video has no greater interference potential than any other type of data, and the timing requirements in paragraphs (a) and (e) will not allow continuous transmissions, so there is no need to expressly prohibit them.

13. We seek comments on our proposal to allow data transmission under § 15.231(a) and the potential benefits to manufacturers. We also seek comment on whether allowing data transmissions will result in an increased proliferation of devices or in devices transmitting for a greater amount of time, and whether there is a need to modify the timing requirements in paragraphs (a) or (e) to avoid interference to other radio services.

Radio Frequency Identification Systems

14. Radio frequency identification (RFID) systems use radio signals to track and identify items such as shipping containers and merchandise in stores. A system typically consists of a tag mounted on the item to be identified, and a transmitter/receiver unit that interrogates the tag and receives identification data back from the tag. The tag may be a self-powered transmitter, or it may receive power from the interrogating transmitter. RFID systems can operate in a number of frequency bands under part 15 of the rules.

15. NCITS B10 Petition for Rulemaking. We believe that the increases in emission levels proposed by NCITS B10 are not likely to create significant interference to other services. Further, although other part 15 RFID systems are not protected from interference from new RFID systems, we believe that the potential for such interference is low and can be mitigated through site engineering techniques if it should occur. Thus, we find that the public interest would be best served by proposing to modify our rules to permit the introduction of these improved RFID devices. Specifically, we are proposing to modify § 15.225 to include the
emission mask sought by NCITS B10. We are also proposing to amend § 15.205 of the rules to allow devices operated pursuant to § 15.255 to place emissions other than spurious emissions into the 13.36–13.41 MHz restricted band. This restricted band was intended to protect radio astronomy operations. However, radio astronomy operations in this band in the United States are limited to one site in Florida. NTIA has stated that they do not object to allowing emissions from RFID devices in this restricted band. Alternatively, we propose to remove the 13.36–13.41 MHz band from the restricted bands listed in § 15.205. We seek comment on these proposals.

16. The NCITS B10 also requests that the Commission clarify that RFID tags may be approved with or without the reader. NCITS B10 states that separate authorizations of the RFID tag and reader could foster competition in the provision of tags designed to work with multiple readers. We agree with NCITS B10 and are proposing to amend § 15.225 to specify that RFID applications equipment authorization for tags and readers can be submitted either together or separately. Tags and readers approved together would both be labeled with the same FCC identification number. We seek comment on this proposal.

17. SAVI Petition for Rule Making. We agree with SAVI that changes to part 15 to allow more advanced RFID systems in the 433 MHz band would serve the public interest. Accordingly, we are proposing to add a new section that would allow operation of such devices in the 425–435 MHz band. We propose to allow a maximum field strength of 11,000 microvolts per meter measured at a distance of 3 meters using equipment with an average detector function. The maximum peak level permitted would be 110,000 microvolts per meter measured at a distance of 3 meters. This is the same as the current limit in § 15.231(a) at 433 MHz, which we believe will provide an adequate signal for reliable communications while minimizing the potential for interference to other users of the band. As proposed by SAVI, transmissions would be limited to 120 seconds with at least a 10 second silent period between transmissions, except that retransmissions would be permitted in case of data errors. We also propose that powered tags and readers could be approved either separately or under a single application as we proposed for devices operating in the 13.56 MHz band. We will seek comments on these proposals. We also seek comments on allowing retransmissions in the event of data errors, and whether we need to more clearly define the circumstances under which retransmissions are permitted.

Declaration of Conformity (DoC) Labeling

18. Many unintentional radiators under part 15 of the rules, including personal computers, VCRs and radio receivers, are authorized through the Declaration of Conformity (DoC) procedure. DoC is a self-approval procedure in which the manufacturer has the equipment tested for compliance at a laboratory accredited to make the required measurements. Once the equipment has been found to comply with the applicable rules, it may be marketed without an approval from the Commission.

19. Equipment authorized through the DoC procedure must be labeled as specified in Section 15.19 of the rules. This section shows illustrations of two variations of the label to be used. One label is for equipment that was tested for compliance as a complete unit, and the other label is for personal computers that were assembled from components that were tested separately for compliance. Either variation of label must include the manufacturer’s trade name, the equipment model number, the FCC logo, the phrase “For Home or Office Use”, and a statement as to whether the complete device was tested for compliance or whether it was assembled from tested components.

20. The DoC procedure was originally established to reduce the burden on manufacturers of Class B personal computers and peripherals by eliminating the delays resulting from the requirement to obtain a Commission approval prior to marketing equipment. The phrase “For Home or Office Use” on the DoC label was intended to show that a device meets the more stringent Class B limits and is suitable for use in either residential (Class B) or non-residential (Class A) environments. However, because Class B devices may be used anywhere, this statement on the label is unnecessary, and requiring it to be included means that manufacturers must use a larger label on a device. This could become increasingly burdensome as advancements in technology result in smaller and smaller equipment. We are therefore proposing to delete the requirement for the phrase “For Home or Office Use” to simplify the label (The text of labels in § 15.19(b)(1) do not appear in this proposed rule but will appear in full text in the final rule.).

