Federal Communications Commission § 73.208

(iv) U.S. Class C2 assignments or allotments are considered Class B; and
(v) Class C1 assignments or allotments assume maximum facilities of 100 kW ERP at 300 meters HAAT. However, U.S. Class C1 stations may not, in any event, exceed the domestic U.S. limit of 100 kW ERP at 299 meters HAAT, or the equivalent.

TABLE C—Minimum Distance Separation Requirements in Kilometers

<table>
<thead>
<tr>
<th>Relation</th>
<th>Co-Channel</th>
<th>200 kHz</th>
<th>400 kHz or 600 kHz</th>
<th>10.6 or 10.8 MHz [I.F.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A to A</td>
<td>100</td>
<td>61</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>A to AA</td>
<td>111</td>
<td>68</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>A to B1</td>
<td>138</td>
<td>88</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>A to B</td>
<td>163</td>
<td>105</td>
<td>65</td>
<td>14</td>
</tr>
<tr>
<td>A to C1</td>
<td>196</td>
<td>129</td>
<td>74</td>
<td>21</td>
</tr>
<tr>
<td>A to C</td>
<td>210</td>
<td>161</td>
<td>94</td>
<td>28</td>
</tr>
<tr>
<td>AA to AA</td>
<td>115</td>
<td>72</td>
<td>31</td>
<td>10</td>
</tr>
<tr>
<td>AA to B1</td>
<td>143</td>
<td>96</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>AA to B</td>
<td>178</td>
<td>125</td>
<td>69</td>
<td>15</td>
</tr>
<tr>
<td>AA to C1</td>
<td>200</td>
<td>133</td>
<td>75</td>
<td>22</td>
</tr>
<tr>
<td>AA to C</td>
<td>226</td>
<td>165</td>
<td>95</td>
<td>29</td>
</tr>
<tr>
<td>B1 to B1</td>
<td>175</td>
<td>114</td>
<td>50</td>
<td>14</td>
</tr>
<tr>
<td>B1 to B</td>
<td>211</td>
<td>145</td>
<td>71</td>
<td>17</td>
</tr>
<tr>
<td>B1 to C1</td>
<td>233</td>
<td>161</td>
<td>77</td>
<td>24</td>
</tr>
<tr>
<td>B1 to C</td>
<td>259</td>
<td>193</td>
<td>96</td>
<td>31</td>
</tr>
<tr>
<td>B to B1</td>
<td>237</td>
<td>164</td>
<td>65</td>
<td>20</td>
</tr>
<tr>
<td>B to C1</td>
<td>270</td>
<td>195</td>
<td>79</td>
<td>27</td>
</tr>
<tr>
<td>B to C</td>
<td>270</td>
<td>215</td>
<td>98</td>
<td>35</td>
</tr>
<tr>
<td>C1 to C1</td>
<td>245</td>
<td>177</td>
<td>82</td>
<td>34</td>
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<tr>
<td>C1 to C</td>
<td>270</td>
<td>209</td>
<td>102</td>
<td>41</td>
</tr>
<tr>
<td>C to C</td>
<td>290</td>
<td>228</td>
<td>105</td>
<td>48</td>
</tr>
</tbody>
</table>

TABLE C—Minimum Distance Separation Requirements in Kilometers

(c) The distances listed below apply only to allotments and assignments on Channel 253 (98.5 MHz). The Commission will not accept petitions to amend the Table of Allotments (§ 73.202(b)) are considered:

(i) First, transmitter sites if authorized, or if proposed in applications with cut-off protection pursuant to paragraph (a)(3) of this section;
(ii) Second, reference coordinates designated by the FCC;
(iii) Third, coordinates listed in the United States Department of Interior publication entitled Index to the National Atlas of the United States of America; or
(iv) Last, coordinates of the main post office.

The community’s reference points for which the petition is submitted will normally be the coordinates listed in the above publication.

(2) When the distance between communities is calculated using community reference points and it does not meet the minimum separation requirements to transmitter sites specified in pending applications, a showing should also be made indicating adequate distance between suitable transmitter sites for all communities.

(3) Petitions to amend the Table of Allotments that do not meet minimum distance separation requirements to transmitter sites specified in pending applications will not be considered unless they are filed no later than:

§ 73.208 Reference points and distance computations.

(a)(1) The following reference points must be used to determine distance separation requirements when petitions to amend the Table of Allotments (§ 73.202(b)) are considered:

(i) First, transmitter sites if authorized, or if proposed in applications with cut-off protection pursuant to paragraph (a)(3) of this section;
(ii) Second, reference coordinates designated by the FCC;
(iii) Third, coordinates listed in the United States Department of Interior publication entitled Index to the National Atlas of the United States of America; or
(iv) Last, coordinates of the main post office.

(2) When the distance between communities is calculated using community reference points and it does not meet the minimum separation requirements to transmitter sites specified in pending applications, a showing should also be made indicating adequate distance between suitable transmitter sites for all communities.

(3) Petitions to amend the Table of Allotments that do not meet minimum distance separation requirements to transmitter sites specified in pending applications will not be considered unless they are filed no later than:
(i) The last day of a filing window if the application is for a new FM facility or a major change in the non-reserved band and is filed during a filing window established under section 73.3564(d)(3); or

(ii) The cut-off date established in a Commission Public Notice under §73.3564(d) and 73.3573(e) if the application is for a new FM facility or a major change in the reserved band; or

(iii) The date of receipt of all other types of FM applications. If an application is amended so as to create a conflict with a petition for rule making filed prior to the date the amendment is filed, the amended application will be treated as if filed on the date of the amendment for purposes of this paragraph (a)(3).

