

Federal Communications Commission

§ 90.279

TABLE 2—CHANNELS AVAILABLE IN BUFFALO, DETROIT AND CLEVELAND AREAS—Continued

Frequency (MHz)	Pool in which assigned
425.11875*	IB
425.125	IB
425.13125*	IB
425.13750	IB
425.14375*	IB
425.150	IB
425.15625*	IB
425.16250	IB
425.16875*	IB
425.175	IB
425.18125*	IB
425.18750	IB
425.19375*	IB
425.200	IB
425.20625*	IB
425.21250	IB
425.21875*	IB
425.225	IB
425.23125*	IB
425.23750	IB
425.24375*	IB
425.250	PS
425.25625*	PS
425.26250	PS
425.26875*	PS
425.275	PS
425.28125*	PS
425.28750	PS
425.29375*	PS
425.300	PS
425.30625*	PS
425.31250	PS
425.31875*	PS
425.325	PS
425.33125*	PS
425.33750	PS
425.34375*	PS
425.350	PS
425.35625*	PS
425.36250	PS
425.36875*	PS
425.375	PS
425.38125*	PS
425.38750	PS
425.39375*	PS
425.400	PS
425.40625*	PS
425.41250	PS
425.41875*	PS
425.425	PS
425.43125*	PS
425.43750	PS
425.44375*	PS
425.450	PS
425.45625*	PS
425.46250	PS
425.46875*	PS
425.475	PS
425.48125*	PS

* This frequency will be assigned with an authorized bandwidth not to exceed 6 kHz.

(b) [Reserved]

(c) Base or control stations shall be located within 48 km (30 miles) of the center of Buffalo or 80 km (50 miles) of the center of Detroit. In Cleveland, base or control stations will be allowed

at locations north of line A that are within 48 km (30 miles) of the city center. In addition, low power (2 watts or less) base stations may locate within 80 km (50 miles) of the center of Buffalo. The following coordinates shall be used for the centers of these areas (coordinates are referenced to North American Datum 1983 (NAD83)):

Buffalo, 42°52'52.2" North latitude.
 NY, 78°52'20.1" West longitude.
 Cleveland, 41°29'51.2" North latitude.
 OH, 81°41'49.5" West longitude.
 Detroit, 42°19'48.1" North latitude.
 MI, 83°02'56.7" West longitude.

(d) Mobile operation shall be confined to within 80 km (50 miles) of the centers of Detroit, Cleveland, or Buffalo.

[52 FR 6156, Mar. 2, 1987, as amended at 54 FR 38681, Sept. 20, 1989; 58 FR 31476, June 3, 1993; 58 FR 44957, Aug. 25, 1993; 60 FR 37269, July 19, 1995; 61 FR 6576, Feb. 21, 1996; 62 FR 18929, Apr. 17, 1997; 63 FR 68965, Dec. 14, 1998]

§ 90.275 Selection and assignment of frequencies in the 421–430 MHz band.

Applicants must specify the frequencies in which the proposed system will operate pursuant to a recommendation by a frequency coordinator certified for the pool in which the requested frequency is assigned.

[62 FR 18932, Apr. 17, 1997]

§ 90.279 Power limitations applicable to the 421–430 MHz band.

(a) Base station authorizations in the 421–430 MHz band will be subject to Effective Radiated Power (ERP) and Effective Antenna Height (EAH) limitations as shown in the table below. ERP is defined as the product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction. EAH is calculated by subtracting the Assumed Average Terrain Elevation (AATE) as listed in table 7 of § 90.619 from the antenna height above mean sea level.