21. We also propose to eliminate the statement on the label that the complete device be tested for compliance in order to further simplify the label. We will, however, continue to require that personal computers assembled from tested components contain a statement to that effect on their label. That information could assist us in determining the source of compliance problems when investigating cases of non-compliant equipment. We do not believe requiring this information on the label would be unduly burdensome because the types of computers assembled from tested components generally have more space for the label. We believe these changes will result in a reduced burden on manufacturers while still requiring sufficient information on equipment for enforcement purposes. We seek comment on these proposals. In other proceedings, parties have indicated that electronic labeling may enhance flexibility by permitting equipment to be quickly re-labeled when changes are made to the product identification number. We seek comment on whether electronic labeling should be permitted for devices authorized under the DoC procedure as we proposed for certain other equipment. If so, we seek comment on what would be an appropriate method for electronically labeling equipment such as computers that are authorized through the DoC procedure.

Test Procedure for Unlicensed PCS Equipment

22. Section 15.31 of the rules lists the measurement procedures that the Commission will use to determine whether a part 15 device complies with the applicable technical requirements. In the past the Commission usually developed its own measurement procedures. More recently, the Commission has shifted to incorporating industry-developed measurement procedures into the rules by reference. The American National Standards Institute (ANSI) C63.4—1992 procedure is specified as the procedure the Commission will use for testing most intentional and unintentional radiators for compliance. However, this procedure does not cover certain types of devices, including unlicensed Personal Communication Service (PCS) equipment.

23. Unlicensed PCS equipment has certain unique technical requirements that other Part 15 devices do not have which are intended to prevent interference between devices. For example, there is a clearly defined spectrum etiquette that requires unlicensed PCS equipment to monitor the spectrum before transmitting and to use a specific transmission format.
Ensuring that unlicensed PCS equipment complies with this etiquette requires a highly specialized measurement procedure. The ANSI C63 Committee recently completed work on a measurement procedure for unlicensed PCS equipment, ANSI C63.17–1998. This procedure provides detailed guidance that will assist manufacturers in measuring unlicensed PCS devices to ensure that they comply with the requirements in our rules. We are therefore proposing to incorporate this procedure into our rules by reference as the procedure we will use for testing unlicensed PCS equipment. We request comments on this proposal.

Exemption for Very Low-Powered Devices

24. Part 15 of the rules requires most devices that intentionally emit radiofrequency radiation to be certified before they can be marketed. Phillip Inglis noted that there are a number of devices on the market that transmit signals on low frequencies at extremely low power levels, such as card readers, pens used to write on specialized computer screens, and other devices designed to communicate over distances of inches. All such devices must be certified regardless of how low an operating power they use. Certification requires that the manufacturer have the equipment tested for compliance, submit an application with the test results and other exhibits to the Commission and wait for an approval before marketing the equipment. We believe that the interference potential of such devices is extremely low, and we tentatively conclude that requiring certification is an unnecessary burden on manufacturers. We therefore propose to exempt devices operating below 490 kHz from certification if the maximum field strength emitted is more than 40 dB below the applicable part 15 limits. We seek comment on this proposal. As an alternative, we seek comment on whether all transmitters operating below 490 kHz under the provisions of §15.209 should be only subject to verification. Verification simply requires the manufacturer to have the equipment tested and to retain certain information on file. No application filing is required for verification and the equipment may be sold as soon as it is found to comply.

Information to the User

25. Manufacturers are required to supply certain information to the users of products operating under part 15 of the rules. §21.1 requires the instruction manual for all part 15 devices to contain a statement that unauthorized modifications to a device could void the user’s authority to operate it. In addition, §15.105 requires the manual for a digital device to include a warning of the potential for interference to other devices and a list of some steps that could possibly eliminate the interference. The rules originally envisioned that this information would be included in a paper instruction manual. As manufacturers have moved to provide more of their manuals electronically, the Commission has permitted this warning information to be provided by alternative means, such as a CD-ROM. 26. The Information Technology Industry Council (ITI) states that manufacturers are increasingly providing information over the Internet, rather than on paper or a CD-ROM. ITI recommends that the Commission consider the possibility of allowing the information to users required by the rules to be supplied over the Internet rather than with the product. We do not believe it is burdensome on manufacturers to require this information to be supplied with the product when a paper manual or CD-ROM is supplied with the product. However, this requirement could be burdensome in cases where the instruction manual is only available over the Internet. We therefore propose that manufacturers be permitted to provide the required information to users in the instruction manual in whatever form the manual is supplied. This may be on paper, a computer disk, a CD-ROM or over the Internet. This will ensure that the information is readily available to users while minimizing the burden on manufacturers. We seek comment on this proposal. We seek comment, more particularly, on whether Internet-delivered manuals create accessibility problems for consumers without Internet access or for groups of consumers for whom obtaining Internet access is difficult. Where this is the case, we seek comment on whether allowing important information to be delivered only over the Internet results in certain consumers having insufficient access to information. We also seek comment on whether allowing warnings to be delivered exclusively online will result in a significant reduction in the number of consumers who receive the warnings.