NOTE: If the filing of a conflicting FM application renders an otherwise timely filed counterproposal unacceptable, the counterproponent may be considered in the rulemaking proceeding if it is amended to protect the site of the previously filed FM application within 15 days after being placed on the Public Notice routinely issued by the staff concerning the filing of counterproposals. No proposals involving communities not already included in the proceeding can be introduced during the reply comment period as a method of resolving conflicts. The counterproponent is required to make a showing that, at the time it filed the counterproposal, it did not know, and could not have known by exercising due diligence, of the pendency of the conflicting FM application.

(b) Station separations in licensing proceedings shall be determined by the distance between the coordinates of the proposed transmitter site in one community and

(1) The coordinates of an authorized transmitter site for the pertinent channel in the other community; or, where such transmitter site is not available for use as a reference point,

(2) Reference coordinates designated by the FCC; or, if none are designated,

(3) The coordinates of the other community as listed in the publication listed in paragraph (a) of this section; or, if not contained therein,

(4) The coordinates of the main post office of such other community.

(5) In addition, where there are pending applications in other communities which, if granted, would have to be considered in determining station separations, the coordinates of the transmitter sites proposed in such applications must be used to determine whether the requirements with respect to minimum separations between the proposed stations in the respective cities have been met.

(c) The method given in this paragraph shall be used to compute the distance between two reference points, except that, for computation of distance involving stations in Canada and Mexico, the method for distance computation specified in the applicable international agreement shall be used instead. The method set forth in this paragraph is valid only for distances not exceeding 475 km (295 miles).

(1) 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.

(2) Calculate the middle latitude between the two reference points by averaging the two latitudes as follows:

\[ ML = \frac{\text{LAT}_1 + \text{LAT}_2}{2} \]

(3) Calculate the number of kilometers per degree latitude difference for the middle latitude calculated in paragraph (c)(2) as follows:

\[ KPD_{\text{lat}} = 111.3209 - 0.56605 \cos(2ML) + 0.00120 \cos(4ML) \]

(4) Calculate the number of kilometers per degree longitude difference for the middle latitude calculated in paragraph (c)(2) as follows:

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

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

\[ \text{NS} = KPD_{\text{lat}} (\text{LAT}_1 - \text{LAT}_2) \]

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

\[ \text{EW} = KPD_{\text{lon}} (\text{LON}_1 - \text{LON}_2) \]

(7) Calculate the distance between the two reference points by taking the square root of the sum of the squares of the East-West and North-South distances as follows:

\[ \text{DIST} = (\text{NS}^2 + \text{EW}^2)^{0.5} \]
§ 73.209 Protection from interference.

(a) Permittees and licensees of FM broadcast stations are not protected from any interference which may be caused by the grant of a new station, or of authority to modify the facilities of an existing station, in accordance with the provisions of this subpart. However, they are protected from interference caused by Class D (secondary) noncommercial educational FM stations. See §73.509.

(b) The nature and extent of the protection from interference afforded FM broadcast stations operating on Channels 221–300 is limited to that which results when assignments are made in accordance with the rules in this subpart.

(c) Permittees and licensees of FM stations are not protected from interference which may be caused by the grant of a new LPFM station or of authority to modify an existing LPFM station, except as provided in subpart G of this part.

§ 73.210 Station classes.

(a) The rules applicable to a particular station, including minimum and maximum facilities requirements, are determined by its class. Possible class designations depend upon the zone in which the station’s transmitter is located, or proposed to be located. The zones are defined in §73.205. Allotted station classes are indicated in the Table of Allotments, §73.202. Class A, B1 and B stations may be authorized in Zones I and I-A. Class A, C3, C2, C1, C0 and C stations may be authorized in Zone II.

(b) The power and antenna height requirements for each class are set forth in §73.211. If a station has an ERP and an antenna HAAT such that it cannot be classified using the maximum limits and minimum requirements in §73.211, its class shall be determined using the following procedure:

1. Determine the reference distance of the station using the procedure in paragraph (b)(1)(i) of §73.211. If this distance is less than or equal to 28 km, the station is Class A; otherwise,

2. For a station in Zone I or Zone I-A, except for Puerto Rico and the Virgin Islands:

   (i) If this distance is greater than 28 km and less than or equal to 39 km, the station is Class B1.

   (ii) If this distance is greater than 39 km and less than or equal to 52 km, the station is Class B.

3. For a station in Zone II:

   (i) If this distance is greater than 28 km and less than or equal to 39 km, the station is Class C3.

   (ii) If this distance is greater than 39 km and less than or equal to 52 km, the station is Class C2.

   (iii) If this distance is greater than 52 km and less than or equal to 72 km, the station is Class C1.

4. For a station in Puerto Rico or the Virgin Islands:

   (i) If this distance is greater than 72 km and less than or equal to 83 km, the station is Class C0.

   (ii) If this distance is greater than 83 km and less than or equal to 92 km, the station is Class C.

5. For a station in Puerto Rico or the Virgin Islands:

   (i) If this distance is less than or equal to 42 km, the station is Class A.