

**W268BA  
APPLICATION FOR  
MINOR MODIFICATIONS AND  
MATTOON WAIVER  
TO SERVE AS A FILL IN FOR  
WWIN(AM) - FACILITY #54709**

**Request for waiver of § 74.1233(a)(1):**

This application requests a move to ASR#1048112 to serve as a fill in translator for WWIN(AM) (facility ID #54709) in accordance with the waiver granted for W263AQ's move to Effingham, IL (DA-11-1495) and subsequent grants commonly referred to as the *Mattoon Waiver*.

In accordance with the waiver granted for the move of W263AQ (DA-11-1495), the proposed W268BA (formerly W215BY) facility is mutually exclusive with the constructed and license applied for W268BA facility because the proposed 40 dBu (50:10) interfering contour overlaps the existing built and license applied for W28BA 60 dBu (50:50) contour as demonstrated in exhibit E2.

It is also noted that the facility has not been "hopped". It has operated at the current site since 2008. The recent change in channel and antenna at site do not constitute a "hop" in accordance with Commission policy and precedent.

**Allocation discussion:**

All exhibits utilize the V-Soft provided USGS 3 second terrain database.

E1	Channel study
E1A	WLIF analysis
E1B	WWDC analysis
E1C	Aerial view of interference area
E1D	WROZ interference plot and FMOVER
E1E	WBQB interference plot and FMOVER
E2	60 dBu and 2 mV/m contours plot and 40 dBu Mattoon overlap
E3	ASR

A channel study is included demonstrating compliance with §74.1204. Analysis of 2nd adjacent channel stations WLIF and WWDC are provided below. A plot of the proposed 60 dBu

is provided as E2 showing that it is entirely contained within the WWIN 2 mV/m and 40 km circle.

**WLIF and WWDC analyses:**

The proposed W268BA facility will be located inside the protected contour of 2nd adjacent channel stations WLIF on channel 270B and WWDC on 266B. Therefore, an interference analysis has been conducted based on the U/D ratio of +40 dB at the proposed site. The WLIF (50,50) contour at the proposed site is 85.56 dBu and the (50,10) interference contour is 125.56 dBu. Exhibit E1A demonstrates that this interfering contour is at least 130.5 meters above ground.

The WWDC contour at the proposed site 59.95 dBu and the (50,10) interference contour is 99.95 dBu. Exhibit E1B demonstrates that this interfering contour is at least 46.4 meters above ground.

A careful examination of the interference area's aerial photograph (see E1C) from Google Earth and Google Street Views the great majority of the structures are one or two story with three one three story, one four story building two ten (10) story structures (street view included in E1C) located at the edge of the interfering contour where the clearance is at least 81.8 meters. Those structures are no more than 110 feet (33.5 meters) in height. Therefore, there is ample clearance from the interference contour.

Clearly, these interference contours will not reach any populated area or major highways. Based on this showing a waiver of Section 74.1204 is requested in accordance with Living Way Ministries, Inc. (FCC 08-242).

**RF Exposure Calculation:**

The proposed facility will be located at an existing tower (ASR#1048112) using a six bay PSI 0.75 wavelength spaced, circularly polarized antenna mounted at 135 meters AGL. The RF contribution of the proposed translator was calculated to be  $0.94 \mu\text{Watts/cm}^2$  using the formula included below and a worst case vertical factor of 1.0. This is 0.47% of the maximum permissible 200 microwatts/cm<sup>2</sup> exposure for general population/uncontrolled exposure, and well below 5% of that limit which requires consideration.

$$S \text{ (RF in uWatts/cm}^2\text{)} = \frac{33.4 (F^2 \text{ Vertical Factor}) \times (H \text{ ERP} + V \text{ ERP in Watts})}{R^2 \text{ (distance to radiation center in meters - 2 m)}}$$

The proposed translator facility complies with Commission RF radiation limits.