Proposed Revisions to Part 2

Family Radio Service Equipment Measurements

27. In 1996, the Commission established the Family Radio Service (FRS), which is a private, two-way, very short distance voice communications service for facilitating family and group activities. Part 95 of the rules specifies the operating frequencies and a frequency tolerance requirement for transmitters used in the FRS. The temperature ranges over which frequency tolerance measurements for most transmitters must be made are specified in part 2 of the rules. However, at the time the FRS was established, the temperature ranges specified in part 2 only applied to equipment authorized under the now-abolished type-acceptance procedure. Because the rules adopted for the FRS stated that transmitters were to be authorized under the certification procedure, the temperature ranges specified in part 2 for type-accepted equipment did not apply. Therefore, the temperature range over which FRS frequency stability measurements must be made was not clear. Accordingly, we are proposing to amend our rules to specify that FRS frequency stability measurements are to be made from −20 °C to +50 °C. We request comments on this proposal.

Accreditation of Test Laboratories

28. Section 2.948 of the rules require laboratories that submit test data for equipment subject to certification under parts 15 and 18 of the rules to file an up-to-date description of its facility with the Commission. Many of these laboratories are accredited by a recognized accrediting organization, such Accreditation Program (NVLAP) that determines the technical competency of the laboratory in accordance with International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) Standard 17025. Because the accreditation process considers both the test facility and the competency of the laboratory to perform the required measurements, we question whether it is necessary for an accredited laboratory to submit a description of its facility to the Commission as the rules currently require. Therefore, we are tentatively proposing to remove this requirement from §2.948 of the rules for accredited laboratories, provided the accrediting organization notifies the Commission with certain minimum information about the laboratory. We propose that this information would include the laboratory name, address, contact information, scope of accreditation, date of accreditation and date by which the accreditation must be renewed. In addition, we are proposing to clarify the requirements in §2.948 for the testing of equipment subject to
Declaration of Conformity, which requires the use of an accredited laboratory. Specifically, we propose that the accreditation of laboratories outside the United States will be recognized by the Commission if one of the following two conditions are met: (1) the laboratory has been designated by a foreign authority and recognized by the Commission under the terms of a government-to-government Mutual Recognition Agreement or Arrangement; or (2) the laboratory has been accredited by an organization whose accreditations are recognized by the Commission. We seek comment on these proposals.

Additional Proposals

29. We believe that there are a number of other changes that can be made to simplify and clarify Parts 2, 15 and 18 of the rules. Our analysis revealed several rule sections that no longer appear to be necessary. In addition, we identified several sections that need to be updated to reflect the availability of more recent industry documents, or that need other minor revisions. The proposed changes are listed below. We request comment on each of these proposals.

- Section 2.202 Bandwidths. The table of necessary bandwidth calculations in paragraph (g) does not contain entries for newer digital modulation types. The NTIA Manual of Regulations & Procedures for Federal Radio Frequency Management contains formulas for calculating necessary bandwidths for various digital modulation types, and we are proposing to add them to the table in § 2.202(g).
- Section 2.948 Description of measurement facilities. We are proposing to remove references to expired transition dates and obsolete measurement procedures, update references to reflect the availability of the new ANSI C63.4–2000 measurement procedure, and to correct the Commission’s mailing address.
- Section 2.1033 Application for certification. We are proposing to re-designate paragraph 2.1033(c)(17) on composite devices as paragraph 2.1033(d). This proposed change corrects a numbering error that arose in the Report and Order in ET Docket 97–94.
- Sections 2.1061 through 2.1065 Filing for Application Reference. This procedure was developed over 20 years ago to allow manufacturers and licensees to file transmitter measurement data with the Commission. The Commission would retain the test data for future reference by licensees. This procedure is separate from the regular equipment authorization process. There appears to be no current need for this procedure, so we are proposing to remove it from the rules.
- Section 15.31 Measurement standards. We are proposing to remove references to measurement procedures that are no longer used and to correct the Commission’s mailing address. In addition we are proposing to update the reference to reflect the new ANSI C63.4–2000 measurement procedure. The rules will continue to indicate that the Commission will not use certain sections of this procedure for determining the compliance of equipment. Also, we are proposing that the rules reflect the Commission’s longstanding practice to use loop antennas rather than rod antennas for low frequency measurements.
- Section 15.118 Cable ready consumer electronics equipment. We are proposing to correct the Commission’s mailing address.
- Section 15.120 Program blocking technology requirements for television receivers. We are proposing to correct the Commission’s mailing address.
- Section 15.255 Operation in the band 59.0–64.0 GHz. We are proposing to correct the wording in paragraph (b)(5) from “emission limits” to “emission levels.”
- Section 18.103 Organization and applicability of the rules. We are proposing to delete this section because it duplicates the table of contents for Part 18.
- Section 18.105 Other applicable rules. We are proposing to delete this section because it provides little information and is not necessary.
- Section 18.119 Importation. We are proposing to delete this section because it duplicates portions of the rules in part 2.
- Section 90.203 Certification required. We are proposing to correct an error in paragraph (k) that occurred when rules streamlining the equipment authorization processes were published in the Federal Register.

