

Amended Section 74.1204 - Statement of Compliance
AM Revitalization 250-Mile Window Application
W258AK, Farmville, VA to Richmond, VA, Channel 295
FM Translator Facility ID. 156388
February, 2016

The Applicant proposes to modify the above-referenced, non-reserved band, FM translator authorization pursuant to the announced “*First FM translator application modification window for AM stations to modify and/or relocate FM translator stations (First Modification Window)*”.¹ The FM translator will relocate, change frequency and rebroadcast Class D AM station WREJ(AM), Richmond, Virginia (Facility ID 21434). As discussed below, the instant proposal complies with the protection requirements set forth in Section 74.1204 of the FCC Rules. This technical amendment will resolve a conflict with a mutually-exclusive application which was also filed on the opening day of the First Modification Window.

Section 74.1204(a) Contour Overlap Protection Criteria

Attached is a map which demonstrates that proposed technical facility complies with the contour overlap provisions of Section 74.1204(a) of the FCC Rules with respect to all pertinent cochannel (See Exhibit 1) assignments, authorizations and applications. The instant proposal is well clear of all other relevant co-channel and first-adjacent channel protection considerations not represented herein.

Section 74.1204(d) Second/Third-Adjacent Channel Protection

The required protection to second-adjacent channel stations WBTJ(FM), Richmond, VA (Channel 293B) and WBBT-FM, Powhatan, VA (Channel 297A) is discussed below. The instant proposal is well clear of all other relevant second and third-adjacent channel protection considerations not represented herein.

The proposed transmitting antenna will be located within the protected contour of second and third adjacent channel, full service stations listed above which results in contour overlap as defined in Section 74.1204 of the FCC Rules. However, at the translator’s proposed transmitter site, WBTJ(FM) is predicted to produce an F(50,50) signal strength of 95 dBu while WBBT-FM is predicted to produce an F(50,50) signal strength of only 69 dBu. Therefore, WBBT-FM provides for a worst-case interference analysis.

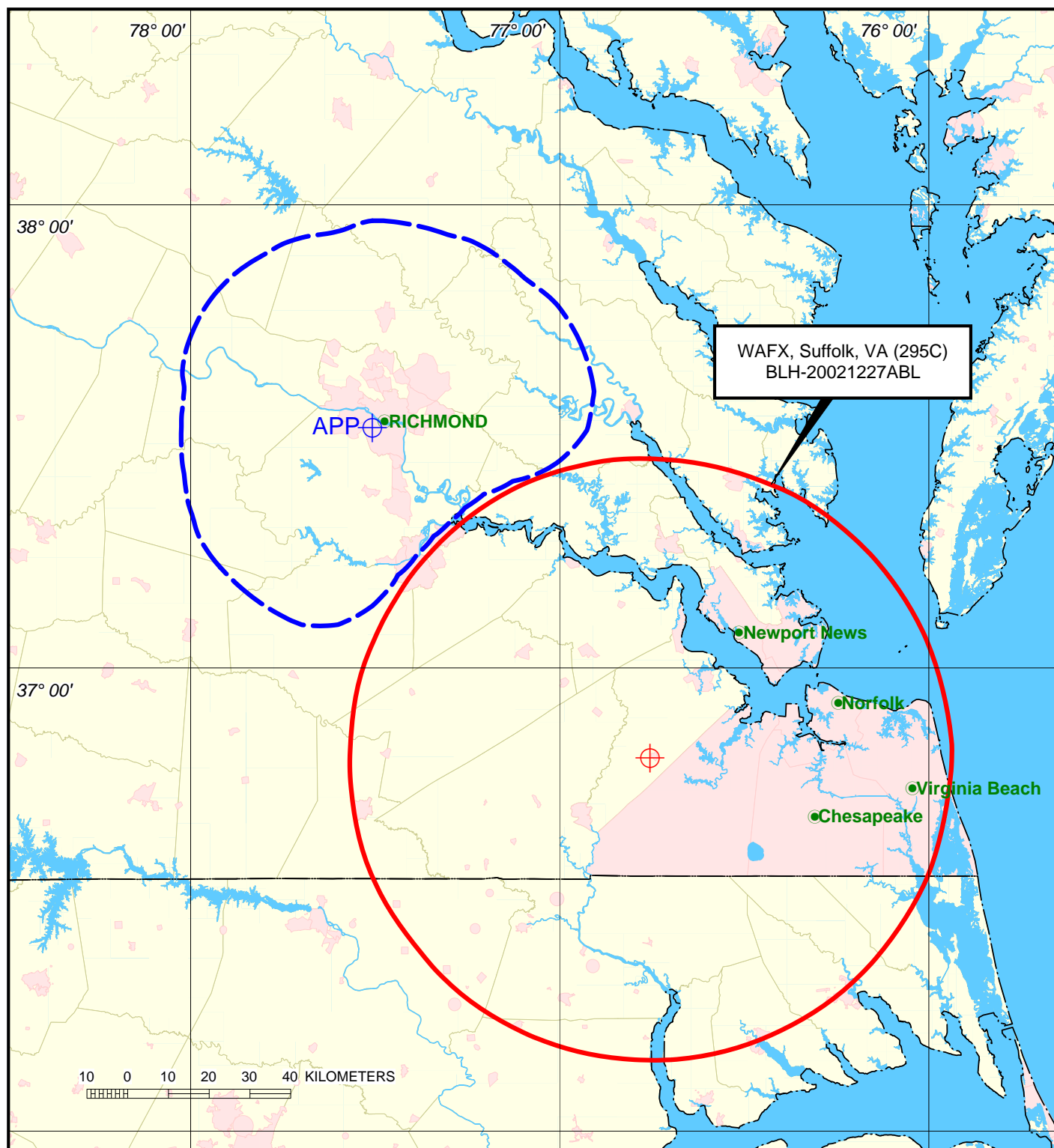
In the vicinity of the second-adjacent channel translator station, the translator’s relevant interfering contour is the 109 dBu contour relative to WBBT-FM. According to free space calculations, the translator’s worst-case predicted 109 dBu contour will extend, at most, 393 meters from the proposed transmitter site and interference is predicted to

