### **Federal Communications Commission**

U.S.C. 310, is eligible to hold a license under this part.

[70 FR 61059, Oct. 20, 2005]

#### §24.15 License period.

Licenses for service areas will be granted for ten year terms from the date of original issuance or renewal.

## Subpart C—Technical Standards

### § 24.50 Scope.

This subpart sets forth the technical requirements for use of the spectrum and equipment in the personal communications services.

### §24.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in §2.803 of this chapter, must be of a type that has been authorized by the Commission under its certification procedure for use under this part.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, as amended at 63 FR 36604, July 7, 1998; 85 FR 18150, Apr. 1, 2020]

## §24.52 RF exposure.

Licensees and manufacturers 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. 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.

[85 FR 18150, Apr. 1, 2020]

# § 24.53 Calculation of height above average terrain (HAAT).

- (a) HAAT is determined by subtracting average terrain elevation from antenna height above mean sea level.
- (b) Average terrain elevation shall be calculated using elevation data from a 30 arc second or better Digital Elevation Models (DEMs). DEM data is available from United States Geological Survey (USGS). The data file shall be identified. If 30 arc second data is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. If DEM data is not available, elevation data from the Defense Mapping Agency's Digital Chart of the World (DCW) may be used.
- (c) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers extending radially from the antenna site. At least 50 evenly spaced data points for each radial shall be used in the computation.
- (d) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).
- (e) The position location of the antenna site shall be determined to an accuracy of no less than  $\pm 5$  meters in both the horizontal (latitude and longitude) and vertical (ground elevation) dimensions with respect to the National Geodetic Reference System.

 $[58~\mathrm{FR}~59183,~\mathrm{Nov.}~8,~1993;~59~\mathrm{FR}~15269,~\mathrm{Mar.}~31,~1994]$ 

# \$24.55 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues