Federal Communications Commission

§ 1.957 Procedure with respect to amateur radio operator license.

Each candidate for an amateur radio license which requires the applicant to pass one or more examination elements must present the Volunteer Examiners (VEs) with a properly completed FCC Form 605 prior to the examination. Upon completion of the examination, the VEs will grade the test papers. If the applicant is successful, the VEs will forward the candidate’s application to a Volunteer-Examiner Coordinator (VEC). The VEs will then issue a certificate for successful completion of an amateur radio operator examination. The VEC will forward the application to the Commission’s Gettysburg, Pennsylvania, facility.

§ 1.958 Distance computation.

The method given in this section must be used to compute the distance between any two locations, except that, for computation of distance involving stations in Canada and Mexico, methods for distance computation specified in the applicable international agreement, if any, must be used instead. The result of a distance calculation under parts 21 and 101 of this chapter must be rounded to the nearest tenth of a kilometer. The method set forth in this paragraph is considered to be sufficiently accurate for distances not exceeding 475 km (295 miles).

(a) Convert the latitudes and longitudes of each reference point from degree-minute-second format to degree-decimal format by dividing minutes by 60 and seconds by 3600, then adding the results to degrees.

LATX_dd = DD + \(\frac{MM}{60} + \frac{SS}{3600}\)

LONX_dd = DDD + \(\frac{MM}{60} + \frac{SS}{3600}\)

(b) Calculate the mean geodetic latitude between the two reference points by averaging the two latitudes:

\[ML = \frac{LAT1_dd + LAT2_dd}{2}\]

(c) Calculate the number of kilometers per degree latitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

\[KPD_{lat} = 111.13209 - 0.56605 \cos 2ML + 0.00120 \cos 4ML\]

(d) Calculate the number of kilometers per degree of longitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

\[KPD_{lon} = 111.41513 \cos 5ML - 0.09455 \cos 3ML + 0.00012 \cos 5ML\]

(e) Calculate the North-South distance in kilometers as follows:

\[NS = KPD_{lat} \times (LAT1_{dd} - LAT2_{dd})\]

(f) Calculate the East-West distance in kilometers as follows:

\[EW = KPD_{lon} \times (LON1_{dd} - LON2_{dd})\]

(g) Calculate the distance between the locations by taking the square root of the sum of the squares of the East-West and North-South distances:

\[DIST = \sqrt{NS^2 + EW^2}\]

(h) Terms used in this section are defined as follows:

(1) LAT1_{dd} and LON1_{dd} are the coordinates of the first location in degree-decimal format.

(2) LAT2_{dd} and LON2_{dd} are the coordinates of the second location in degree-decimal format.

(3) ML is the mean geodetic latitude in degree-decimal format.

(4) KPD_{lat} is the number of kilometers per degree of latitude at a given mean geodetic latitude.

(5) KPD_{lon} is the number of kilometers per degree of longitude at a given mean geodetic latitude.
§ 1.959 Computation of average terrain elevation.

Except as otherwise specified in §90.309(a)(4) of this chapter, average terrain elevation must be calculated by computer using elevations from a 30 second point or better topographic data file. The file must be identified. If a 30 second point data file is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. In cases of dispute, average terrain elevation determinations can also be done manually, if the results differ significantly from the computer derived averages.

(a) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers (2 and 10 miles) extending radially from the antenna site. If a portion of the radial path extends over foreign territory or water, such portion must not be included in the computation of average elevation unless the radial path again passes over United States land between 16 and 134 kilometers (10 and 83 miles) away from the station. At least 50 evenly spaced data points for each radial should be used in the computation.

(b) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).

(c) For locations in Dade and Broward Counties, Florida, the method prescribed above may be used or average terrain elevation may be assumed to be 3 meters (10 feet).

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§ 1.990 Citizenship and filing requirements under the Communications Act of 1934.

These rules establish the requirements and conditions for obtaining the Commission’s prior approval of foreign ownership in common carrier, aeronautical en route, and aeronautical fixed radio station licensees and common carrier spectrum lessees that would exceed the 25 percent benchmark in section 310(b)(4) of the Communications Act of 1934, as amended (47 U.S.C. 310(b)(4)). These rules also establish the requirements and conditions for obtaining the Commission’s prior approval of foreign ownership in common carrier (but not aeronautical en route or aeronautical fixed) radio station licensees and spectrum lessees that would exceed the 20 percent limit in section 310(b)(3) of the Act (47 U.S.C. 310(b)(3)).

(a)(1) A common carrier, aeronautical en route or aeronautical fixed radio station licensee or common carrier spectrum lessee shall file a petition for declaratory ruling to obtain Commission approval under section 310(b)(4) of the Act, and obtain such approval, before the aggregate foreign ownership of any controlling, U.S.-organized parent company exceeds, directly and/or indirectly, 25 percent of the U.S. parent’s equity interests and/or or 25 percent of its voting interests. An applicant for a common carrier, aeronautical en route or aeronautical fixed