

Section 74.1204 - Statement of Compliance
W244EB, Burke, VA
Modification of FCC Construction Permit
FCC File No. BNPFT-20180314ACL
FM Translator Facility ID. 201212
March, 2019

The Applicant proposes a minor modification to the above-referenced, non-reserved band, FM translator authorization. Specifically, the applicant proposes herein to change the directional antenna make, model, power and height. No further changes are proposed herein.

Section 74.1204(a) Contour Overlap Protection Criteria

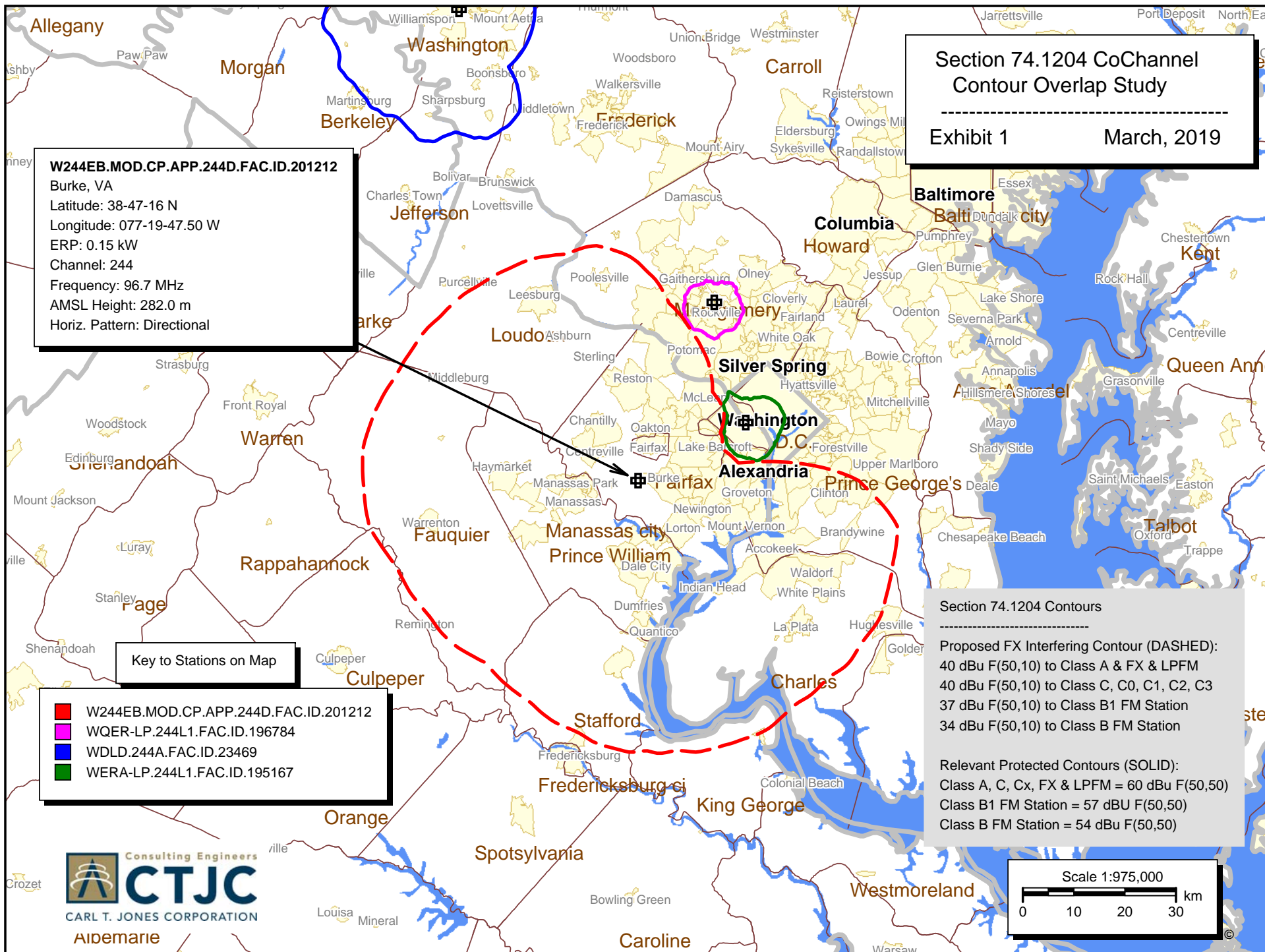
Attached are two maps which demonstrate that proposed technical facility complies with the contour overlap provisions of Section 74.1204(a) of the FCC Rules with respect to all pertinent cochannel (See Exhibit 1) and first-adjacent channel (See Exhibit 2) assignments, authorizations and applications. 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 WHUR-FM (Channel 242B) and WASH(FM) (Channel 246B), both licensed to Washington, DC 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 both WHUR-FM and WASH(FM) resulting in contour overlap as defined in Section 74.1204 of the FCC Rules. At the translator's proposed transmitter site, both second-adjacent channel stations are predicted to produce an F(50,50) signal strength of 72 dBu. Therefore, in the vicinity of the proposed transmitter site, the translator's relevant interfering contour is the 112 dBu contour relative to both WHUR-FM and WASH(FM). As demonstrated in the attached Table, according to free space calculations, the translator's predicted interfering contour will not reach within 175 feet of ground level. Therefore, any predicted interference will not reach any population or any major roadway.

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".



