

SPACE STATIONS

§ 25.140 Qualifications of fixed-satellite space station licensees.

(a) New fixed-satellites shall comply with the requirements established in Report and Order, CC Docket No. 81-704 (available at address in §0.445 of this chapter.) Applications must also meet the requirements in paragraphs (b) through (d) of this section. The Commission may require additional or different information in the case of any individual application. Applications will be unacceptable for filing and will be returned to the applicant if they do not meet the requirements referred to in this paragraph.

(b) Each applicant for a space station authorization in the fixed-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is legally, technically, and otherwise qualified to proceed expeditiously with the construction, launch and/or operation of each proposed space station facility immediately upon grant of the requested authorization. Each applicant must provide the following information:

(1) The information specified in §25.114; and

(2) Except as set forth in paragraphs (b)(3), (b)(4), (b)(5), and (b)(6) of this section, all applicants must provide an interference analysis to demonstrate the compatibility of their proposed system two degrees from any authorized space station. An applicant should provide details of its proposed r.f. carriers which it believes should be taken into account in this analysis. At a minimum, the applicant must include, for each type of r.f. carrier, the link noise budget, modulation parameters, and overall link performance analysis. (See, e.g., appendices B and C to Licensing of Space Stations in the Domestic Fixed-Satellite Service (available at address in Sec. 0.445)).

(3) Except as described in paragraph (b)(5) of this section, an applicant for a license to operate a 17/24 GHz BSS space station that will be located precisely at one of the 17/24 GHz BSS orbital locations specified in Appendix F of the Report and Order adopted May 2, 2007, IB Docket No. 06-123, FCC 07-76, must provide an interference analysis

of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate the compatibility of its proposed network with any current or future authorized space station in the 17/24 GHz BSS that complies with the technical rules in this part and that will be located at least four degrees from the proposed space station.

(4) Except as described in paragraph (b)(5) of this section, an applicant for a license to operate a 17/24 GHz BSS space station that will not be located precisely at one of the nominal 17/24 GHz BSS orbital locations specified in Appendix F of the Report and Order adopted May 2, 2007, IB Docket No. 06-123, FCC 07-76, must make one of the following showings:

(i) In cases where there is no previously licensed or proposed space station to be located closer than four degrees from the applicant's space station, and the applicant seeks to operate pursuant to §25.262(b) of this part, the applicant must provide an interference analysis of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate the compatibility of its proposed network with any current or future authorized space stations in the 17/24 GHz BSS that are operating in compliance with the technical rules of this part and that will be located at least four degrees from the applicant's proposed space station;

(ii) In cases where there is a previously licensed or proposed 17/24 GHz BSS space station to be located within four degrees of the applicant's proposed space station, the applicant must provide an interference analysis of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate that its proposed network will not cause more interference to the adjacent 17/24 GHz BSS satellite networks operating in compliance with the technical requirements of this part, than if the applicant were located at the precise Appendix F orbital location from which it seeks to offset;

(iii) In cases where there is no previously licensed or proposed 17/24 GHz BSS space station to be located within four degrees of the applicant's proposed

space station, and the applicant does not seek to operate pursuant to § 25.262(b) of this part, the applicant must provide an interference analysis of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate that its proposed operations will not cause more interference to any current or future 17/24 GHz BSS satellite networks operating in compliance with the technical requirements of this part, than if the applicant were located at the precise Appendix F orbital location from which it seeks to offset.

(5) An applicant for a license to operate a 17/24 GHz BSS space station, in cases where there is a previously licensed or proposed space station operating pursuant to § 25.262(b) of this part located within four degrees of the applicant's proposed 17/24 GHz BSS space station, must provide an interference analysis of the kind described in paragraph (b)(2) of this section, except that the applicant must demonstrate that its proposed operations will not cause more interference to the adjacent 17/24 GHz BSS satellite network than if the adjacent space station were located four degrees from the applicant's space station.

(6) In addition to the requirements of paragraphs (b)(3), (b)(4), and (b)(5) of this section, the link budget for any satellite in the 17/24 GHz BSS must take into account longitudinal stationkeeping tolerances and, where appropriate, any existing orbital location offsets from the 17/24 GHz BSS orbital locations of the adjacent prior-authorized 17/24 GHz BSS space stations. In addition, any 17/24 GHz BSS satellite applicant that has reached a coordination agreement with an operator of another 17/24 GHz BSS satellite to allow that operator to exceed the pfd levels specified in the rules for this service, must use those higher pfd levels for the purposes of this showing.

(c) Operators of satellite networks using 17/24 GHz BSS space stations must design their satellite networks to be capable of operating with another 17/24 GHz BSS space station as follows:

(1) Except as described in paragraphs (b)(4)(ii) and (b)(4)(iii) of this section, all satellite network operators using 17/24 GHz BSS space stations must de-

sign their satellite networks to be capable of operating with another 17/24 GHz BSS space station as close as four degrees away.

(2) Satellite network operators located less than four degrees away from a space station to be operated pursuant to § 25.262(b) of this part must design their satellite networks to be capable of operating with that adjacent 17/24 GHz BSS space station.

(3) Satellite network operators using 17/24 GHz BSS space stations located at an orbital location other than those specified in Appendix F of the Report and Order adopted May 2, 2007, IB Docket No. 06–123, FCC 07–76, and that are not operating pursuant to § 25.262(b) of this part, must design their satellite networks to be capable of operating with another 17/24 GHz BSS space station closer than four degrees away, as a result of the operator's offset position.

(d)–(g) [Reserved]

[62 FR 5929, Feb. 10, 1997, as amended at 68 FR 51504, Aug. 27, 2003; 72 FR 50028, Aug. 29, 2007; 72 FR 60279, Oct. 24, 2007]

§ 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.

(a) *Space station application requirements.* (1) Each application for a space station system authorization in the non-voice, non-geostationary mobile-satellite service shall describe in detail the proposed non-voice, non-geostationary mobile-satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical and legal qualifications of the applicant. In particular, each application shall include the information specified in § 25.114. Applicants must also file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any non-voice, non-geostationary mobile-satellite service system authorized to construct or operate.

(2) Applicants for a non-voice, non-geostationary mobile-satellite must identify the power flux density produced at the Earth's surface by each