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# E1 CHANNEL STUDY

REFERENCE CH# 268D - 101.5 MHz, Pwr= 0.25 kW DA, HAAT= 168.6 M, COR= 259 M DISPLAY DATES  
 39 20 18.0 N. Average Protected F(50-50)= 17.04 km DATA 04-23-15  
 76 39 60.0 W. Standard Directional SEARCH 04-23-15

CH CITY	CALL	TYPE STATE	ANT AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
270B Baltimore	WLIF	LIC _CX MD	47.1 227.2	13.15 BLH20130702ABE	39 25 07.6 76 33 16.1	13.500 292	5.3 384	63.5 Cbs Radio wlif, Inc.	-3.8	-51.3* (1)
268B Fredericksburg	WBQB	LIC DCN VA	209.6 29.2	128.37 BLH19910701KC	38 19 57.0 77 23 41.0	50.000 150	138.5 186	66.1 Centennial Licensing Ii, L	-24.8*	1.4
268D Church Hill	W215BY	CP _C_ MD	103.9 284.2	51.25 BPFT20140922AAQ	39 13 35.0 76 05 20.0	0.018	17.8 69	5.4 Hope Christian Church	13.7	-15.3*
266B Washington	WWDC	LIC _C_ DC	221.9 41.7	50.51 BMLH20130909ABL	38 59 59.0 77 03 27.0	22.500 232	5.5 313	63.0 Amfm Radio Licenses, L.l.c	32.6	-13.1* (1)
267B Lancaster	WROZ	LIC _C_ PA	3.0 183.0	77.50 BLH20010126AAK	40 02 04.0 76 37 08.0	7.400 379	72.0 517	61.7 Hall Communications, Inc.	-1.6	0.6
268B Waynesboro	WBHB-FM	LIC DEN PA	306.0 125.4	93.48 BLH19861114KA	39 49 44.0 77 33 10.0	50.000 70	65.4 369	21.8 Hjv Limited Partnership	23.1	44.9
268L1 Cambridge	WHCP-LP	CP _C_ MD	148.7 329.1	98.97 BMPL20150313ABR	38 34 34.1 76 04 30.5	0.100 29	30	59.8 Historic Cambridge, Inc.	30.5	
265D North East	W265BG	LIC _C_ MD	61.5 241.9	66.03 BLFT20051101AAY	39 37 12.0 75 59 21.0	0.010 116	0.2 177	6.0 Priority Radio, Inc.	48.9	58.1
215B Washington	WETA	LIC _CX DC	219.1 38.8	63.85 BMLED20070511AAI	38 53 30.0 77 07 55.0	75.000 186	60.4 252	19.5 Greater Washington Educati	14.5R	49.4M

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
 In & Out distances between contours are shown at closest points. Reference zone= East 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 restricted contour.

(1) See Technical Report and E1A - E1C for disproval of interference.

## E1A WLIF INTERFERENCE ANALYSIS

W268BA Church Hill, MD

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 135 Meters

W268BA Antenna Model = PSI FML6 0.75 SPACED

Protected Station's Contour = 85.56014 dBu

Translator's or LPFM's full Interference contour 125.56014

Review Azimuth = 120 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 13.2 km

Protected Station= WLIF, 13.5 kW, 383.8 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	058.4740	058.4740	135.000
05.00	0.768	1.0	0.1475	044.9081	044.7372	131.086
10.00	0.261	1.0	0.0170	015.2617	015.0299	132.350
15.00	0.14	1.0	0.0049	008.1864	007.9074	132.881
20.00	0.215	1.0	0.0116	012.5719	011.8137	130.700
25.00	0.054	1.0	0.0007	003.1576	002.8618	133.666
30.00	0.111	1.0	0.0031	006.4906	005.6210	131.755
35.00	0.135	1.0	0.0046	007.8940	006.4664	130.472
40.00	0.041	1.0	0.0004	002.3974	001.8365	133.459
45.00	0.065	1.0	0.0011	003.8008	002.6876	132.312
50.00	0.109	1.0	0.0030	006.3737	004.0969	130.117
55.00	0.085	1.0	0.0018	004.9703	002.8508	130.929
60.00	0.029	1.0	0.0002	001.6957	000.8479	133.531
65.00	0.021	1.0	0.0001	001.2280	000.5190	133.887
70.00	0.047	1.0	0.0006	002.7483	000.9400	132.417
75.00	0.05	1.0	0.0006	002.9237	000.7567	132.176
80.00	0.039	1.0	0.0004	002.2805	000.3960	132.754
85.00	0.02	1.0	0.0001	001.1695	000.1019	133.835
90.00	0.0	1.0	0.0000	000.0058	000.0000	134.994

