

MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS (MILES)

| Relation | Co-channel | 200 kHz | 400/600 kHz | 10.6/10.8 MHz |
|---------------|------------|-----------|-------------|---------------|
| A to A | 105 (65) | 64 (40) | 27 (17) | 8 (5) |
| A to B1 | 138 (86) | 88 (55) | 48 (30) | 11 (6) |
| A to B | 163 (101) | 105 (65) | 69 (43) | 14 (9) |
| A to C3 | 138 (86) | 84 (52) | 42 (26) | 11 (6) |
| A to C2 | 163 (101) | 105 (65) | 55 (34) | 14 (9) |
| A to C1 | 196 (122) | 129 (80) | 74 (46) | 21 (13) |
| A to C | 222 (138) | 161 (100) | 94 (58) | 28 (17) |

(2) Applications for authorization of Class A facilities greater than 3,000 watts ERP and 100 meters HAAT. Each application to operate a Class A station with an ERP and HAAT such that the reference distance would exceed 24 kilometers must contain an exhibit demonstrating the consent of the licensee of each co-channel, first, second or third adjacent channel station (for which the requirements of §73.207 are not met) to a grant of that application. Each such application must specify a transmitter site that meets the applicable IF-related channel distance separation requirements of §73.207. Applications that specify a new transmitter site which is short-spaced to an FM station other than another Class A station which is seeking a mutual increase in facilities may be granted only if no alternative fully-spaced site or less short-spaced site is available. Licensees of Class A stations seeking mutual increases in facilities need not show that a fully spaced site or less short-spaced site is available. Applications submitted pursuant to the provisions of this paragraph may be granted only if such action is consistent with the public interest.

[52 FR 37789, Oct. 9, 1987, as amended at 54 FR 14964, Apr. 14, 1989; 54 FR 35339, Aug. 25, 1989; 56 FR 27426, June 14, 1991; 62 FR 50521, Sept. 26, 1997; 63 FR 33876, June 22, 1998]

§73.215 Contour protection for short-spaced assignments.

The Commission will accept applications that specify short-spaced antenna locations (locations that do not meet the domestic co-channel and adjacent channel minimum distance separation requirements of §73.207); Provided That, such applications propose contour protection, as defined in paragraph (a) of this section, with all short-spaced assignments, applications and

allotments, and meet the other applicable requirements of this section. Each application to be processed pursuant to this section must specifically request such processing on its face, and must include the necessary exhibit to demonstrate that the requisite contour protection will be provided. Such applications may be granted when the Commission determines that such action would serve the public interest, convenience, and necessity.

(a) *Contour protection.* Contour protection, for the purpose of this section, means that on the same channel and on the first, second and third adjacent channels, the predicted interfering contours of the proposed station do not overlap the predicted protected contours of other short-spaced assignments, applications and allotments, and the predicted interfering contours of other short-spaced assignments, applications and allotments do not overlap the predicted protected contour of the proposed station.

(1) The protected contours, for the purpose of this section, are defined as follows. For all Class B and B1 stations on Channels 221 through 300 inclusive, the F(50,50) field strengths along the protected contours are 0.5 mV/m (54 dBμ) and 0.7 mV/m (57 dBμ), respectively. For all other stations, the F(50,50) field strength along the protected contour is 1.0 mV/m (60 dBμ).

(2) The interfering contours, for the purpose of this section, are defined as follows. For co-channel stations, the F(50,10) field strength along the interfering contour is 20 dB lower than the F(50,50) field strength along the protected contour for which overlap is prohibited. For first adjacent channel stations (±200 kHz), the F(50,10) field strength along the interfering contour is 6 dB lower than the F(50,50) field strength along the protected contour

for which overlap is prohibited. For both second and third adjacent channel stations (± 400 kHz and ± 600 kHz), the F(50,10) field strength along the interfering contour is 40 dB higher than the F(50,50) field strength along the protected contour for which overlap is prohibited.

(3) The locations of the protected and interfering contours of the proposed station and the other short-spaced as-

signments, applications and allotments must be determined in accordance with the procedures of paragraphs (c), (d)(2) and (d)(3) of § 73.313, using data for as many radials as necessary to accurately locate the contours.

(4) Protected and interfering contours (in dBu) for stations in Puerto Rico and the U.S. Virgin Islands are as follows:

| Station with interfering contour | Station with protected contour | | | | | |
|----------------------------------|--------------------------------|-----------|-------------|-----------|-------------|-----------|
| | Class A | | Class B1 | | Class B | |
| | Interfering | Protected | Interfering | Protected | Interfering | Protected |
| Co-Channel: | | | | | | |
| Class A | 46 | 66 | 41 | 61 | 40 | 60 |
| Class B1 | 43 | 63 | 39 | 59 | 38 | 58 |
| Class B | 45 | 65 | 41 | 61 | 41 | 61 |
| 1st Adj. Channel: | | | | | | |
| Class A | 61 | 67 | 56 | 62 | 59 | 65 |
| Class B1 | 57 | 63 | 54 | 60 | 54 | 60 |
| Class B | 62 | 68 | 56 | 62 | 57 | 63 |
| 2nd-3rd Adj. Channel: | | | | | | |
| Class A | 107 | 67 | 100 | 60 | 104 | 64 |
| Class B1 | 99 | 59 | 100 | 60 | 104 | 64 |
| Class B | 94 | 54 | 94 | 54 | 104 | 64 |

Maximum permitted facilities assumed for each station pursuant to 47 CFR 73.211(b)(3):
 6 kW ERP/240 meters HAAT—Class A
 25 kW ERP/150 meters HAAT—Class B1
 50 kW ERP/472 meters HAAT—Class B

(b) Applicants requesting short-spaced assignments pursuant to this section must take into account the following factors in demonstrating that contour protection is achieved:

(1) The ERP and antenna HAAT of the proposed station in the direction of the contours of other short-spaced assignments, applications and allotments. If a directional antenna is proposed, the pattern of that antenna must be used to calculate the ERP in particular directions. See § 73.316 for additional requirements for directional antennas.

