Comprehensive Engineering Exhibit
Minor Change Application
Facility ID No. 147557, W233BG

This exhibit is for the minor change application of translator W233BG seeking to relocate the translator and to become a fill-in facility for standard band station WKRC.

Antenna Location

The proposed shared antenna is mounted on ASR 1019014 at 213 meters above ground, to serve as a fill-in translator for standard band station WKRC. This location is on the opposite face of the support tower from the antenna of W264BW. This application seeks a waiver of Section 74.1233(a)(1) utilizing the standards set forth in the *Comwell Group Inc. of Illinois*,[1] aka a "Mattoon" waiver.

Below as Figure 1 is a spacing study from which it can be determined that this proposal is within the protected contour of second adjacent channel stations WNNF and WREW. Section 74.1204(d) states that "*The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable*."

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called "Living Way"[2], allows for the use of U/D Analysis, also known as "signal strength ratio methodology" to be utilized. In this instant case the facilities of to be protected are second adjacent and are to be afforded protection from signals 40 dB stronger than they present in the location of the proposed antenna location.

Figure 2 is a map showing the predicted signal contour of WREW at the proposed antenna location utilizing the FCC F50:50 curve. WNNF is located on the same support tower as this proposed facility, and will present a much stronger signal in the area of this proposed location than WREW does. Thus, protection of the WREW 92.5 dBu contour from a signal produced by this proposal exceeding 132.5 is required, and by protecting this "weaker" signal as compared to WNNF, the protection requirements are demonstrated.

Utilizing the line of sight equation[3] it has been determined that a 132.5 dBu signal is developed by 85 watts, as proposed, emitted by an isotropic emitter extends only out to a distance of 16.5 meters. As the antenna is mounted 213 meters above ground, and by examination of the image in Figure 3 it can be seen that no habitable space extends into a 16.5 meter radius of the antenna, the provisions of the

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[1] *The Cromwell Group, Inc. of Illinois*, Letter, 26 FCC Rcd 12685 (MB 2011) ("*Mattoon*").
[2] As recently described in FCC 08-242 in connection with BPFT-19981001TA
[3] ReachDistMeters=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]

rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Mattoon Waiver

The proposed facilities are mutually exclusive with the existing facilities, as demonstrated by the overlap of the proposed 40 dBu F.1 and the licensed 60 dBu F.5 contours as shown in Figure 4.

Also on Figure 4 are the 60 dBu F.5 of the proposal as well as the 5.0 mV/m[4] day contour and 25 mile limit of WKRC, demonstrating this proposal qualifies for "fill-in" status of an AM station.

Initially licensed in December 2007 at the present location, the facility has not engaged in "hopping".

The proposed facility will not preclude a fully spaced LPFM facility.

