

**Section 74.1204 - Statement of Compliance**  
**W245CY-CP, Cleveland, OH**  
**Modification of FCC Construction Permit**  
**FCC File No. BMPFT-20180117AAP**  
**FM Translator Facility ID. 145205**  
**February, 2018**

The Applicant proposes a minor modification to the above-referenced, non-reserved band, FM translator authorization. Specifically, the applicant proposes herein to reduce power of the authorized off-the-shelf directional antenna. No further changes are proposed herein. 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 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 first-adjacent channel (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 station WAKS(FM), Akron, OH (Channel 243B) and WONE-FM, Akron, OH (Channel 248B) 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 and third adjacent channel, full service stations listed above resulting in contour overlap as defined in Section 74.1204 of the FCC Rules. However, at the translator's proposed transmitter site, WAKS(FM) is predicted to produce an F(50,50) signal strength of 80 dBu while WONE-FM is predicted to produce an F(50,50) signal strength of only 65 dBu. Therefore, WONE-FM provides for a worst-case interference analysis.

In the vicinity of the third-adjacent channel translator station, the translator's relevant interfering contour is the 105 dBu contour relative to WONE-FM. According to free space calculations, the translator's worst-case predicted 105 dBu contour will extend, at most, 243 meters from the proposed transmitter site and toward the nearest building the interference will only occur at heights above 193 feet above ground level (See the attached Tables). As shown on Exhibit 2, there are no other buildings, residences or major roadways within the area where the predicted worst-case interference will reach within 30 feet of ground level. Therefore, the instant proposal will cause no interference to any population served by either WONE-FM or WAKS(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”.

Section 74.1204 First-Adjacent  
Channel Contour Overlap Study

Exhibit 1

February, 2018

Key to Stations on Map

- W245CY.MOD.APP.245D
- WREO-FM.246B.FAC.ID.54566

Section 74.1204 Contours

Proposed FX Interfering Contour (DASHED):  
54 dBu F(50,10) to Class A & FX & LPFM  
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 B1 FM Station = 57 dBu F(50,50)  
Class B FM Station = 54 dBu F(50,50)

W245CY.MOD.APP.245D

Cleveland, OH  
Latitude: 41-26-32 N  
Longitude: 081-29-28 W  
ERP: 0.04 kW  
Channel: 245  
Frequency: 96.9 MHz  
AMSL Height: 457.0 m  
Horiz. Pattern: Directional

W245CY.MOD.APP.245D

Scale 1:564,688

0 7 14 21 km

**W245CY.MOD**  
**Cleveland, OH (Facility ID 145205)**

**ERP      40.00      WATTS**

**Maximum ERP**      *Interfering contour value ----->*      105      dBu  
0.04      kW      *RCAGL (m)----->*      110      meters  
*Antenna Type ----->*      15