(2) The ERP and antenna HAAT of other short-spaced assignments, applications and allotments in the direction of the contours of the proposed station. The ERP and antenna HAATs in the directions of concern must be determined as follows:

(i) For vacant allotments, contours are based on the presumed use, at the allotment's reference point, of the maximum ERP that could be authorized for the station class of the allotment, and antenna HAATs in the directions of concern that would result from

a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the station class of the allotment.

(ii) For existing stations that were not authorized pursuant to this section, including stations with authorized ERP that exceeds the maximum ERP permitted by § 73.211 for the standard eight-radial antenna HAAT employed, and for applications not requesting authorization pursuant to this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in § 73.211), and the antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply (e.g. zoning laws, FAA constraints, application of § 73.213).

(iii) For stations authorized pursuant to this section, except stations with authorized ERP that exceeds the maximum ERP permitted by § 73.211 for the

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standard eight-radial antenna HAAT employed, contours are based on the use of the authorized ERP in the directions of concern, and HAATs in the directions of concern derived from the authorized standard eight-radial antenna HAAT. For stations with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, authorized under this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in §73.211), and antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply.

(iv) For applications containing a request for authorization pursuant to this section, except for applications to continue operation with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, contours are based on the use of the proposed ERP in the directions of concern, and antenna HAATs in the directions of concern derived from the proposed standard eight-radial antenna HAAT. For applications to continue operation with an ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, if processing is requested under this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in §73.211), and antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply.

NOTE TO PARAGRAPH (b): Applicants are cautioned that the antenna HAAT in any particular direction of concern will not usually be the same as the standard eight-radial antenna HAAT or the reference HAAT for the station class.

(c) Applications submitted for processing pursuant to this section are not

required to propose contour protection of any assignment, application or allotment for which the minimum distance separation requirements of §73.207 are met, and may, in the directions of those assignments, applications and allotments, employ the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed.

(d) Stations authorized pursuant to this section may be subsequently authorized on the basis of compliance with the domestic minimum separation distance requirements of §73.207, upon filing of an FCC Form 301 or FCC Form 340 (as appropriate) requesting a modification of authorization.

(e) The Commission will not accept applications that specify a short-spaced antenna location for which the following minimum distance separation requirements, in kilometers (miles), are not met:

| Relation | Co-Channel | 200 kHz | 400/600 kHz |
|----------------|------------|-----------|-------------|
| A to A | 92 (57) | 49 (30) | 25 (16) |
| A to B1 | 119 (74) | 72 (45) | 42 (26) |
| A to B | 143 (89) | 96 (60) | 63 (39) |
| A to C3 | 119 (74) | 72 (45) | 36 (22) |
| A to C2 | 143 (89) | 89 (55) | 49 (30) |
| A to C1 | 178 (111) | 111 (69) | 69 (43) |
| A to C0 | 193 (120) | 130 (81) | 80 (50) |
| A to C | 203 (126) | 142 (88) | 89 (55) |
| B1 to B1 | 143 (89) | 96 (60) | 44 (27) |
| B1 to B | 178 (111) | 114 (71) | 65 (40) |
| B1 to C3 | 143 (89) | 96 (60) | 44 (27) |
| B1 to C2 | 175 (109) | 114 (71) | 50 (31) |
| B1 to C1 | 200 (124) | 134 (83) | 71 (44) |
| B1 to C0 | 0215 (134) | 153 (95) | 81 (50) |
| B1 to C | 233 (145) | 165 (103) | 99 (61) |
| B to B | 211 (131) | 145 (90) | 68 (42) |
| B to C3 | 178 (111) | 114 (70) | 65 (40) |
| B to C2 | 211 (131) | 145 (90) | 68 (42) |
| B to C1 | 241 (150) | 169 (105) | 73 (45) |
| B to C0 | 266 (165) | 195 (121) | 83 (52) |
| B to C | 268 (163) | 195 (121) | 99 (61) |
| C3 to C3 | 142 (88) | 89 (55) | 37 (23) |
| C3 to C2 | 166 (103) | 106 (66) | 50 (31) |
| C3 to C1 | 200 (124) | 133 (83) | 70 (43) |
| C3to C0 | 215 (134) | 152 (94) | 81 (50) |
| C3 to C | 226 (140) | 165 (103) | 90 (56) |
| C2 to C2 | 177 (110) | 117 (73) | 52 (32) |
| C2 to C1 | 211 (131) | 144 (90) | 73 (45) |
| C2 to C0 | 227 (141) | 163 (101) | 83 (52) |
| C2 to C | 237 (147) | 176 (109) | 96 (61) |
| C1 to C1 | 224 (139) | 158 (98) | 76 (47) |
| C1 to C0 | 239 (148) | 176 (109) | 88 (55) |
| C1 to C | 249 (155) | 188 (117) | 99 (61) |
| C0 to C0 | 259 (161) | 196 (122) | 90 (56) |
| C0 to C | 270 (168) | 207 (129) | 99 (61) |
| C to C | 270 (168) | 209 (130) | 99 (61) |

[54 FR 9802, Mar. 8, 1989, as amended at 54 FR 35340, Aug. 25, 1989; 56 FR 57294, Nov. 8, 1991; 57 FR 46325, Oct. 8, 1992; 65 FR 79777, Dec. 20, 2000; 66 FR 8149, Jan. 29, 2001]