

§ 25.131

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MSS feeder link stations in a complex as defined in § 25.257.

[56 FR 24016, May 28, 1991, as amended at 58 FR 68059, Dec. 23, 1993; 59 FR 53327, Oct. 21, 1994; 61 FR 4367, Feb. 6, 1996; 61 FR 9952, Mar. 12, 1996; 62 FR 5929, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997; 69 FR 29901, May 26, 2004; 69 FR 47795, Aug. 6, 2004; 70 FR 4783, Jan. 31, 2005; 70 FR 32253, June 2, 2005; 74 FR 57098, Nov. 4, 2009; 78 FR 14926, Mar. 8, 2013; 79 FR 8317, Feb. 12, 2014]

§ 25.131 Filing requirements and registration for receive-only earth stations.

(a) Except as provided in paragraphs (b) and (j) of this section, applications for licenses for receive-only earth stations shall be submitted on FCC Form 312, Main Form and Schedule B, accompanied by any required exhibits and the information described in § 25.130(a)(1) through (a)(5). Such applications must be filed electronically through the International Bureau Filing System (IBFS) in accordance with the applicable provisions of part 1, subpart Y of this chapter.

(b) Receive-only earth stations in the Fixed-Satellite Service that operate with U.S.-licensed satellites, or that operate with non-U.S.-licensed satellites on the Permitted Space Station List in accordance with paragraph (j) of this section, may be registered with the Commission in order to protect them from interference from terrestrial microwave stations in bands shared co-equally with the Fixed Service in accordance with the procedures of §§ 25.203 and 25.251, subject to the stricture in § 25.209(e).

(c) Licensing or registration of receive-only earth stations with the Commission confers no authority to receive and use signals or programming received from satellites. *See* section 705 of the Communications Act. 47 U.S.C. 605.

(d) Applications for registration must be filed on FCC Form 312, Main Form and Schedule B, accompanied by the coordination exhibit required by § 25.203 and any other required exhibits.

(e) Complete applications for registration will be placed on public notice for 30 days and automatically granted if no objection is submitted to the Commission and served on the applicant. Additional pleadings are au-

thorized in accordance with § 1.45 of this chapter.

(f) The registration of a receive-only earth station results in the listing of an authorized frequency band at the location specified in the registration. Interference protection levels are those agreed to during coordination.

(g) Reception of signals or programming from non-U.S. satellites may be subject to restrictions as a result of international agreements or treaties. The Commission will maintain public information on the status of any such agreements.

(h) Registration term: Registrations for receive-only earth stations governed by this section will be issued for a period of 15 years from the date on which the application was filed. Applications for renewals of registrations must be submitted on FCC Form 312R (Application for Renewal of Radio Station License in Specified Services) no earlier than 90 days and no later than 30 days before the expiration date of the registration.

(i) Applications for modification of license or registration of receive-only earth stations shall be made in conformance with §§ 25.117 and 25.118. In addition, registrants are required to notify the Commission when a receive-only earth station is no longer operational or when it has not been used to provide any service during any 6-month period.

(j)(1) Except as set forth in paragraph (j)(2) of this section, receive-only earth stations operating with non-U.S. licensed space stations shall file an FCC Form 312 requesting a license or modification to operate such station.

(2) Operators of receive-only earth stations used to receive transmissions from non-U.S.-licensed space stations on the Permitted Space Station List need not file for licenses, provided that the space station operator and earth station operator comply with all applicable rules in this chapter and with the

applicable conditions in the Permitted Space Station List.

[56 FR 24016, May 28, 1991, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5929, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997; 65 FR 58466, Sept. 29, 2000; 67 FR 12485, Mar. 19, 2002; 68 FR 62249, Nov. 3, 2003; 68 FR 63999, Nov. 12, 2003; 69 FR 29901, May 26, 2004; 69 FR 47795, Aug. 6, 2004; 70 FR 32253, June 2, 2005; 78 FR 8421, Feb. 6, 2013; 79 FR 8318, Feb. 12, 2014]

§ 25.132 Verification of earth station antenna performance standards.

(a)(1) Except for applications for 20/30 GHz earth stations and applications subject to the requirement in paragraph (b)(3) of this section, applications for transmitting earth stations in the Fixed-Satellite Service, including feeder-link stations, must include certification that the applicant has reviewed the results of a series of radiation pattern tests performed by the antenna manufacturer on representative equipment in representative configurations, and the test results demonstrate that the equipment meets the off-axis gain standards in § 25.209, measured in accordance with paragraph (b)(1) of this section. The licensee must be prepared to submit the radiation pattern measurements to the Commission on request.

(2) Applications for transmitting GSO FSS earth stations operating in the 20/30 GHz band must include the antenna measurements specified in § 25.138(d) and (e). Applications for transmitting NGSO FSS earth stations operating in the 20/30 GHz band must include the antenna measurements specified in § 25.138(d).

(b)(1) For purposes of paragraph (a)(1) of this section, the following measurements on a production antenna performed on calibrated antenna range, as a minimum, must be made at the bottom, middle and top of each allocated frequency band:

(i) Co-polarized patterns in the E- and H-planes for linear-polarized antennas or in two orthogonal cuts for circularly-polarized antennas:

(A) In the azimuth plane, plus and minus 7 degrees and plus and minus 180 degrees from beam peak.

(B) In the elevation plane, 0 to 45 degrees from beam peak.

(ii) Cross-polarization patterns in the E- and H-planes for linear-polarized an-

tennas or in two orthogonal cuts for circularly-polarized antennas, plus and minus 9 degrees from beam peak.

(iii) Main beam gain.

(2) The FCC envelope specified in § 25.209 shall be superimposed on each pattern. The minimum tests specified above are recognized as representative of the performance of the antenna in most planes although some increase in sidelobe levels should be expected in the spar planes and orthogonal spar planes.

(3) Except as provided in paragraph (d) of this section, applicants seeking authority to operate a Fixed-Satellite Service earth station pursuant to the requirements in § 25.218, § 25.220, § 25.221, § 25.222, § 25.223, § 25.226, or § 25.227 must submit a copy of the manufacturer's range test plots of the antenna gain patterns specified in paragraph (b)(1) of this section.

(c) The tests specified in paragraph (b) of this section are normally performed at the manufacturer's facility; but for those antennas that are very large and only assembled on-site, on-site measurements may be used for product qualification data. If on-site data is to be used for qualification, the test frequencies and number of patterns should follow, where possible, the recommendations in paragraph (b) of this section, and the test data is to be submitted in the same manner as described in paragraph (a) of this section.

(d) For each new or modified transmitting antenna over 3 meters in diameter, except antennas subject to measurement under § 25.138(d), the following on-site verification measurements must be completed at one frequency on an available transponder in each frequency band of interest and submitted to the Commission.

(1) Co-polarized patterns in the elevation plane, plus and minus 7 degrees, in the transmit band.

(2) Co-polarized patterns in the azimuth and elevation planes, plus and minus 7 degrees, in the receive band.

(3) *System cross-polarization discrimination on-axis.* The FCC envelope specified in § 25.209 shall be superimposed on each pattern. The transmit patterns are to be measured with the aid of a co-operating earth station in coordination