Section 74.1204 - Statement of Compliance AM Revitalization 250-Mile Window Application W258AK Farmville, VA to Norfolk, VA Channel 223 FM Translator Facility ID. 156388 August, 2016

The Applicant proposes to modify the above-referenced, non-reserved band, FM translator authorization pursuant to the announced "Second FM translator application modification window for AM stations to modify and/or relocate FM translator stations (Second Modification Window)". The FM translator will relocate, change frequency and rebroadcast Class B AM station WHKT(AM), Portsmouth, VA (Facility ID 87170). As discussed below, the instant proposal complies with the protection requirements set forth in Section 74.1204 of the FCC Rules.

### Section 74.1204(a) Contour Overlap Protection Criteria

Attached are maps which demonstrate that the proposed technical facility complies with the contour overlap provisions of Section 74.1204(a) of the FCC Rules with respect to all pertinent co-channel (See Exhibit 13) 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 WVBW(FM), Suffolk, VA (Channel 225B) and WHBT-FM, Moyock, NC (Channel 221C3) 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 the second-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, WVBW(FM) is predicted to produce an F(50,50) signal strength of 88 dBu while WHBT-FM is predicted to produce an F(50,50) signal strength of only 71 dBu. Therefore, WHBT-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 111 dBu contour relative to WHBT-FM. According to free space calculations, within 30 feet of ground level, the translator's worst-case

<sup>&</sup>lt;sup>1</sup> See <u>FCC Public Notice</u> (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.

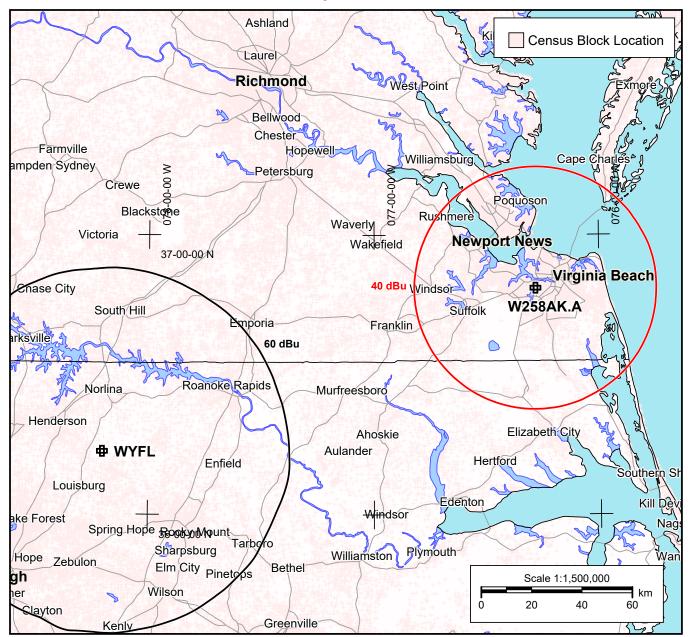


predicted 111 dBu contour will not come within 72 feet of the ground elevation, (see the attached table). There are no tall occupied structures near to the proposed translator tower site. Therefore, the translator's worst-case interfering contour relative to WHBT-FM does not reach any buildings or major roads where there may be an affected population. Therefore, the proposed minor change will cause no interference to any population served by WVBW (FM) or WHBT-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".



# Exhibit 13A - 47 CFR 74.1204 Compliance - WYFL 223C0 Henderson, NC





### 47 C.F.R. 74.1204 Compliance

The contour to contour map shows there is no prohibited contour overlap between the proposed translator and the protected facility.