Section 74.1204 CoChannel Contour Overlap Study

Exhibit 1

March, 2019

W244EB.MOD.CP.APP.244D.FAC.ID.201212

Burke, VA

Latitude: 38-47-16 N

Longitude: 077-19-47.50 W

ERP: 0.15 kW

Channel: 244

Frequency: 96.7 MHz

AMSL Height: 282.0 m

Horiz. Pattern: Directional

Key to Stations on Map

- W244EB.MOD.CP.APP.244D.FAC.ID.201212
- WQER-LP.244L1.FAC.ID.196784
- WDLA.244A.FAC.ID.23469
- WERA-LP.244L1.FAC.ID.195167

Section 74.1204 Contours

Proposed FX Interfering Contour (DASHED):

- 40 dBu F(50,10) to Class A & FX & LPFM
- 40 dBu F(50,10) to Class C, C0, C1, C2, C3
- 37 dBu F(50,10) to Class B1 FM Station
- 34 dBu F(50,10) to Class B FM Station

Relevant Protected Contours (SOLID):

- Class A, C, Cx, FX & LPFM = 60 dBu F(50,50)
- Class B1 FM Station = 57 dBu F(50,50)
- Class B FM Station = 54 dBu F(50,50)

Section 74.1204 First-Adjacent Channel Contour Overlap Study

Exhibit 2

March, 2019

Key to Stations on Map

- W244EB.MOD.CP.APP.244D.FAC.ID.201212
- W243BS.243D.FAC.ID.142774
- WWUZ.245A.FAC.ID.55174

W244EB.MOD.CP.APP.244D.FAC.ID.201212

Burke, VA
Latitude: 38-47-16 N
Longitude: 077-19-47.50 W
ERP: 0.15 kW
Channel: 244
Frequency: 96.7 MHz
AMSL Height: 282.0 m
Horiz. Pattern: Directional

Section 74.1204 Contours

Proposed FX Interfering Contour (DASHED):
54 dBu F(50,10) to Class A & FX & LPFM
54 dBu F(50,10) to Class C, C0, C1, C2 & C3
51 dBu F(50,10) to Class B1 FM Station
48 dBu F(50,10) to Class B FM Station

Relevant Protected Contours (SOLID):
Class A & FX & LPFM = 60 dBu F(50,50)
Class C, C0, C1, C2 & C3 = 60 dBu F(50,50)
Class B1 FM Station = 57 dBu F(50,50)
Class B FM Station = 54 dBu F(50,50)

Scale 1:721,771



W244EB**Burke, VA (Facility ID 201212)****ERP 150.00 WATTS**

Maximum ERP 0.15 kW Interfering contour value -----> 112 dBu
 RCAGL (m)-----> 147 meters
 Antenna Type -----> 21

Antenna Type 21 = **SWR FMEC, 2-bay, full-wave spaced**

| Angle Below Horizontal (degrees) | Vertical Pattern (REL. FIELD) | W244EB ERP (kW) | W244EB ERP (dBk) | W244EB 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 | 0.1500 | -8.239 | 215.3 | N/A | 482.3 | | | 706.4 |
| 5 | 0.959 | 0.1380 | -8.603 | 206.5 | 1,582.2 | 423.2 | No | 205.7 | 674.8 |
| 10 | 0.843 | 0.1066 | -9.723 | 181.5 | 794.1 | 378.9 | No | 178.7 | 586.4 |
| 15 | 0.666 | 0.0665 | -11.770 | 143.4 | 532.8 | 360.5 | No | 138.5 | 454.4 |
| 20 | 0.450 | 0.0304 | -15.175 | 96.9 | 403.2 | 373.6 | No | 91.0 | 298.7 |
| 25 | 0.220 | 0.0073 | -21.391 | 47.4 | 326.3 | 416.6 | No | 42.9 | 140.8 |
| 30 | 0.000 | 0.0000 | -128.239 | 0.0 | 275.8 | 482.3 | No | 0.0 | 0.0 |
| 35 | 0.192 | 0.0055 | -22.573 | 41.3 | 240.4 | 404.5 | No | 33.9 | 111.1 |
| 40 | 0.342 | 0.0175 | -17.559 | 73.6 | 214.5 | 327.0 | No | 56.4 | 185.1 |
| 45 | 0.446 | 0.0298 | -15.252 | 96.0 | 195.0 | 259.5 | No | 67.9 | 222.8 |
| 50 | 0.503 | 0.0380 | -14.208 | 108.3 | 180.0 | 210.1 | No | 69.6 | 228.4 |
| 55 | 0.519 | 0.0404 | -13.936 | 111.7 | 168.3 | 182.0 | No | 64.1 | 210.3 |
| 60 | 0.502 | 0.0378 | -14.225 | 108.1 | 159.2 | 175.2 | No | 54.0 | 177.3 |
| 65 | 0.460 | 0.0317 | -14.984 | 99.0 | 152.2 | 187.8 | No | 41.9 | 137.3 |
| 70 | 0.401 | 0.0241 | -16.176 | 86.3 | 146.8 | 216.1 | No | 29.5 | 96.9 |
| 75 | 0.331 | 0.0164 | -17.843 | 71.3 | 142.8 | 256.4 | No | 18.4 | 60.5 |
| 80 | 0.256 | 0.0098 | -20.074 | 55.1 | 140.0 | 304.2 | No | 9.6 | 31.4 |
| 85 | 0.178 | 0.0048 | -23.231 | 38.3 | 138.4 | 357.0 | No | 3.3 | 11.0 |
| 90 | 0.000 | 0.0000 | -88.239 | 0.0 | 137.9 | 482.2 | 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.