§25.282 Orbit raising maneuvers.

A space station authorized to operate in the geostationary satellite orbit under this part is also authorized to transmit in connection with short-term, transitory maneuvers directly related to post-launch, orbit-raising maneuvers, provided that the following conditions are met:

- (a) Authority is limited to those tracking, telemetry, and control frequencies in which the space station is authorized to operate once it reaches its assigned geostationary orbital location;
- (b) The space station operator will coordinate on an operator-to-operator basis with any potentially affected satellite networks.
- (c) The space station licensee is required to accept interference from any lawfully operating satellite network or radio communication system.

[69 FR 54587, Sept. 9, 2004, as amended at 85 FR 52453, Aug. 25, 2020]

§25.283 End-of-life disposal.

(a) Geostationary orbit space stations. Unless otherwise explicitly specified in an authorization, a space station authorized to operate in the geostationary satellite orbit under this part shall be relocated, at the end of its useful life, barring catastrophic failure of satellite components, to an orbit with a perigee with an altitude of no less than:

 $36,021 \text{ km} + (1000 \cdot \text{C}_R \cdot \text{A/m})$

where C_R is the solar radiation pressure coefficient of the spacecraft, and A/m is the Area to mass ratio, in square meters per kilogram, of the spacecraft.

(b) A space station authorized to operate in the geostationary satellite orbit under this part may operate using its authorized tracking, telemetry and control frequencies, and outside of its assigned orbital location, for the purpose of removing the satellite from the geostationary satellite orbit at the end of its useful life, provided that the conditions of paragraph (a) of this section are met, and on the condition that the space station's tracking, telemetry and control transmissions are planned so as to avoid electrical in-

terference to other space stations, and coordinated with any potentially affected satellite networks.

- (c) All space stations. Upon completion of any relocation authorized by paragraph (b) of this section, or any relocation at end-of-life specified in an authorization, or upon a spacecraft otherwise completing its authorized mission, a space station licensee shall ensure, unless prevented by technical failures beyond its control, that stored energy sources on board the satellite are discharged, by venting excess propellant, discharging batteries, relieving pressure vessels, or other appropriate measures.
- (d) The minimum perigee requirement of paragraph (a) of this section shall not apply to space stations launched prior to March 18, 2002.

[69 FR 54588, Sept. 9, 2004, as amended at 78 FR 8431, Feb. 6, 2013; 81 FR 55349, Aug. 18, 2016]

§ 25.284 [Reserved]

§ 25.285 Operation of MSS and ATC transmitters or transceivers on board civil aircraft.

- (a) Operation of any of the following devices aboard civil aircraft is prohibited, unless the device is installed in a manner approved by the Federal Aviation Administration or is used by the pilot or with the pilot's consent:
- (1) Earth stations capable of transmitting in the 1.5/1.6 GHz, 1.6/2.4 GHz, or 2 GHz Mobile-Satellite Service frequency bands;
- (2) ATC terminals capable of transmitting in the 1.5/1.6 GHz or 1.6/2.4 GHz MSS bands;
- (3) Earth stations used for non-voice, non-geostationary Mobile-Satellite Service communication that can emit radiation in the 108–137 MHz band.
- (b) No portable device of any type identified in paragraph (a) of this section (including transmitter or transceiver units installed in other devices that are themselves portable) may be sold or distributed to users unless it conspicuously bears the following warning: "This device must be turned off at all times while on board aircraft." For purposes of this section, a device is portable if it is a "portable device" as defined in §2.1093(b) of this