Antenna Type      15      =      **Scala CL-FM, 1 bay**

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	W245CY.MOD ERP (kW)	W245CY.MOD ERP (dBk)	W245CY.MOD Free-Space Distance to interfering contour (meters)	Slant Distance (meters) *	Height of interfering contour above ground (feet)**	Proposed Interference within 20 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.0400	-13.979	248.9	N/A	360.9			816.6
5	0.980	0.0384	-14.155	243.9	1,157.7	291.1	No	243.0	797.2
10	0.970	0.0376	-14.244	241.4	581.1	223.3	No	237.8	780.1
15	0.950	0.0361	-14.425	236.5	389.8	160.1	No	228.4	749.3
20	0.920	0.0339	-14.704	229.0	295.0	103.9	No	215.2	706.0
25	0.880	0.0310	-15.090	219.0	238.7	57.2	No	198.5	651.3
30	0.820	0.0269	-15.703	204.1	201.8	26.1	Yes	176.8	579.9
35	0.750	0.0225	-16.478	186.7	175.9	9.6	Yes	152.9	501.7
40	0.680	0.0185	-17.329	169.3	157.0	4.0	Yes	129.7	425.4
45	0.600	0.0144	-18.416	149.3	142.7	14.4	Yes	105.6	346.5
50	0.530	0.0112	-19.494	131.9	131.7	29.3	Yes	84.8	278.2
55	0.450	0.0081	-20.915	112.0	123.2	59.9	No	64.2	210.8
60	0.380	0.0058	-22.384	94.6	116.5	92.2	No	47.3	155.2
65	0.280	0.0031	-25.036	69.7	111.3	153.7	No	29.5	96.6
70	0.160	0.0010	-29.897	39.8	107.4	238.1	No	13.6	44.7
75	0.080	0.0003	-35.918	19.9	104.5	297.8	No	5.2	16.9
80	0.030	0.0000	-44.437	7.5	102.5	336.8	No	1.3	4.3
85	0.001	0.0000	-73.979	0.2	101.3	360.1	No	0.0	0.1
90	0.001	0.0000	-73.979	0.2	100.9	360.1	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.

**W245CY.MOD Toward Building at 260 deg. True  
Cleveland, OH (Facility ID 145205)**

**ERP 8.80 WATTS**

**Maximum ERP** *Interfering contour value ----->* **105** dBu  
0.0088 kW *RCAGL (m)----->* **110** meters  
*Antenna Type ----->* **15**

Antenna Type 15 = **Scala CL-FM, 1 bay**

W245CY.MOD Toward Building at 260 deg. True									
Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	Toward Building ERP (kW)	Toward Building ERP (dBk)	Free-Space Distance to interfering contour (meters)	Slant Distance (meters) *	Height of interfering contour above ground (feet)**	Proposed Interference within 20 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.0088	-20.555	116.7	N/A	360.9			383.0
5	0.980	0.0085	-20.731	114.4	1,157.7	328.2	No	114.0	373.9
10	0.970	0.0083	-20.820	113.2	581.1	296.4	No	111.5	365.9
15	0.950	0.0079	-21.001	110.9	389.8	266.7	No	107.1	351.5
20	0.920	0.0074	-21.279	107.4	295.0	240.4	No	100.9	331.1
25	0.880	0.0068	-21.666	102.7	238.7	218.4	No	93.1	305.5
30	0.820	0.0059	-22.279	95.7	201.8	203.9	No	82.9	272.0
35	0.750	0.0050	-23.054	87.6	175.9	196.1	No	71.7	235.3
40	0.680	0.0041	-23.905	79.4	157.0	193.5	No	60.8	199.5
45	0.600	0.0032	-24.992	70.0	142.7	198.4	No	49.5	162.5
50	0.530	0.0025	-26.070	61.9	131.7	205.4	No	39.8	130.5
55	0.450	0.0018	-27.491	52.5	123.2	219.7	No	30.1	98.9
60	0.380	0.0013	-28.960	44.4	116.5	234.8	No	22.2	72.8
65	0.280	0.0007	-31.612	32.7	111.3	263.7	No	13.8	45.3
70	0.160	0.0002	-36.473	18.7	107.4	303.3	No	6.4	21.0
75	0.080	0.0001	-42.493	9.3	104.5	331.3	No	2.4	7.9
80	0.030	0.0000	-51.013	3.5	102.5	349.6	No	0.6	2.0
85	0.001	0.0000	-80.555	0.1	101.3	360.5	No	0.0	0.0
90	0.001	0.0000	-80.555	0.1	100.9	360.5	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.



WONE-FM, Akron, OH  
Channel 248B, 12 kW ERP, 271 m HAAT  
FCC File No. BLH-20010810AAQ



Worst-Case Interfering Contour to WONE-FM  
W245CY.MOD, Cleveland, OH (Facility ID 145205)  
Ch. 246D, 40 watts ERP (DA-MAX) , 110 m RCAGL  
February, 2018