

Exhibit 13 A - Proposed Translator 47 C.F.R. 74.1204 Compliance

WMMG-FM - CH228

Brandenburg, KY
Freq: 93.5 MHz
BLH20181129AAR
Latitude: 37-59-09 N
Longitude: 086-11-04 W
ERP: 3.40 kW
RCAMSL: 276.0 m
Elevation: 189.0 m
HAAT: 85.2
Pattern: Omni
7/24/2019

■ W228nn (228)

■ WMMG-FM (228)

W228nn - CH228

Louisville, KY
Freq: 93.5 MHz
FAC ID 203047
Latitude: 38-15-57 N
Longitude: 085-42-50 W
ERP: 0.099 kW
RCAMSL: 215.0 m
Elevation: 127.6 m
HAAT: 64.1
Pattern: Directional
7/24/2019

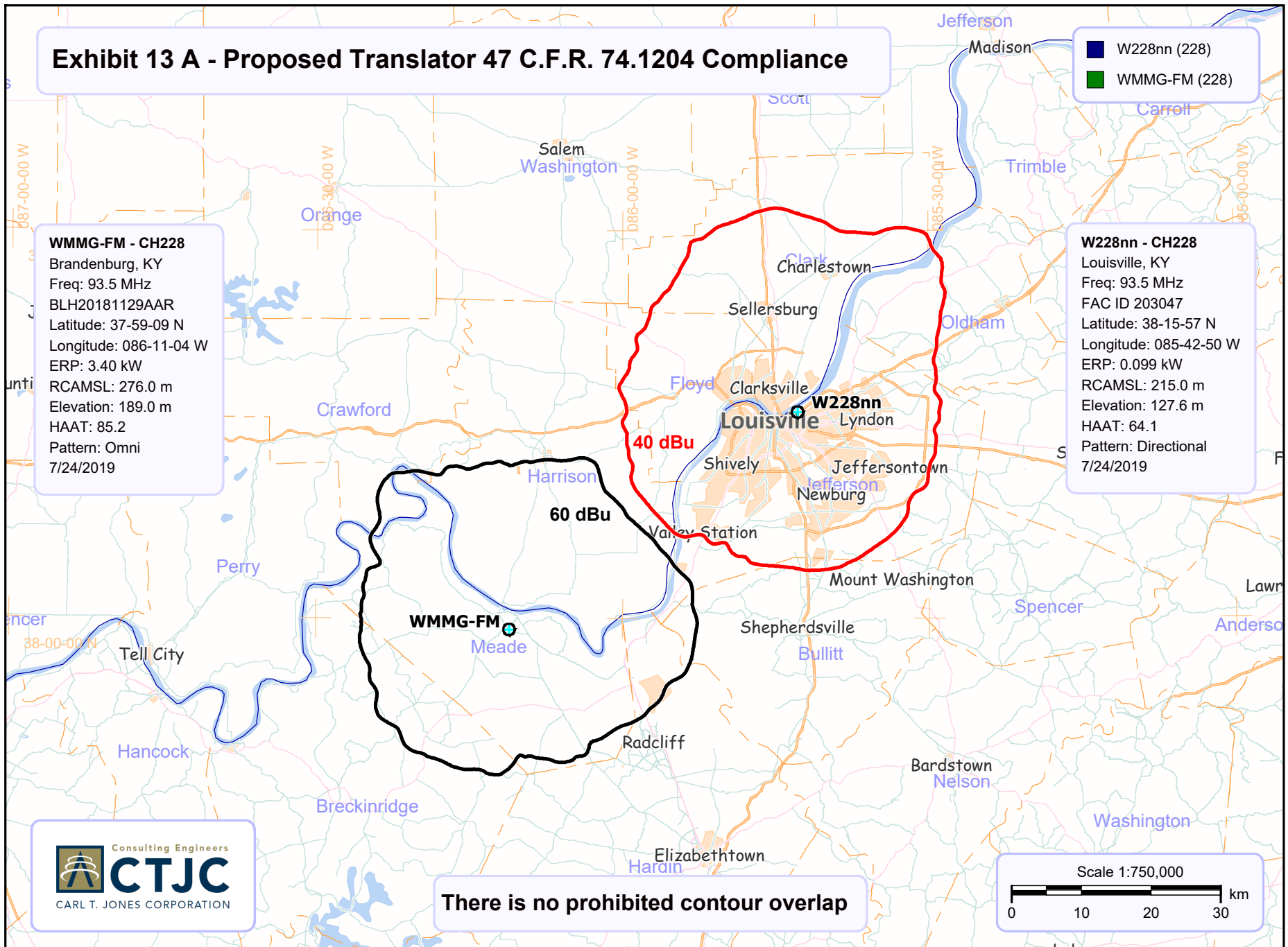


Exhibit 13 B - Proposed Translator 47 C.F.R. 74.1204 Compliance

W228nn - CH228

Louisville, KY
Freq: 93.5 MHz
FAC ID 203047
Latitude: 38-15-57 N
Longitude: 085-42-50 W
ERP: 0.099 kW
RCAMSL: 215.0 m
Elevation: 127.6 m
HAAT: 64.1
Pattern: Directional
7/24/2019

WTFX-FM - CH226

Clarksville, IN
Freq: 93.1 MHz
BLH20080522ABA
Latitude: 38-17-02 N
Longitude: 085-54-17 W
ERP: 4.10 kW
RCAMSL: 310.0 m
Elevation: 276.0 m
HAAT: 114.0
Pattern: Omni
7/24/2019

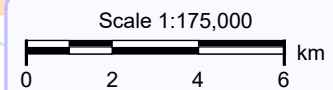
WLCL - CH230

Sellersburg, IN
Freq: 93.9 MHz
BLH20071218ABI
Latitude: 38-15-21.70 N
Longitude: 085-45-29.10 W
ERP: 2.65 kW
RCAMSL: 299.0 m
Elevation: 141.1 m
HAAT: 152.0
Pattern: Omni
7/24/2019

Desired to Undesired Signal Analysis

Second Adjacent WLCL 230A Sellersburg, IN places a signal strength of 93 dBu at the proposed translator site. Second Adjacent WTFX-FM 226A Clarksville IN places a signal strength of 73 dBu at the proposed site. Therefore the lowest interfering signal level from the proposed translator to these second adjacents is 113 dBu. The following sheet, exhibit 13 C, is a table that shows the proposed translator facility will not place a 113 dBu interfering signal closer than 129 feet above the ground. There are no tall structures near the tower.