Initial Regulatory Flexibility Analysis

30. As required by the Regulatory Flexibility Act (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rule Making (NPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided in paragraph 51 of the NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). 3

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

31. Section 11 of the Communications Act of 1934, as amended, and Section 202(h) of the Telecommunications Act of 1996 require the Commission: (1) To review biennially its regulations pertaining to telecommunications service providers and broadcast ownership; and (2) to determine whether economic competition has made those regulations no longer necessary in the public interest. The Commission is directed to modify or repeal any such regulations that it finds are no longer in the public interest.

32. As part of the biennial review for the year 2000, the Commission reviewed its regulations pertaining to telecommunications service providers and broadcast ownership and recommended a number of changes to those rules. While not specifically required by statute, the Commission also reviewed parts 2, 15 and 18 as part of this process.

33. The NPRM proposes several changes to part 15 and other parts of the rules. Specifically, it proposes to:

(1) Make certain changes to the part 15 emission limits above 2 GHz. While the part 15 emission limits have been effective at controlling interference, a review is warranted due to the increasing use of frequencies above 2 GHz. These limits appear to restrict unnecessarily certain types of devices such as field disturbance sensors. In addition, radar detectors, which are currently exempt from complying with emission limits, are causing interference to satellite services.

(2) Remove the restriction on data transmissions by remote control device because it may hinder the development of new types of devices, and the distinction between control signals and data signals is becoming increasingly blurred.

(3) Make changes to the requirements for radio frequency identification (RFID) systems to allow faster data transmission. RFID systems use a small transmitter attached to an item that transmits data identifying the item. The Commission received two petitions for

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2 See 5 U.S.C. 603(a).
rule making requesting these changes to the rules.

(4) Streamline the labeling process for equipment authorized under the Declaration of Conformity (DoC) procedure. As equipment becomes smaller, it becomes more difficult to include all the information currently required on the label.

(5) Make minor corrections and updates to part 15 and other parts of the rules.

B. Legal Basis

34. The proposed action is authorized under sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

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

35. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” 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 SBA.

36. The Commission has not developed a definition of small entities applicable to Radio Frequency Equipment Manufacturers (RF Manufacturers). Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to manufacturers of “Radio and Television Broadcasting and Communications Equipment.” According to the SBA’s regulation, an RF manufacturer must have 750 or fewer employees in order to qualify as a small business. Census Bureau data indicates that there are 858 companies in the United States that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities. We believe that many of the companies that manufacture RF equipment may qualify as small entities.

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

37. The NPRM proposes a number of rule changes that will affect reporting, recordkeeping and other compliance requirements. Each of these changes is described below.

38. The NPRM proposes to require radar detectors used by motorists to meet emission limits to prevent interference to satellite services. The tuning circuitry in most receivers, including radar detectors, generates radio frequency signals that can be radiated and cause interference. Part 15 of the rules has limits on the radiated signals from radio receivers that tuned up to 960 MHz. Because radar detectors only tune above 960 MHz, they are exempt from complying with emission limits and most or all models currently sold significantly exceed the Part 15 limits. We expect that manufacturers would be required to redesign radar detectors to comply with any emission limit adopted.

39. The NPRM proposes changes to streamline the labeling requirements for equipment authorized under the Declaration of Conformity (DoC) procedure. DoC is a self-approval procedure in which the manufacturer has the equipment tested for compliance at a laboratory accredited to make the required measurements. There is an alternative procedure that allows personal computers to be assembled using compliant motherboards and power supplies with no additional testing required. Equipment that complies with the applicable rules may be marketed without an approval from the Commission, and must be labeled as specified in part 15 of the rules. The NPRM proposes to eliminate the phrase “For home or office use” from the label for all equipment subject to DoC. In addition, if proposes to eliminate the phrase “Tested to comply with FCC standards” from the label on equipment that was tested as a complete unit, although this phrase will still be required on personal computers that were assembled from tested components. The NPRM also proposes to eliminate the need to place the equipment trade name and model number on the label if that information is already on the equipment in close proximity to the label. These changes will permit smaller labels on equipment. These changes will not be required, and small entities can change labels as they change and upgrade models.

