

to perform other communications functions, such as providing telephone billing information. This security code system is to operate in accordance with the following provisions.

(1) There must be provision for at least 256 possible discrete digital codes. Factory-set codes must be continuously varied over at least 256 possible codes as each telephone is manufactured. The codes may be varied either randomly, sequentially, or using another systematic procedure.

(2) Manufacturers must use one of the following approaches for facilitating variation in the geographic distribution of individual security codes:

(i) Provide a means for the user to readily select from among at least 256 possible discrete digital codes. The cordless telephone shall be either in a non-operable mode after manufacture until the user selects a security code or the manufacturer must continuously vary the initial security code as each telephone is produced.

(ii) Provide a fixed code that is continuously varied among at least 256 discrete digital codes as each telephone is manufactured.

(iii) Provide a means for the cordless telephone to automatically select a different code from among at least 256 possible discrete digital codes each time it is activated.

(iv) It is permissible to provide combinations of fixed, automatic, and user-selectable coding provided the above criteria are met.

(3) A statement of the means and procedures used to achieve the required protection shall be provided in any application for equipment authorization of a cordless telephone.

[56 FR 3785, Jan. 31, 1991, as amended at 63 FR 36603, July 7, 1998; 66 FR 7580, Jan. 24, 2001]

#### RADIATED EMISSION LIMITS, ADDITIONAL PROVISIONS

#### **§ 15.215 Additional provisions to the general radiated emission limitations.**

(a) The regulations in §§ 15.217 through 15.257 provide alternatives to the general radiated emission limits for intentional radiators operating in specified frequency bands. Unless otherwise

stated, there are no restrictions as to the types of operation permitted under these sections.

(b) In most cases, unwanted emissions outside of the frequency bands shown in these alternative provisions must be attenuated to the emission limits shown in § 15.209. In no case shall the level of the unwanted emissions from an intentional radiator operating under these additional provisions exceed the field strength of the fundamental emission.

(c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

[54 FR 17714, Apr. 25, 1989, as amended at 62 FR 45333, Aug. 27, 1997; 67 FR 34855, May 16, 2002; 69 FR 3265, Jan. 23, 2004; 70 FR 6774, Feb. 9, 2005; 79 FR 24578, May 1, 2014]

#### **§ 15.216 Disclosure requirements for wireless microphones and other low power auxiliary stations capable of operating in the core TV bands.**

(a) Any person who manufactures, sells, leases, or offers for sale or lease, low power auxiliary stations capable of

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operating in the core TV bands (channels 2–51, excluding channel 37) is subject to the following disclosure requirements: (1) Such persons must display the consumer disclosure text, as specified by the Wireless Telecommunications Bureau and the Consumer and Governmental Affairs Bureau, at the point of sale or lease of each such low power auxiliary station. The text must be displayed in a clear, conspicuous, and readily legible manner. One way to fulfill the requirement in this section is to display the consumer disclosure text in a prominent manner on the product box by using a label (either printed onto the box or otherwise affixed to the box), a sticker, or other means. Another way to fulfill this requirement is to display the text immediately adjacent to each low power auxiliary station offered for sale or lease and clearly associated with the model to which it pertains.

(2) If such persons offer such low power auxiliary stations via direct mail, catalog, or electronic means, they shall prominently display the consumer disclosure text in close proximity to the images and descriptions of each such low power auxiliary station. The text should be in a size large enough to be clear, conspicuous, and readily legible, consistent with the dimensions of the advertisement or description.

(3) If such persons have Web sites pertaining to these low power auxiliary stations, the consumer disclosure text must be displayed there in a clear, conspicuous, and readily legible manner (even in the event such persons do not sell low power auxiliary stations directly to the public).

(b) The consumer disclosure text described in paragraph (a)(1) of this section is set out in an appendix to this section.

### APPENDIX TO § 15.216—CONSUMER ALERT

#### *Consumer Alert*

Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: The system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device. Purchasers should

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also be aware that the FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change. For more information, call the FCC at 1–888–CALL–FCC (TTY: 1–888–TELL–FCC) or visit the FCC’s wireless microphone Web site at <http://www.fcc.gov/cgb/wirelessmicrophones>.

[75 FR 3638, 3640, Jan. 22, 2010]

### § 15.217 Operation in the band 160–190 kHz.

(a) The total input power to the final radio frequency stage (exclusive of filament or heater power) shall not exceed one watt.

(b) The total length of the transmission line, antenna, and ground lead (if used) shall not exceed 15 meters.

(c) All emissions below 160 kHz or above 190 kHz shall be attenuated at least 20 dB below the level of the unmodulated carrier. Determination of compliance with the 20 dB attenuation specification may be based on measurements at the intentional radiator’s antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated emissions.

### § 15.219 Operation in the band 510–1705 kHz.

(a) The total input power to the final radio frequency stage (exclusive of filament or heater power) shall not exceed 100 milliwatts.

(b) The total length of the transmission line, antenna and ground lead (if used) shall not exceed 3 meters.

(c) All emissions below 510 kHz or above 1705 kHz shall be attenuated at least 20 dB below the level of the unmodulated carrier. Determination of compliance with the 20 dB attenuation specification may be based on measurements at the intentional radiator’s antenna output terminal unless the intentional radiator uses a permanently attached antenna, in which case compliance shall be demonstrated by measuring the radiated emissions.

### § 15.221 Operation in the band 525–1705 kHz.

(a) Carrier current systems and transmitters employing a leaky coaxial cable as the radiating antenna may operate in the band 525–1705 kHz provided the field strength levels of the