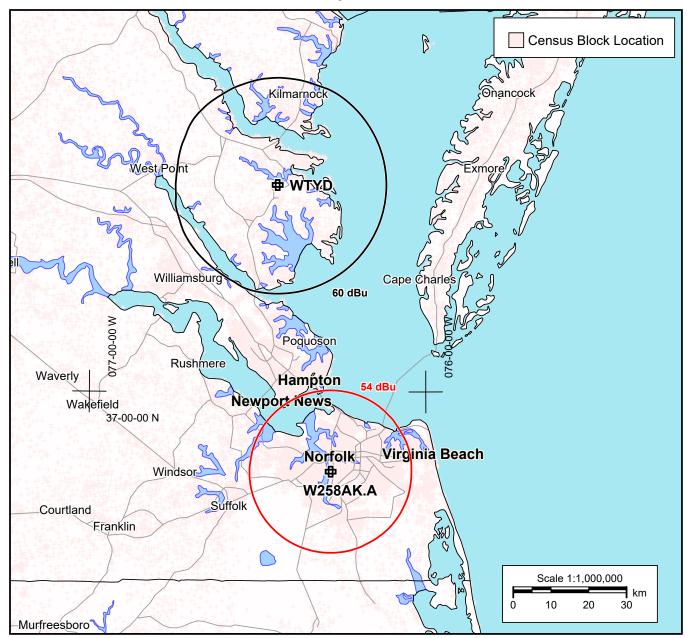
#### WYFL

Henderson, NC
BLED20140723ACU
Channel: 223C0
Latitude: 36-13-30 N
Longitude: 078-12-10 W
ERP: 100.00 kW
HAAT 308.0 m
Frequency: 92.5 MHz
AMSL Height: 403.0 m
Elevation: 122.0 m
Horiz. Pattern: Directional
Study Date: 8/11/2016

### W258AK.A Norfolk, VA

BLFT-20070208AAC Channel: 223D Latitude: 36-48-37 N Longitude: 076-16-58 W ERP: 0.25 kW HAAT 122.59 m Frequency: 92.5 MHz AMSL Height: 123.0 m Elevation: 3.0 m Horiz. Pattern: Omni Study Date: 8/11/2016

# Exhibit 13B - 47 CFR 74.1204 Compliance - WTYD 222A Deltaville VA





### 47 C.F.R. 74.1204 Compliance

The contour to contour map shows there is no prohibited contour overlap between the proposed translator and the protected facility.

### WTYD

Deltaville, VA
BMLH20060803AMM
Channel: 222A
Latitude: 37-29-37 N
Longitude: 076-26-30 W
ERP: 2.40 kW
HAAT 160.0 m
Frequency: 92.3 MHz
AMSL Height: 166.0 m
Elevation: 15.0 m
Horiz. Pattern: Omni

Study Date: 8/11/2016

### W258AK.A

Norfolk, VA BLFT-20070208AAC Channel: 223D Latitude: 36-48-37 N Longitude: 076-16-58 W ERP: 0.25 kW HAAT 122.59 m Frequency: 92.5 MHz AMSL Height: 123.0 m Elevation: 3.0 m Horiz. Pattern: Omni Study Date: 8/11/2016

# **WHKT-XLA** W258AK Farmville VA to Channel 223 (Facility ID 156388)

**ERP** 250.00 **WATTS** 

**Maximum ERP** Interfering contour value -----> 111 dBu RCAGL (m)-----> 0.25 kW 120 meters

Antenna Type ----->

Antenna Type 3 ERI, 2-bay, half-wave spaced

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	WHKT-XLA ERP (kW)	WHKT-XLA ERP (dBk)	WHKT-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 H Distance (meters) ***	orizontal Distance (feet) ***
0	1.000	0.2500	-6.021	311.9	N/A	393.7			1023.2
5	0.988	0.2440	-6.125	308.1	1,272.4	395.7	No	307.0	1023.2
10	0.950	0.2256	-6.466	296.3	638.6	224.9	No	291.8	957.3
15	0.892	0.1989	-7.013	278.2	428.5	157.5	No	268.7	881.6
20	0.815	0.1661	-7.797	254.2	324.2	108.5	No	238.8	783.6
25	0.725	0.1314	-8.814	226.1	262.4	80.2	No	204.9	672.3
30	0.628	0.0986	-10.061	195.9	221.8	72.4	No	169.6	556.5
35	0.525	0.0689	-11.617	163.7	193.3	85.6	No	134.1	440.0
40	0.427	0.0456	-13.412	133.2	172.5	112.9	No	102.0	334.7
45	0.332	0.0276	-15.598	103.5	156.8	153.5	No	73.2	240.2
50	0.250	0.0156	-18.062	78.0	144.8	197.7	No	50.1	164.4
55	0.180	0.0081	-20.915	56.1	135.4	242.8	No	32.2	105.6
60	0.121	0.0037	-24.365	37.7	128.1	286.5	No	18.9	61.9
65	0.077	0.0015	-28.291	24.0	122.4	322.3	No	10.1	33.3
70	0.042	0.0004	-33.556	13.1	118.0	353.3	No	4.5	14.7
75	0.022	0.0001	-39.172	6.9	114.8	372.0	No	1.8	5.8
80	0.010	0.0000	-46.021	3.1	112.6	383.6	No	0.5	1.8
85	0.005	0.0000	-52.041	1.6	111.3	388.6	No	0.1	0.4
90	0.000	0.0000	-106.021	0.0	110.9	393.7	No	0.0	0.0

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



<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> 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.