40. The NPRM proposes to incorporate the ANSI C63.17–1998 procedure into the part 15 of the rules by reference as the procedure the Commission will use for testing unlicensed Personal Communication Service (PCS) equipment for compliance. Unlicensed PCS equipment has a number of specialized technical requirements designed to prevent interference between devices. Specifically, there is a defined “spectrum etiquette” that requires unlicensed PCS transmitters to monitor the spectrum for other users before transmitting, and to use a defined transmission format. There is currently no procedure listed in the rules for testing unlicensed PCS equipment to these requirements. The American National Standards Institute (ANSI) C63 Committee recently completed work on a procedure for measuring unlicensed PCS equipment, which the NPRM proposes to incorporate into the rules as the procedure that the Commission will use.

41. Part 15 currently references the ANSI C63.4–1992 procedure as the one that will be used for testing most intentional and unintentional radiators for compliance with the rules. The ANSI C63 Committee recently completed a minor revision of the ANSI C63.4–1992 procedure that contains a number of clarifications to the testing procedures. The NPRM proposes to reference the new C63.4–2000 procedure in place of the older version as the procedure that manufacturers should use for compliance testing.

42. The NPRM proposes a change to the temperature range for frequency stability measurements on transmitters used in the Family Radio Service (FRS) under part 95 of the rules. Most transmitters used in licensed services are required to maintain their carrier frequency within a specified tolerance over a range of voltage and temperature variations to minimize the probability of interference to other users. At the time the FRS was established in 1996, a frequency stability limit was specified for transmitters, but no temperature range was specified. The Commission...
staff informally interpreted that measurements must be made to −20 degrees centigrade. A 1998 rule change to the equipment authorization requirements unintentionally resulted in a new requirement to measure FRS transmitters to −30 degrees centigrade. However, the staff continued requiring measurements to −20 degrees centigrade in the interest of fairness. The NPRM proposes to specifically specify that FRS transmitters are to be measured to −20 degree centigrade as the staff has been requiring since 1996.

E. Steps Taken To Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

43. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.9

44. The proposal to require emission limits on radar detectors would have an impact on equipment manufacturers, some of which may be small entities. Paragraphs 10 through 14 in the primary item discuss the need to require certain receivers to meet radiated emission limits to minimize the possibility of interference. We requested comments in the NPRM on the timetable that should be required for compliance with new emission limits, and whether a differing compliance timetable should be required for small entities. The alternative of establishing a different timetable for small manufacturers would allow these small entities additional time to consider how to meet these new emission limits, and, if necessary, an opportunity to redesign or retool manufacturing facilities. We expect that the emission limits would be performance, rather than design standards, in that the Commission would not specify how manufacturers must design their equipment. The Commission seeks additional comment from small entities on what an appropriate time limit for compliance would be, and the resulting costs.

45. The other proposals contained in this NPRM are deregulatory in nature, which we expect will simplify compliance and reporting requirements for all parties, particularly small entities. For example, we proposed to reduce the amount of information required on the label for products authorized through the Declaration of Conformity self-approval process. If this change were adopted, manufacturers would be permitted to use the simplified label as soon as the rules change were adopted, manufacturers would not specify how manufacturers must design their equipment. The Commission seeks additional comment from small entities on what an appropriate time limit for compliance would be, and the resulting costs.

F. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rule

46. None.

List of Subjects

47 CFR Part 2

Communications equipment, Radio, Reporting and recordkeeping requirements.

47 CFR Part 15

Communications equipment, Labeling, Radio, Reporting and recordkeeping requirements.

47 CFR Part 18

Business and industry, Medical devices, Radio, Reporting and recordkeeping requirements, Scientific equipment.

47 CFR Part 90

Communications equipment, Reporting and recordkeeping requirements.

Federal Communications Commission.

William F. Caton,
Deputy Secretary.

Rule Changes

For reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR, parts 2, 15, 18 and 90 as follows:

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

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

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

2. In §2.202(g) table, under III–A. Frequency Modulation the entry 6. Composite Emissions emissions is revised to read as follows:

§ 2.202  Bandwidths.

* * * * *

(g) * * *

III–A. Frequency Modulation

* * * * *

6. Composite Emissions

Radio-relay system .................. $B_o = 2K/1$

$K = 1.6$

Pulse position modulated by 36 voice channel $8M00M7E$

baseband: pulse width at half amplitude $0.4 \mu S$;

$B_o = 8 \times 10^6 \text{ Hz} = 8 \text{ MHz}$ (Bandwidth independent of the number of voice channels)