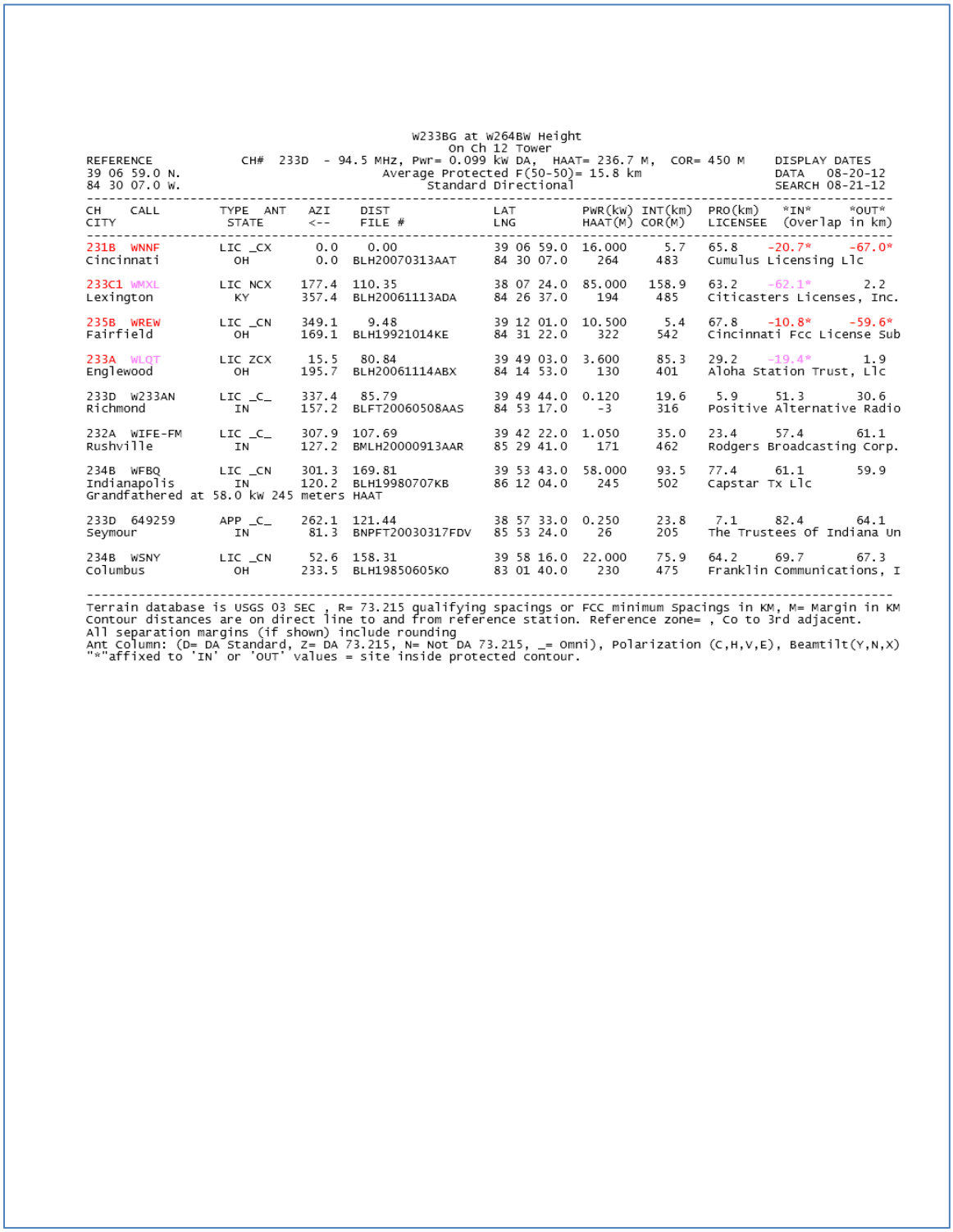
The present facility is located in the same Arbitron market as the proposed facility.

RF Radiation Statement

In accordance with 47 C.F.R. 1.1307(b)(1) Table 1, only a "Part 74 – Subpart L" facility with an ERP greater than 100 watts, is subject to routine environmental evaluation. Since the facility proposed in this application will operate with an ERP of less than 100 watts, it is "categorically excluded from making such studies or preparing an EA" [1.1307(b)(1)] the licensee will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

[4] For added map detail, the 5 mV contour is given in place of the much larger 2 mv

Figure 1. Spacing Study



W233BG at W264BW Height
On Ch 12 Tower

REFERENCE — CH# 233D - 94.5 MHz, Pwr= 0.099 kW DA, HAAT= 236.7 M, COR= 450 M — DISPLAY DATES
39 06 59.0 N. — Average Protected F(50-50)= 15.8 km — DATA 08-20-12
84 30 07.0 W. — Standard Directional — SEARCH 08-21-12

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
231B WNNF Cincinnati	LIC _CX OH	0.0 0.0	0.00 BLH20070313AAT	39 06 59.0 84 30 07.0	16.000 264	5.7 483	65.8 Cumulus Licensing Llc	-20.7*	-67.0*
233C1 WMXL Lexington	LIC NCX KY	177.4 357.4	110.35 BLH20061113ADA	38 07 24.0 84 26 37.0	85.000 194	158.9 485	63.2 Citicasters Licenses, Inc.	-62.1*	2.2
235B WREW Fairfield	LIC _CN OH	349.1 169.1	9.48 BLH19921014KE	39 12 01.0 84 31 22.0	10.500 322	5.4 542	67.8 Cincinnati Fcc License Sub	-10.8*	-59.6*
233A WLQT Englewood	LIC ZCX OH	15.5 195.7	80.84 BLH20061114ABX	39 49 03.0 84 14 53.0	3.600 130	85.3 401	29.2 Aloha Station Trust, Llc	-19.4*	1.9
233D W233AN Richmond	LIC _C_ IN	337.4 157.2	85.79 BLFT20060508AAS	39 49 44.0 84 53 17.0	0.120 -3	19.6 316	5.9 Positive Alternative Radio	51.3	30.6
232A WIFE-FM Rushville	LIC _C_ IN	307.9 127.2	107.69 BMLH20000913AAR	39 42 22.0 85 29 41.0	1.050 171	35.0 462	23.4 Rodgers Broadcasting Corp.	57.4	61.1
234B WFBQ Indianapolis Grandfathered at 58.0 kW 245 meters HAAT	LIC _CN IN	301.3 120.2	169.81 BLH19980707KB	39 53 43.0 86 12 04.0	58.000 245	93.5 502	77.4 Capstar Tx Llc	61.1	59.9
233D 649259 Seymour	APP _C_ IN	262.1 81.3	121.44 BNPFT20030317FDV	38 57 33.0 85 53 24.0	0.250 26	23.8 205	7.1 The Trustees Of Indiana Un	82.4	64.1
234B WSNY Columbus	LIC _CN OH	52.6 233.5	158.31 BLH19850605KO	39 58 16.0 83 01 40.0	22.000 230	75.9 475	64.2 Franklin Communications, I	69.7	67.3