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LIMITS OF EFFECTIVE RADIATED POWER (ERP) CORRESPONDING TO EFFECTIVE ANTENNA HEIGHTS (EAH) OF BASE STATIONS IN THE 421-430 MHz BAND

Effective antenna height (EAH) in meters (feet)	Maximum effective radiated power (ERP) (watts)
0-152 (0-500)	250
Above 152-305 (above 500-1000)	150
Above 305-457 (above 1000-1500)	75
Above 457-610 (above 1500-2000)	40
Above 610-762 (above 2000-2500)	20
Above 762-914 (above 2500-3000)	15
Above 914-1219 (above 3000-4000)	10
Above 1219 (above 4000)	5

(b) The maximum transmitter power output that will be authorized for control stations is 20 watts.

[52 FR 6157, Mar. 2, 1987, as amended at 58 FR 44957, Aug. 25, 1993]

§ 90.281 Restrictions on operational fixed stations in the 421-430 MHz band.

(a) Except for control stations, operational fixed facilities will not be authorized in the 421-430 MHz band. This does not preclude secondary fixed tone signaling and alarm operations authorized in § 90.235.

(b) Control stations associated with one or more mobile relay stations will be authorized only on the assigned frequency of the associated mobile station. Use of a mobile service frequency by a control station of a mobile relay system is subject to the condition that

harmful interference shall not be caused to stations of licensees authorized to use the frequency for mobile service communications.

[52 FR 6158, Mar. 2, 1987, as amended at 54 FR 38681, Sept. 20, 1989]

§ 90.283 [Reserved]

Subpart L—Authorization in the Band 470-512 MHz (UHF-TV Sharing)

§ 90.301 Scope.

This subpart governs the authorization and use of frequencies by land mobile stations in the band 470-512 MHz on a geographically shared basis with Television Broadcast stations. Under this special sharing plan, different frequencies are allocated depending on the geographic urban area involved as fully detailed in the following rule sections.

[43 FR 54791, Nov. 22, 1978, as amended at 62 FR 18932, Apr. 17, 1997]

§ 90.303 Availability of frequencies.

(a) Frequencies in the band 470-512 MHz are available for assignment as described below. Note: coordinates are referenced to the North American Datum 1983 (NAD83).

(b) The following table lists frequency bands that are available for assignment in specific urban areas. The available frequencies are listed in § 90.311 of this part.

Urbanized area	Geographic center		Bands (MHz)	TV channels
	North latitude	West longitude		
Boston, MA	42°21'24.4"	71°03'23.2"	470-476, 482-488	14, 16
Chicago, IL ¹	41°52'28.1"	87°38'22.2"	470-476, 476-482	14, 15
Cleveland, OH ²	41°29'51.2"	81°49'49.5"	470-476, 476-482	14, 15
Dallas/Fort Worth, TX	32°47'09.5"	96°47'38.0"	482-488	16
Detroit, MI ³	42°19'48.1"	83°02'56.7"	476-482, 482-488	15, 16
Houston, TX	29°45'26.8"	95°21'37.8"	488-494	17
Los Angeles, CA ⁴	34°03'15.0"	118°14'31.3"	470-476, 482-488, 506-512	14, 16, 20
Miami, FL	25°46'38.4"	80°11'31.2"	470-476	14
New York, NY/NE NJ	40°45'06.4"	73°59'37.5"	470-476, 476-482, 482-488	14, 15, 16
Philadelphia, PA	39°56'58.4"	75°09'19.6"	500-506, 506-512	19, 20
Pittsburgh, PA	40°26'19.2"	79°59'59.2"	470-476, 494-500	14, 18
San Francisco/Oakland, CA	37°46'38.7"	122°24'43.9"	482-488, 488-494	16, 17
Washington, DC/MD/VA	38°53'51.4"	77°00'31.9"	488-494, 494-500	17, 18

¹ In the Chicago, IL, urbanized area, channel 15 frequencies may be used for paging operations in addition to low power base/mobile usages, where applicable protection requirements for ultrahigh frequency television stations are met.

² Channels 14 and 15 are not available in Cleveland, OH, until further order from the Commission.

³ Channels 15 and 16 are not available in Detroit, MI, until further order from the Commission.

⁴ Channel 16 is available in Los Angeles, CA, for use by eligibles in the Public Safety Radio Pool.