- W228nn (228)
- WLCL (230)
- WTFX-FM (226)



W228nn
Louisville, KY FAC ID 203047

Exhibit 13 C

ERP 99.00 WATTS

Maximum ERP *Interfering contour value ----->* **113** dBu
0.099 kW *RCAGL (m)----->* **84** meters
Antenna Type -----> **9**

Antenna Type 9 = **Nicom, BKG77, 2-bay, 0.85 wave spaced**

Angle Below Horizontal (degrees)	Vertical Pattern (REL. FIELD)	W228nn ERP (kW)	W228nn ERP (dBk)	W228nn 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	0.0990	-10.044	155.9	N/A	275.6			511.4
5	0.967	0.0926	-10.335	150.7	859.4	232.5	No	150.2	492.7
10	0.871	0.0751	-11.243	135.8	431.3	198.2	No	133.7	438.7
15	0.711	0.0500	-13.006	110.8	289.4	181.5	No	107.1	351.2
20	0.518	0.0266	-15.757	80.8	219.0	185.0	No	75.9	249.0
25	0.310	0.0095	-20.216	48.3	177.2	208.6	No	43.8	143.7
30	0.112	0.0012	-29.059	17.5	149.8	246.9	No	15.1	49.6
35	0.062	0.0004	-34.196	9.7	130.6	257.4	No	7.9	26.0
40	0.198	0.0039	-24.110	30.9	116.5	210.5	No	23.6	77.6
45	0.288	0.0082	-20.856	44.9	105.9	171.4	No	31.7	104.2
50	0.336	0.0112	-19.517	52.4	97.8	143.9	No	33.7	110.5
55	0.349	0.0121	-19.187	54.4	91.4	129.4	No	31.2	102.4
60	0.331	0.0108	-19.647	51.6	86.5	129.0	No	25.8	84.6
65	0.295	0.0086	-20.647	46.0	82.6	138.8	No	19.4	63.8
70	0.246	0.0060	-22.225	38.3	79.7	157.4	No	13.1	43.0
75	0.197	0.0038	-24.154	30.7	77.5	178.3	No	7.9	26.1
80	0.151	0.0023	-26.464	23.5	76.1	199.5	No	4.1	13.4
85	0.122	0.0015	-28.316	19.0	75.2	213.4	No	1.7	5.4
90	0.117	0.0014	-28.680	18.2	74.9	215.8	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.