# E1B WWDC INTERFERENCE ANALYSIS

W268BA Church Hill, MD

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 135 Meters

W268BA Antenna Model = PSI FML6 - 0.75 SPACED

Protected Station's Contour = 59.94893 dBu

Translator's or LPFM's full Interference contour 99.94893

Review Azimuth = 120 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 50.5 km

Protected Station= WWDC, 22.5 kW, 313 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	1115.6385	1115.6385	135.000
01.00	0.99	1.0	0.2450	1104.4822	1104.3139	115.724
02.00	0.96	1.0	0.2304	1071.0130	1070.3605	097.622
03.00	0.912	1.0	0.2079	1017.4623	1016.0679	081.750
04.00	0.847	1.0	0.1794	944.9458	942.6440	069.084
05.00	0.768	1.0	0.1475	856.8104	853.5500	060.324
06.00	0.677	1.0	0.1146	755.2873	751.1497	056.051
07.00	0.577	1.0	0.0832	643.7235	638.9252	056.550
08.00	0.472	1.0	0.0557	526.5814	521.4567	061.714
09.00	0.365	1.0	0.0333	407.2081	402.1947	071.299
10.00	0.261	1.0	0.0170	291.1817	286.7580	084.437
11.00	0.161	1.0	0.0065	179.6178	176.3177	100.727
12.00	0.069	1.0	0.0012	076.9791	075.2969	118.995
13.00	0.013	1.0	0.0000	014.5033	014.1316	131.737
14.00	0.083	1.0	0.0017	092.5980	089.8474	112.599
15.00	0.14	1.0	0.0049	156.1894	150.8674	094.575
16.00	0.182	1.0	0.0083	203.0462	195.1805	079.033
17.00	0.21	1.0	0.0110	234.2841	224.0470	066.502
18.00	0.224	1.0	0.0125	249.9030	237.6719	057.776
19.00	0.226	1.0	0.0128	252.1343	238.3977	052.913
20.00	0.215	1.0	0.0116	239.8623	225.3968	052.962
21.00	0.195	1.0	0.0095	217.5495	203.1000	057.037
22.00	0.166	1.0	0.0069	185.1960	171.7107	065.624
23.00	0.132	1.0	0.0044	147.2643	135.5575	077.459
24.00	0.094	1.0	0.0022	104.8700	095.8035	092.346
25.00	0.054	1.0	0.0007	060.2445	054.6000	109.540
26.00	0.014	1.0	0.0000	015.6189	014.0382	128.153
27.00	0.023	1.0	0.0001	025.6597	022.8629	123.351
28.00	0.058	1.0	0.0008	064.7070	057.1329	104.622
29.00	0.087	1.0	0.0019	097.0605	084.8911	087.944
30.00	0.111	1.0	0.0031	123.8359	107.2450	073.082
31.00	0.128	1.0	0.0041	142.8017	122.4050	061.452
32.00	0.14	1.0	0.0049	156.1894	132.4561	052.232
33.00	0.144	1.0	0.0052	160.6519	134.7341	047.503
34.00	0.142	1.0	0.0050	158.4207	131.3367	046.412
35.00	0.135	1.0	0.0046	150.6112	123.3735	048.613
36.00	0.123	1.0	0.0038	137.2235	111.0162	054.342
37.00	0.106	1.0	0.0028	118.2577	094.4448	063.831
38.00	0.087	1.0	0.0019	097.0605	076.4848	075.244
39.00	0.065	1.0	0.0011	072.5165	056.3559	089.364
40.00	0.041	1.0	0.0004	045.7412	035.0398	105.598
41.00	0.018	1.0	0.0001	020.0815	015.1557	121.825
42.00	0.005	1.0	0.0000	005.5782	004.1454	131.267
43.00	0.027	1.0	0.0002	030.1222	022.0300	114.457
44.00	0.047	1.0	0.0006	052.4350	037.7186	098.576
45.00	0.065	1.0	0.0011	072.5165	051.2769	083.723
46.00	0.08	1.0	0.0016	089.2511	061.9990	070.798
47.00	0.092	1.0	0.0021	102.6387	069.9995	059.935

