

**§ 90.259 Assignment and use of frequencies in the bands 216–220 MHz and 1427–1432 MHz.**

(a) *216–220 MHz band.* (1) Frequencies in the 216–220 MHz band may be assigned to applicants that establish eligibility in the Industrial/Business Pool.

(2) All operation is secondary to the fixed and mobile services, including the Low Power Radio Service.

(3) In the 216–217 MHz band, no new assignments will be made after January 1, 2002.

(4) In the 217–220 MHz band, the maximum transmitter output power is 2 watts. The maximum antenna height above average terrain (HAAT) is 152 m (500 feet).

(5) In the 217–220 MHz band, base, mobile, and operational fixed operations are permitted.

(6) Wide area operations will not be authorized. The area of normal day-to-day operations will be described in the application in terms of maximum distance from a geographical center (latitude and longitude).

(7) Frequencies will be assigned with a 6.25 kHz, 12.5 kHz, 25 kHz or 50 kHz channel bandwidth. Frequencies may be assigned with a channel bandwidth exceeding 50 kHz only upon a showing of adequate justification.

(8) Assignable 6.25 kHz channels will occur in increments of 6.25 kHz from 217.00625 MHz to 219.99375 MHz. Assignable 12.5 kHz channels will occur in increments of 12.5 kHz from 217.0125 MHz to 219.9875 MHz. Assignable 25 kHz channels will occur in increments of 25 kHz from 217.025 MHz to 219.975 MHz. Assignable 50 kHz channels will occur in increments of 50 kHz from 217.025 MHz to 219.975 MHz.

(b) *1427–1432 MHz band.* (1) Frequencies in the 1427–1432 MHz band may be assigned to applicants that establish eligibility in the Public Safety Pool or the Industrial/Business Pool.

(2) All operations in the 1427–1429.5 MHz band are secondary to the Wireless Medical Telemetry Service except in the locations specified in paragraph (b)(4) of this section. At the locations specified in paragraph (b)(4) of this section, all operations are secondary to the Wireless Medical Telemetry Service in the 1429–1431.5 MHz band.

(3) All operations in the 1429.5–1432 MHz band are primary in status except in the locations specified in paragraph (b)(4) of this section. At the locations specified in paragraph (b)(4) of this section, all operations are primary in status in the 1427–1429 MHz and 1431.5–1432 MHz bands.

(4) *Locations:* (i) Pittsburgh, Pennsylvania—Counties of Westmoreland, Washington, Beaver, Allegheny and Butler;

(ii) Washington, DC metropolitan area—Counties of Montgomery, Prince George's, Charles, Arlington, Prince William, Fauquier, Loudon, and Fairfax; Cities of Alexandria, Falls Church, Fairfax, and District of Columbia;

(iii) Richmond/Norfolk, Virginia—Counties of Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, Isle of Wight, James City, New Kent, Powhatan, Prince George, Southampton, Surrey, Sussex, and York; Cities of Chesapeake, Colonial Heights, Franklin, Hampton, Hopewell, Newport News, Norfolk, Petersburg, Poquoson, Portsmouth, Richmond, Suffolk, Virginia Beach, and Williamsburg;

(iv) Austin/Georgetown, Texas—Counties of Williamson and Travis;

(v) Battle Creek, Michigan—County of Calhoun;

(vi) Detroit, Michigan—Counties of Oakland, Wayne, Washtenaw, Macomb and Livingston;

(vii) Spokane, Washington—Counties of Spokane, WA and Kootenai, ID.

(5) All operations in the 1429.5–1432 MHz band authorized prior to April 12, 2002 are on a secondary basis.

(6) For secondary operations only fixed stations are permitted. At the locations specified in (b)(4) of this section, secondary operations are performed in the 1429–1431.5 MHz band. For all other locations, secondary operations are performed in the 1427–1429.5 MHz band. The maximum power is 1 watt EIRP.

(7) For primary operations base, mobile, operational fixed and temporary fixed operations are permitted.

(i) At the locations specified in paragraph (b)(4) of this section, primary operations are performed in the 1427–1429 MHz and 1431.5–1432 MHz bands. The

maximum ERP limitations are as follows:

| Operation                     | Frequency range (MHz) |             |             |             |
|-------------------------------|-----------------------|-------------|-------------|-------------|
|                               | 1427-1428             | 1428-1428.5 | 1428.5-1429 | 1431.5-1432 |
| Fixed (watts) .....           | 61.1                  | 6.11        | 0.611       | 0.611       |
| Mobile (watts) .....          | 0.611                 | 0.611       | 0.015       | 0.015       |
| Temporary fixed (watts) ..... | 0.611                 | 0.611       | 0.611       | 0.611       |

(ii) For all other locations, primary operations are performed in the 1429.5-1432 MHz band. The maximum ERP limitations are as follows:

| Operation                     | Frequency range (MHz) |             |               |             |
|-------------------------------|-----------------------|-------------|---------------|-------------|
|                               | 1429.5-1430           | 1430-1430.5 | 1430.5-1431.5 | 1431.5-1432 |
| Fixed (watts) .....           | 0.611                 | 0.611       | 6.11          | 61.1        |
| Mobile (watts) .....          | 0.015                 | 0.611       | 0.611         | 0.611       |
| Temporary fixed (watts) ..... | 0.611                 | 0.611       | 0.611         | 0.611       |

(8) Wide area operations will not be authorized. The area of normal day-to-day operations will be described in the application in terms of maximum distance from a geographical center (latitude and longitude).

(9) Assignable frequencies occur in increments of 12.5 kHz from 1427.00625 MHz to 1431.99375 MHz.

(10) Licensees, however, may combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification.

(11) For any operation in the 1427-1432 MHz band, the predicted or measured field strength—in the WMTS primary band—at the location of any registered WMTS healthcare facility shall not exceed 150 uV/m. For the locations specified in (b)(4) of this section, WMTS is primary in the 1429-1431.5 MHz band. For all other locations, WMTS is primary in the 1427-1429.5 MHz band.

(c) *Authorized uses.* (1) Use of these bands is limited to telemetering purposes.

(2) Base stations authorized in these bands shall be used to perform telecommand functions with associated mobile telemetering stations. Base stations may also command actions by the vehicle itself, but will not be authorized solely to perform this function.

(3) Except for the transmissions that are permitted under §90.248(f) of this chapter, airborne use is prohibited.

[67 FR 41860, June 20, 2002, as amended at 69 FR 39867, July 1, 2004; 72 FR 35196, June 27, 2007]

**§ 90.261 Assignment and use of the frequencies in the band 450-470 MHz for fixed operations.**

(a) Frequencies in the 450-470 MHz band as listed in §90.20(c)(3) and §90.35(b)(3) may be assigned to all eligibles for fixed use on a secondary basis to land mobile operations.

(b) Fixed stations located 140 km (87 mi) or more from the center of any urbanized area of 600,000 or more population are limited to a transmitter output power of 75 watts. Fixed stations less than 140 km (87 mi) from the centers of these areas are limited to a transmitter output power of 20 watts. Urbanized areas of 600,000 or more population are defined in the U.S. Census of Population 1970, Vol. 1, Table 20, pages 1-74. The centers of the urbanized areas are determined from the Appendix, page 226, of the U.S. Department of Commerce publication "Airline Distance Between Cities in the United States."

(c) All fixed systems are limited to one frequency pair with 5 MHz spacing and must employ directional antennas with a front-to-back ratio of 15dB, except that omnidirectional antennas having unity gain may be employed by