---

9 See 5 U.S.C. 603(c).
### Description of emission

<table>
<thead>
<tr>
<th>Description of emission</th>
<th>Necessary bandwidth</th>
<th>Designation of emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite transmission digital modulation using DSB-AM (Microwave radio relay system).</td>
<td>$B_n = 2RK/\log_2 S$</td>
<td>5M00K7</td>
</tr>
<tr>
<td>Binary Frequency Shift Keying</td>
<td>$B_n = 2.36D + 0.27R$</td>
<td>2M80F1D</td>
</tr>
<tr>
<td>Multilevel Frequency Shift Keying</td>
<td>$B_n = (R/\log_2 S) + 2DK$</td>
<td>9M00F7D</td>
</tr>
<tr>
<td>Phase Shift Keying</td>
<td>$B_n = 2R/\log_2 S$</td>
<td>10M0G7D</td>
</tr>
<tr>
<td>Quadrature Amplitude Modulation (QAM)</td>
<td>$B_n = 2R/\log_2 S$</td>
<td>45M0W</td>
</tr>
<tr>
<td>Minimum Shift Keying</td>
<td>$2$-ary: $B_n = R(1.18)$, $4$-ary: $B_n = R(2.34)$</td>
<td>2M36G1D</td>
</tr>
</tbody>
</table>

#### Sample calculation

<table>
<thead>
<tr>
<th>Description of emission</th>
<th>Necessary bandwidth</th>
<th>Designation of emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite transmission digital modulation using DSB-AM (Microwave radio relay system).</td>
<td>Digital modulation used to send 5 megabits per second by use of amplitude modulation of the main carrier with 4 signaling states $R = 5 \times 10^6$ bits per second; $K = 1$; $S = 4$; $B_n = 8$ MHz</td>
<td>5M00K7</td>
</tr>
<tr>
<td>Binary Frequency Shift Keying</td>
<td>Digital modulation used to send 1 megabit per second by frequency shift keying with 2 signaling states and 0.75 MHz peak deviation of the carrier; $R = 1 \times 10^6$ bps; $D = 0.75 \times 10^6$ Hz; $B_n = 2.8$ MHz</td>
<td>2M80F1D</td>
</tr>
<tr>
<td>Multilevel Frequency Shift Keying</td>
<td>Digital modulation to send 10 megabits per second by use of frequency shift keying with four signaling states and 2 MHz peak deviation of the main carrier. $R = 10 \times 10^6$ bps; $D = 2$ MHz; $K = 1$; $S = 4$; $B_n = 10$ MHz</td>
<td>9M00F7D</td>
</tr>
<tr>
<td>Phase Shift Keying</td>
<td>Digital modulation used to send 10 megabits per second by use of phase shift keying with 4 signaling states; $R = 10 \times 10^6$ bps; $K = 1$; $S = 4$; $B_n = 10$ MHz</td>
<td>10M0G7D</td>
</tr>
<tr>
<td>Quadrature Amplitude Modulation (QAM)</td>
<td>$64$ QAM used to send $135$ Mbps has the same necessary bandwidth as $64$-PSK used to send $135$ Mbps; $R = 135 \times 10^6$ bps; $S = 64$; $B_n = 45$ MHz</td>
<td>45M0W</td>
</tr>
<tr>
<td>Minimum Shift Keying</td>
<td>Digital modulation used to send 2 megabits per second using 2-ary minimum shift keying; $R = 2.36 \times 10^6$ bps; $B_n = 2.36$ MHz</td>
<td>2M36G1D</td>
</tr>
</tbody>
</table>

### §2.948 Description of measurement facilities.

(a) * * * A laboratory that has been accredited in accordance with paragraph (d) of this section, is not required to file a description of its facilities with the Commission’s laboratory, provided the accrediting organization (or designating authority in the case of foreign laboratories) submits the following information to the Commission’s laboratory:

(i) Laboratory name, address and contact information.

(ii) Scope of accreditation.

(iii) Date of accreditation and renewal date of accreditation.

(3) If the equipment is to be authorized under the Declaration of Conformity procedure, the laboratory making the measurements must be accredited in accordance with paragraph (d) of this section.

(b) * * * For equipment that will be measured on an open field test site, a plot of site attenuation data taken pursuant to the procedures contained in sections 5.4.6 through 5.5 of the following procedure: Institute of Electrical and Electronics Engineers (IEEE) C63.4–2000, entitled “Interim Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz,” published by the Institute of Electrical and Electronics Engineers, Inc. on December 8, 2000 as document number SH94908. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of C63.4–2000 may be obtained from: IEEE Standards Department, 455 Hoes Lane, P.O. Box 1313, Piscataway, NJ 08855–1313, telephone 1–800–678–4333. Copies of ANSI C63.4–2000 may be inspected at the following locations:

(i) Federal Communications Commission, 445 12th Street, SW., Office of Engineering and Technology (room 7–B144), Washington, DC 20554,

(ii) Federal Communications Commission Laboratory, 7435 Oakland Mills Road, Columbia, MD 21046, or

(iii) Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(d) A laboratory that has been accredited with a scope covering the required measurements shall be deemed competent to test and submit test data for equipment subject to verification, DoC and certification. Such a laboratory shall be accredited by an approved accreditation organization based on the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) Standard 17025, “General Requirements for the Competence of Calibration and Testing Laboratories.” The organization accrediting the laboratory must be approved by the Commission’s Office of Engineering and Technology, as indicated in §0.241 of this chapter, to perform such accreditation based on ISO/IEC 58, “Calibration and Testing Laboratory Accreditation Systems—General Requirements for Operation and Recognition.” The frequency for revalidation of the test site and the information that is required to be filed, or retained by the testing party shall comply with the requirements established by the accrediting organization.