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.
All separation margins (if shown) include rounding
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

Figure 2. Contour Map

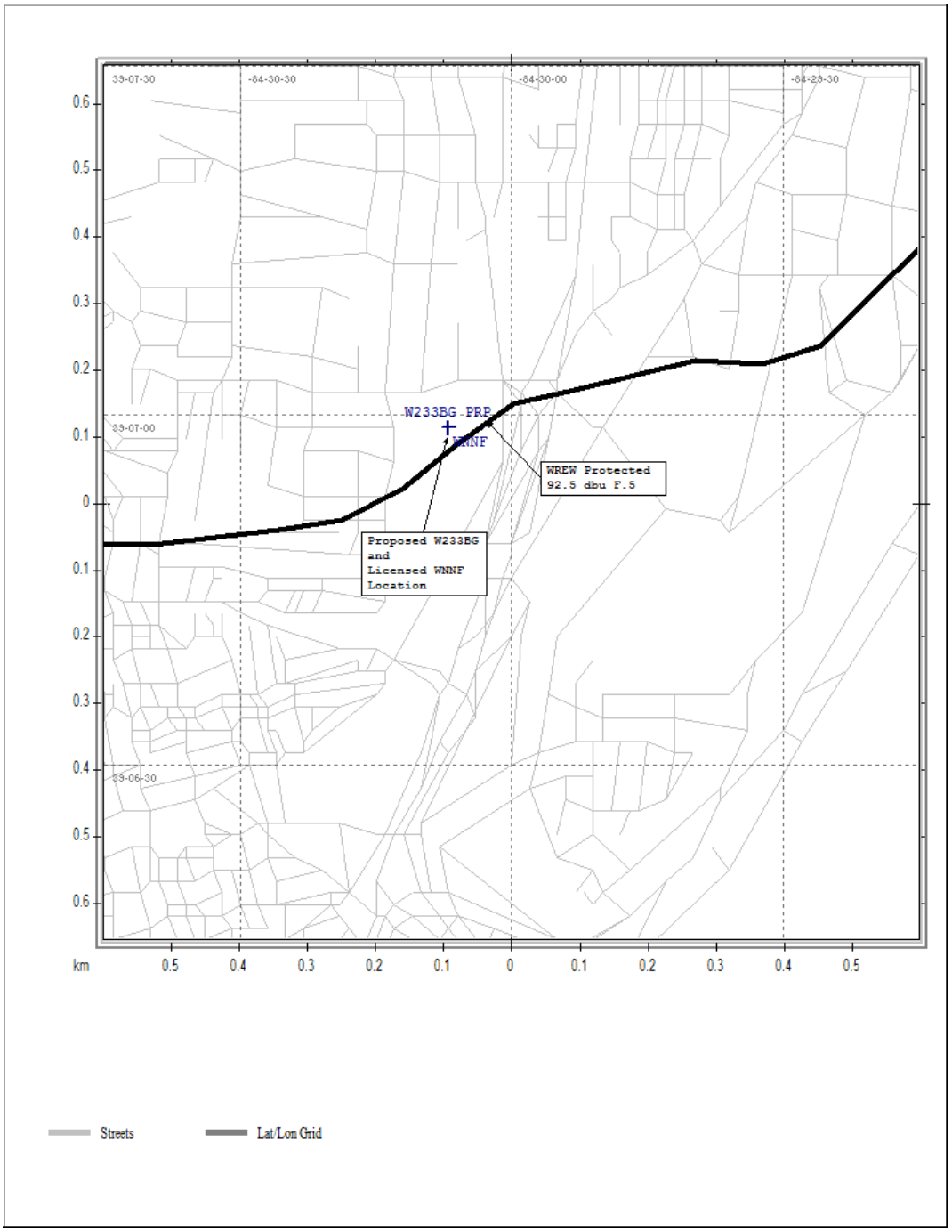


Figure 3. Aerial View of Antenna Location.

