requirement may be granted an exception to these requirements.

NOTE TO PARAGRAPH (c): Links authorized prior to April 1, 1987, need not comply with this requirement.

[61 FR 26677, May 28, 1996, as amended at 65 FR 38330, June 20, 2000]

§ 101.145 Interference to geostationary-satellites.

These limitations are necessary to minimize the probability of harmful interference to reception in the bands 2655–2690 MHz, 5925–7075 MHz, and 12.7–13.25 GHz on board geostationary-space stations in the fixed-satellite service.

(a) Stations authorized prior to July 1, 1976 in the band 2655–2690 MHz, which exceed the power levels in paragraphs (b) and (c) of this section are permitted to operate indefinitely, provided that the operation of such stations does not result in harmful interference to reception in these bands on board geostationary space stations.

(b) *2655 to 2690 MHz and 5925 to 7075 MHz.* No directional transmitting antenna utilized by a fixed station operating in these bands with EIRP greater than 35 dBW may be aimed within 2 degrees of the geostationary-satellite orbit, taking into account atmospheric refraction. However, exception may be made in unusual circumstances upon a showing that there is no reasonable alternative to the transmission path proposed. If there is no evidence that such exception would cause possible harmful interference to an authorized satellite system, said transmission path may be authorized on waiver basis where the maximum value of the equivalent isotropically radiated power (EIRP) does not exceed:

(1) +47 dBW for any antenna beam directed within 0.5 degrees of the stationary satellite orbit; or

(2) +47 to +55 dBW, on a linear decibel scale (8 dB per degree) for any antenna beam directed between 0.5 degrees and 1.5 degrees of the stationary orbit.

(c) *12.7 to 13.25 GHz.* No directional transmitting antenna utilized by a fixed station operating in this band with EIRP greater than 45 dBW may be aimed within 1.5 degrees of the geostationary-satellite orbit, taking into account atmospheric refraction.

(d) Methods for calculating the azimuths to be avoided may be found in: CCIR Report No. 393 (Green Books), New Delhi, 1970; in ''Radio-Relay Antenna Pointing for controlled Interference With Geostationary-Satellites'' by C. W. Lundgren and A. S. May, Bell System Technical Journal, Vol. 48, No. 10, pp. 3387–3422, December 1969; and in ''Geostationary Orbit Avoidance Computer Program'' by Richard G. Gould, Common Carrier Bureau Report CC–7201, FCC, Washington, DC, 1972. This latter report is available through the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22151, in printed form (PB–211 500) or source card deck (PB–211 501).

[61 FR 26677, May 28, 1996, as amended at 65 FR 38330, June 20, 2000; 68 FR 12777, Mar. 17, 2003; 77 FR 54433, Sept. 5, 2012]

§ 101.147 Frequency assignments.

(a) Frequencies in the following bands are available for assignment for fixed microwave services.

928.0–929.0 MHz (28)
932.0–932.5 MHz (27)
932.5–935 MHz (17)
941.0–941.5 MHz (27)
941.5–944 MHz (17) (18)
952.0–960.0 MHz (28)
1,850–1,990 MHz (20) (22)
2,110–2,130 MHz) (1) (3) (7) (20) (23)
2,130–2,150 MHz (20) (22)
2,160–2,180 MHz (1) (2) (20) (23)
2,180–2,200 MHz (20) (22)
2,450–2,500 MHz (12)
2,650–2,690 MHz
3,700–4,200 MHz (8) (14) (25)
5,925–6,425 MHz (6) (14) (25)
6,425–6,525 MHz (24)
6,525–6.875 MHz (14) (33)
6,875–7,125 MHz (10), (34)
10,550–10,680 MHz (19)
10,700–11,700 MHz (8) (9) (19) (25)
11,700–12,200 MHz (24)
12,200–12,700 MHz (31)
12,700–13,200 (22), (34)
13,200–13,250 MHz (4) (24) (25)
14,200–14,400 MHz (24)
17,700–18,820 MHz (5) (10) (15)
17,700–18,300 MHz (10) (15)
18,820–18,920 MHz (22)
18,300–18,580 MHz (5) (10) (15)
18,580–19,300 MHz (22) (30)
18,920–19,160 MHz (5 (10) (15)
19,160–19,260 MHz (22)
19,260–19,700 MHz (5) (10) (15)
19,300–19,700 MHz (5) (10) (15)
21,200–22,000 MHz (4) (11) (12) (13) (24) (25) (26)