¹ See FCC Public Notice (DA 1491), *Media Bureau Announces Filing Dates and Procedures for AM Station Filing Window for FM Translator Modifications and Availability of FM Translator Technical Tools*, Released December 23, 2015.

occur only at heights above ground level of 138 feet or higher (See the attached Table). As shown on Exhibit 2, only low clearance buildings and residences are located in this vicinity. Therefore, the translator's worst-case interfering contour relative to WBBT-FM not only remains well above ground level, but also does not impinge upon any buildings or major roads where there may be an affected population. Therefore, the proposed minor change will cause no interference to any population served by WBBT-FM or by WBTJ(FM).

Accordingly, the proposed facility satisfies Section 74.1204(d) of the FCC Rules because it has been "demonstrated that no actual interference will occur due to lack of population or such other factors as may be applicable".

Cochannel Protected Contours: 60 dBu F(50,50) - Solid Contours
 Proposed Translator Interfering Contour to Class A Station: 40 dBu F(50,10) - Dashed Contour





WBBT-FM, Powhatan, VA
Ch. 297A, 1.4 kW ERP, 207 m HAAT
FCC File No. BLH-20110525ABA

Worst-Case Channel 299 Interfering Contour
to Second-Adjacent Channel Station WBBT-FM
AM Fill-in FM Translator Station Facility ID 156388
Amend: Ch. 295D, 250 w (DA-MAX), 126 m RCAGL
February, 2016

WREJ-XLA

W258AK, Farmville, VA to Channel 295 (Facility ID 156388)

ERP 250.00 WATTS

Maximum ERP 0.25 kW Interfering contour value -----> 109 dBu
RCAGL (m)-----> 126 meters
Antenna Type -----> 4

Antenna Type 4 = ERI, 3-bay, half-wave spaced

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	WREJ-XLA ERP (kW)	WREJ-XLA ERP (dBk)	WREJ-XLA Free-Space Distance to interfering contour (meters)	Slant Distance (meters) *	Height of interfering contour above ground (feet)**	Proposed Interference within 30 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.2500	-6.021	392.6	N/A	413.4			1288.1
5	0.975	0.2377	-6.241	382.8	1,341.3	303.9	No	381.3	1251.1
10	0.895	0.2003	-6.984	351.4	673.2	213.2	No	346.1	1135.3
15	0.775	0.1502	-8.235	304.3	451.7	155.0	No	293.9	964.3
20	0.625	0.0977	-10.103	245.4	341.8	138.0	No	230.6	756.5
25	0.460	0.0529	-12.765	180.6	276.6	163.0	No	163.7	537.0
30	0.300	0.0225	-16.478	117.8	233.8	220.2	No	102.0	334.7
35	0.210	0.0110	-19.576	82.4	203.8	258.2	No	67.5	221.6
40	0.040	0.0004	-33.979	15.7	181.9	380.3	No	12.0	39.5
45	0.050	0.0006	-32.041	19.6	165.3	367.8	No	13.9	45.5
50	0.110	0.0030	-25.193	43.2	152.6	304.8	No	27.8	91.1
55	0.140	0.0049	-23.098	55.0	142.7	265.7	No	31.5	103.4
60	0.160	0.0064	-21.938	62.8	135.0	234.9	No	31.4	103.0
65	0.155	0.0060	-22.214	60.9	129.0	232.4	No	25.7	84.4
70	0.140	0.0049	-23.098	55.0	124.4	243.9	No	18.8	61.7
75	0.120	0.0036	-24.437	47.1	121.0	264.1	No	12.2	40.0
80	0.095	0.0023	-26.466	37.3	118.7	292.9	No	6.5	21.2
85	0.070	0.0012	-29.119	27.5	117.3	323.6	No	2.4	7.9
90	0.050	0.0006	-32.041	19.6	116.9	349.0	No	0.0	0.0

* Slant distance from antenna center of radiation to location 30 feet (9.1 meters) above ground level at angle below horizontal.

** A negative number indicates that the interfering contour is predicted to reach ground level. If a negative number is present, the interfering contour reaches ground level at the "Horizontal Distance" described below.

*** Horizontal distance from tower base to interfering contour at the indicated height above ground level. If a negative height above ground level is indicated, this horizontal distance is the distance from the tower base to the interfering contour. This horizontal distance is only relevant if the proposed interference is predicted to occur within 30 feet of ground level.