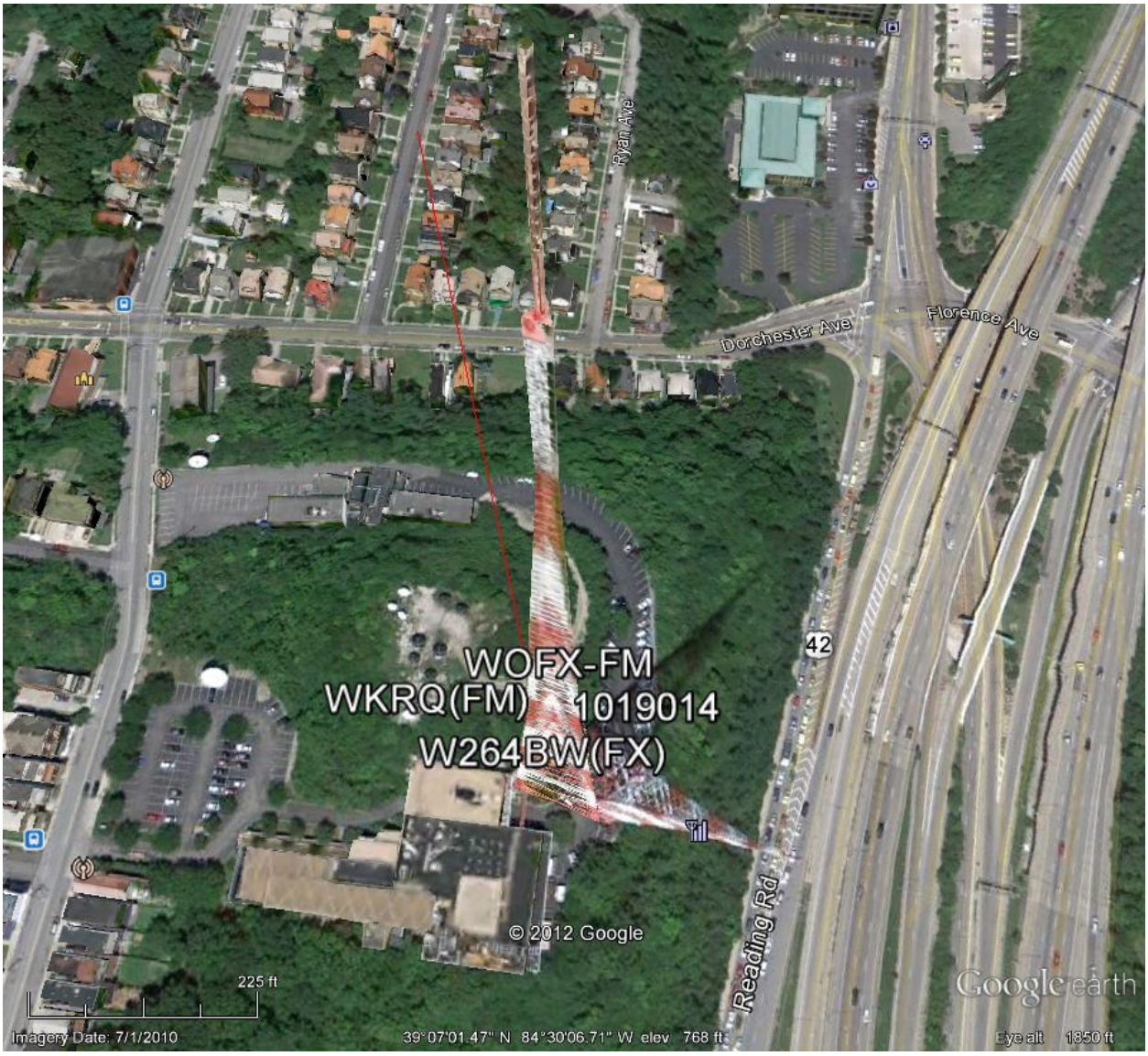


Figure 4 Counties, Contour, and Distance Map