

will, in the event of a space station failure, limit the lifetime of the space station to less than 25 years do not need to provide this additional demonstration; and

(10) A list of the FCC file numbers or call signs for any known applications or Commission grants related to the proposed operations (e.g., experimental license grants, other space station or earth station applications or grants).

§25.123 Applications for streamlined small spacecraft authorization.

(a) This section shall only apply to applicants for space stations that will operate beyond Earth's orbit and that are able to certify compliance with the certifications set forth in paragraph (b) of this section. For applicants seeking to be authorized under this section, a comprehensive proposal for Commission evaluation must be submitted for each space station in the proposed system on FCC Form 312, Main Form and Schedule S, as described in §25.114(a) through (c), together with the certifications described in paragraph (b) of this section and the requirements described in paragraph (c) of this section.

(b) Applicants filing for authorization under the streamlined procedure described in this section must include with their applications certifications that the following criteria will be met for all space stations to be operated under the license:

(1) The space station(s) will operate and be disposed of beyond Earth's orbit;

(2) The total lifetime from deployment to spacecraft end-of-life for any individual space station will be six years or less;

(3) Each space station will be identifiable by a unique signal-based telemetry marker distinguishing it from other space stations or space objects;

(4) The space station(s) will release no operational debris;

(5) No debris will be generated in an accidental explosion resulting from the conversion of energy sources on board the space station(s) into energy that fragments the spacecraft;

(6) The probability of a collision between each space station and any other large object (10 centimeters or larger) during the lifetime of the space station is 0.001 or less as calculated using cur-

rent NASA software or higher fidelity models;

(7) Operation of the space station(s) will be compatible with existing operations in the authorized frequency band(s). Operations will not materially constrain future space station entrants from using the authorized frequency band(s);

(8) The space station(s) can be commanded by command originating from the ground to immediately cease transmissions and the licensee will have the capability to eliminate harmful interference when required under the terms of the license or other applicable regulations;

(9) Each space station is 10 cm or larger in its smallest dimension; and

(10) Each space station will have a mass of 500 kg or less, including any propellant.

(c) Applicants must also provide the information specified in §25.122(d) in narrative form.

[85 FR 43734, July 20, 2020]

EFFECTIVE DATE NOTE: At 85 FR 52452, Aug. 25, 2020, §25.123 was amended by adding paragraph (b)(11). This amendment contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget. For the convenience of the user, the added text is set forth below:

§25.123 Applications for streamlined small spacecraft authorization.

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(b) * * *

(11) Upon receipt of a space situational awareness conjunction warning, the operator will review and take all possible steps to assess the collision risk, and will mitigate the collision risk if necessary. As appropriate, steps to assess and mitigate the collision risk should include, but are not limited to: Contacting the operator of any active spacecraft involved in such a warning; sharing ephemeris data and other appropriate operational information with any such operator; and modifying space station attitude and/or operations.

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§25.129 Equipment authorization for portable earth-station transceivers.

(a) Except as expressly permitted by §2.803 or §2.1204 of this chapter, prior

authorization must be obtained pursuant to the equipment certification procedure in part 2, subpart J of this chapter for importation, sale or lease in the United States, or offer, shipment, or distribution for sale or lease in the United States of portable earth-station transceivers subject to regulation under part 25. This requirement does not apply, however, to devices imported, sold, leased, or offered, shipped, or distributed for sale or lease before November 20, 2004.

(b) For purposes of this section, an earth-station transceiver is portable if it is a “portable device” as defined in §2.1093(b) of this chapter, *i.e.*, if its radiating structure(s) would be within 20 centimeters of the operator’s body when the transceiver is in operation.

(c) In addition to the information required by §2.1033(c) of this chapter, applicants for certification required by this section shall submit any additional equipment test data necessary to demonstrate compliance with pertinent standards for transmitter performance prescribed in §§25.138, 25.202(f), 25.204, 25.209, and 25.216, must demonstrate compliance with the labeling requirement in §25.285(b), and shall ensure compliance with the Commission’s radio frequency exposure requirements in §§1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. An Environmental Assessment may be required if RF radiation from the proposed facilities would, in combination with radiation from other sources, cause RF power density or field strength in an accessible area to exceed the applicable limits specified in §1.1310 of this chapter. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(d) Applicants for certification required by this section must submit evidence that the devices in question are designed for use with a satellite system that may lawfully provide service to users in the United States pursuant to

an FCC license or order reserving spectrum.

[69 FR 5709, Feb. 6, 2004, as amended at 79 FR 8317, Feb. 12, 2014; 81 FR 55330, Aug. 18, 2016; 84 FR 53654, Oct. 8, 2019; 85 FR 18150, Apr. 1, 2020]

EARTH STATIONS

§§ 25.130–25.131 [Reserved]

§ 25.132 Verification of earth station antenna performance.

(a)(1) Except as provided in paragraph (a)(2) of this section, applications for transmitting earth stations in the FSS, including feeder-link stations, must include a 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 relevant off-axis gain standards in §25.209, measured in accordance with paragraph (b)(1) of this section. Applicants and licensees must be prepared to submit the radiation pattern measurements to the Commission on request.

(2) Applicants that specify off-axis EIRP density pursuant to §25.115(g)(1) are exempt from the certification requirement in paragraph (a)(1) of this section.

(b)(1) For purposes of paragraph (a)(1) of this section and §25.115(g)(1), the following measurements on a production antenna performed on calibrated antenna range must be made at the top and bottom of each frequency band assigned for uplink transmission:

(i)(A) Co-polarized gain in the azimuth plane must be measured across a range extending to 180° on each side of the main-lobe axis, and the measurements must be represented in two plots: one across the entire angular range of ±180° from the main-lobe axis and the other across ±10° from the main-lobe axis.

(B) Co-polarized gain must be measured from 0° to 30° from beam peak in the elevation plane.

(ii) Cross-polarization gain must be measured across a range of plus and minus 7° from beam peak in the azimuth and elevation planes.

(iii) Main beam gain.