(e) The accreditation of a laboratory located outside of the United States, or its possessions, will be acceptable only under one of the following conditions:

(1) If the accredited laboratory has been designated by a foreign designating authority and recognized by the Commission under the terms of a government-to-government Mutual Recognition Agreement/Arrangement; or
§ 2.1033 [Amended]

4. Section 2.1033 is amended by redesignating paragraph (c)(17) as paragraph (d).

5. Section 2.1055 is amended by revising paragraph (a)(2) to read as follows:

§ 2.1055 Measurements required: Frequency stability.

(a) * * *

(2) From −20° to +50° centigrade for equipment to be licensed for use in the Maritime Services under part 80 of this chapter, except for Class A, B, and S Emergency Position Indicating Radiobeacons (EPIRBS), and equipment to be licensed for use above 952 MHz at operational fixed stations in all services, stations in the Local Television Transmission Service and Point-to-Point Microwave under part 21 of this chapter, and equipment licensed for use aboard aircraft in the Aviaton Services under part 87 of this chapter, and equipment authorized for use in the Family Radio Service under Part 95 of this chapter.

* * * * *

§ 2.1061 [Removed]

6. Remove § 2.1061 and the undesignated center heading immediately preceding it.

§ 2.1063 [Removed]

7. Remove § 2.1063

§ 2.1065 [Removed]

8. Remove § 2.1065

PART 15—RADIO FREQUENCY DEVICES

9. The authority citation for part 15 continues to read as follows:


10. Section 15.19 is amended by revising paragraphs (b)(1) introductory text and (b)(1)(ii) introductory text to read as follows:

§ 15.19 Labeling requirements.

* * * * *

(b) * * *

(1) The label shall be located in a conspicuous location on the device and shall contain the unique identification described in §2.1074 of this chapter and either of the following logos:

(i) If the product is authorized based on testing of the product or system:

* * * * *

11. Section 15.21 is amended by adding the following sentence to the end of the section to read as follows:

§ 15.21 Information to user.

* * * * * In cases where the manual is only available electronically through the Internet or other computer network, the information required by this section may be included in the electronic manual.

12. Section 15.31 is amended by revising paragraph (a) to read as follows:

§ 15.31 Measurement standards.

(a) The following measurement procedures are used by the Commission to determine compliance with the technical requirements in this part. Except where noted, copies of these procedures are available from the Commission’s current duplicating contractor with name and address are available from the Commission’s Consumer Information Bureau at 1–888–CALL FCC (1–888–225–5322).

(1) FCC/OET MP–2: Measurement of UHF Noise Figures of TV Receivers.

(2) Unlicensed Personal Communication Service (UPCS) devices are to be measured for compliance using American National Standards Institute (ANSI) C63.17–1998, entitled “American National Standard for Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices”, published by the Institute of Electrical and Electronics Engineers, Inc. on March 24, 1998 as document number SH94568. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(3) Other intentional and unintentional radiators are to be measured for compliance using the following procedure excluding sections 4.1.5.2, 5.7, 9 and 14: Institute of Electrical and Electronics Engineers (IEEE) C63.4—2000, entitled “Interim Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz,” published by the Institute of Electrical and Electronics Engineers, Inc. on December 8, 2000 as document number SH94908. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(4) C63.4—1998 and C63.4—2000 may be obtained from: IEEE Standards Department, 455 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855–1331, telephone 1–800–678–4333.

(ii) Copies of ANSI C63.17–1998 and C63.4—2000 may be inspected at the following locations:

(A) Federal Communications Commission, 445 12th Street, SW, Office of Engineering and Technology (room 7–B144), Washington, DC 20554.

(B) Federal Communications Commission Laboratory, 7435 Oakland Mills Road, Columbia, MD 21046, or

(C) Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

13. Section 15.105 is amended by adding a new paragraph (e) to read as follows:

§ 15.105 Information to the user.

* * * * * (e) In cases where the manual is only available electronically through the Internet or other computer network, the information required by this section may be included in the electronic manual.

§ 15.118 [Amended]

14. Section 15.118(b) is amended by removing the words “Federal Communications Commission, 1919 M Street, NW., Dockets Branch (Room 239), Washington, DC” and adding in its place the words, “Federal Communications Commission, 445 12th Street, SW., Washington, DC.”

§ 15.120 [Amended]

15. Section 15.120(d)(1) is amended by removing the words “Federal Communications Commission, 2000 M Street, NW., Technical Information Center (Suite 230), Washington, DC” and adding in its place the words, “Federal Communications Commission, 445 12th Street, SW., Washington, DC”.

16. Section 15.205 is amended by adding paragraph (d)(6) to read as follows:

§ 15.205 Restricted bands of operation.

* * * * *

(d) * * *

(6) Devices operated pursuant to § 15.225 are exempt from complying with this section for the 13.36–13.41 MHz band only.

* * * * *

17. Section 15.215 is amended by adding paragraph (e) to read as follows:

§ 15.215 Additional provisions to the general radiated emission limitations.

* * * * *

(e) Intentional radiators transmitting in the spectrum below 490 kHz with a measured fundamental field strength of 40 dB or more below the limits specified in §15.209(a) for this band, are subject
only to the general conditions of operation in §§15.5 and 15.29 and are exempt from the specific technical standards and other requirements contained in this part. The operator of the exempted device shall be required to take any steps necessary to stop transmission from the device upon a finding by the Commission or its representative that the device is causing harmful interference. Transmission shall not resume until the condition causing the harmful interference has been corrected.

18. Section 15.225 is revised to read as follows:

§15.225 Operation within the band 13.110–14.010 MHz.

(a) The field strength of any emissions within the band 13.553–13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

(b) Within the bands 13.410–13.553 MHz and 13.567–13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

(c) Within the bands 13.110–13.410 MHz and 13.710–14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

(d) The field strength of any emissions appearing outside of the 13.110–14.010 MHz band shall not exceed 30 microvolts/meter at 30 meters.

(e) The frequency tolerance of the carrier signal shall be maintained within ±0.01% of the operating frequency over a temperature variation of –20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

(f) In the case of radio frequency powered tags designed to operate with a device authorized under this section, the tag may be approved with the device or be considered as a separate device subject to its own authorization. Powered tags approved with a device under a single application shall be labeled with the same identification number as the device.

19. Section 15.231 is amended by revising the section heading and the first sentence of paragraph (a) to read as follows:

§15.231 Operation in the band 40.66–40.70 MHz and above 70 MHz.

(a) The provisions of this section are restricted to operation within the band 40.66–40.70 MHz and above 70 MHz.* * * * * * * * *

20. Section 15.240 is added to read as follows:

§15.240 Operation in the band 425–435 MHz.

(a) Operation under the provisions of this section is restricted to devices that use radio frequency energy to locate and identify devices and exchange data. Devices operated pursuant to the provisions of this section shall be digital data devices and not be used for voice communications.

(b) The field strength of any emissions radiated within the specified frequency band shall not exceed 11,000 microvolts per meter measured at a distance of 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Additionally, devices authorized under these provisions shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than 120 seconds and be only permitted to reinitiate an interrogation in the case of a transmission error. Absent such a transmission error, the silent period between transmissions shall not be less than 10 seconds.

(c) The field strength of emissions radiated on any frequency outside of the specified band shall not exceed the general radiated emission limits in §15.209.

(d) The device shall be self-contained with no external or readily accessible controls that may be adjusted to permit operation in a manner inconsistent with the provisions in this section. Any antenna that may be used with this device shall be permanently attached and shall not be readily modifiable by the user.

(e) In the case of radio frequency powered tags designed to operate with a device authorized under this section, the tag may be approved with the device or be considered as a separate device subject to its own authorization. Powered tags approved with a device under a single application shall be labeled with the same identification number as the device.

21. Section 15.255 is amended by revising paragraph (b)(5) to read as follows:

§15.255 Operation within the band 59.0–64.0 GHz.

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

(5) The average emission levels shall be calculated, based on the measured peak levels, over the actual time period during which transmission occurs.

* * * * * * * * *

PART 18—INDUSTRIAL, SCIENTIFIC, AND MEDICAL EQUIPMENT

22. The authority citation for part 18 continues to read as follows:


§18.103 [Removed].

23. Remove §18.103.

§18.105 [Removed].


§18.119 [Removed].

25. Remove §18.119.

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

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

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

27. Section 90.203 is amended by revising paragraph (k) to read as follows:

§90.203 Certification required.

* * * * * * * * *

(k) For transmitters operating on frequencies in the 220–222 MHz band, certification will only be granted for equipment with channel bandwidths up to 5 kHz, except that certification will be granted for equipment operating on 220–222 MHz band Channels 1 through 160 (220.0025 through 220.7975/221.0025 through 221.7975), 171 through 180 (220.8525 through 220.8975/221.8525 through 221.8975), and 186 through 200 (220.9275 through 220.9975/221.9275 through 221.9975) with channel bandwidths greater than 5 kHz.

* * * * * * * * *

[FR Doc. 01–29344 Filed 11–26–01; 8:45 am]