## E1B WWDC INTERFERENCE ANALYSIS (continued)

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
48.00	0.1	1.0	0.0025	111.5639	074.6508	052.092
49.00	0.106	1.0	0.0028	118.2577	077.5840	045.750
50.00	0.109	1.0	0.0030	121.6046	078.1659	041.845
51.00	0.108	1.0	0.0029	120.4890	075.8262	041.362
52.00	0.106	1.0	0.0028	118.2577	072.8067	041.812
53.00	0.1	1.0	0.0025	111.5639	067.1408	045.901
54.00	0.093	1.0	0.0022	103.7544	060.9853	051.061
55.00	0.085	1.0	0.0018	094.8293	054.3918	057.320
56.00	0.075	1.0	0.0014	083.6729	046.7893	065.632
57.00	0.064	1.0	0.0010	071.4009	038.8877	075.118
58.00	0.052	1.0	0.0007	058.0132	030.7423	085.802
59.00	0.04	1.0	0.0004	044.6255	022.9839	096.748
60.00	0.029	1.0	0.0002	032.3535	016.1768	106.981
61.00	0.017	1.0	0.0001	018.9659	009.1948	118.412
62.00	0.007	1.0	0.0000	007.8095	003.6663	128.105
63.00	0.003	1.0	0.0000	003.3469	001.5195	132.018
64.00	0.013	1.0	0.0000	014.5033	006.3578	121.965
65.00	0.021	1.0	0.0001	023.4284	009.9013	113.767
66.00	0.028	1.0	0.0002	031.2379	012.7056	106.463
67.00	0.035	1.0	0.0003	039.0473	015.2570	099.057
68.00	0.04	1.0	0.0004	044.6255	016.7170	093.624
69.00	0.044	1.0	0.0005	049.0881	017.5916	089.172
70.00	0.047	1.0	0.0006	052.4350	017.9338	085.727
71.00	0.05	1.0	0.0006	055.7819	018.1608	082.257
72.00	0.051	1.0	0.0007	056.8976	017.5823	080.887
73.00	0.052	1.0	0.0007	058.0132	016.9614	079.522
74.00	0.051	1.0	0.0007	056.8976	015.6831	080.307
75.00	0.05	1.0	0.0006	055.7819	014.4374	081.119
76.00	0.049	1.0	0.0006	054.6663	013.2250	081.958
77.00	0.047	1.0	0.0006	052.4350	011.7953	083.909
78.00	0.045	1.0	0.0005	050.2037	010.4379	085.893
79.00	0.042	1.0	0.0004	046.8568	008.9407	089.004
80.00	0.039	1.0	0.0004	043.5099	007.5554	092.151
81.00	0.035	1.0	0.0003	039.0473	006.1084	096.433
82.00	0.032	1.0	0.0003	035.7004	004.9685	099.647
83.00	0.028	1.0	0.0002	031.2379	003.8069	103.995
84.00	0.024	1.0	0.0001	026.7753	002.7988	108.371
85.00	0.02	1.0	0.0001	022.3128	001.9447	112.772
86.00	0.016	1.0	0.0001	017.8502	001.2452	117.193
87.00	0.012	1.0	0.0000	013.3877	000.7007	121.631
88.00	0.008	1.0	0.0000	008.9251	000.3115	126.080
89.00	0.004	1.0	0.0000	004.4626	000.0779	130.538
90.00	0.0	1.0	0.0000	000.1116	000.0000	134.888



Central Park Heights

Edgecombe Cir N

Edgecomb

E1C AERIAL VIEW  
99.95 DBU (50:10)

Wylie Ave

Oakford Ave

W Gold Spring Ln

Loyola Northway

W268BA-APP (268)

Greenspring

Woodberry

Boarman Ave

Quantico Ave

Oswego Ave

Shirley Ave

Keyworth Ave

Springhill Ave

East Arlington

Dorithan Rd

Overview Rd

Violet Ave

Uiman Ave

Cottage Ave

Greenspring Ave

Park Hill Ave

Turner Way

Girard Ave

Clipper Park Rd

Forest Dr

Google earth

© 2015 Google



2000 ft

129





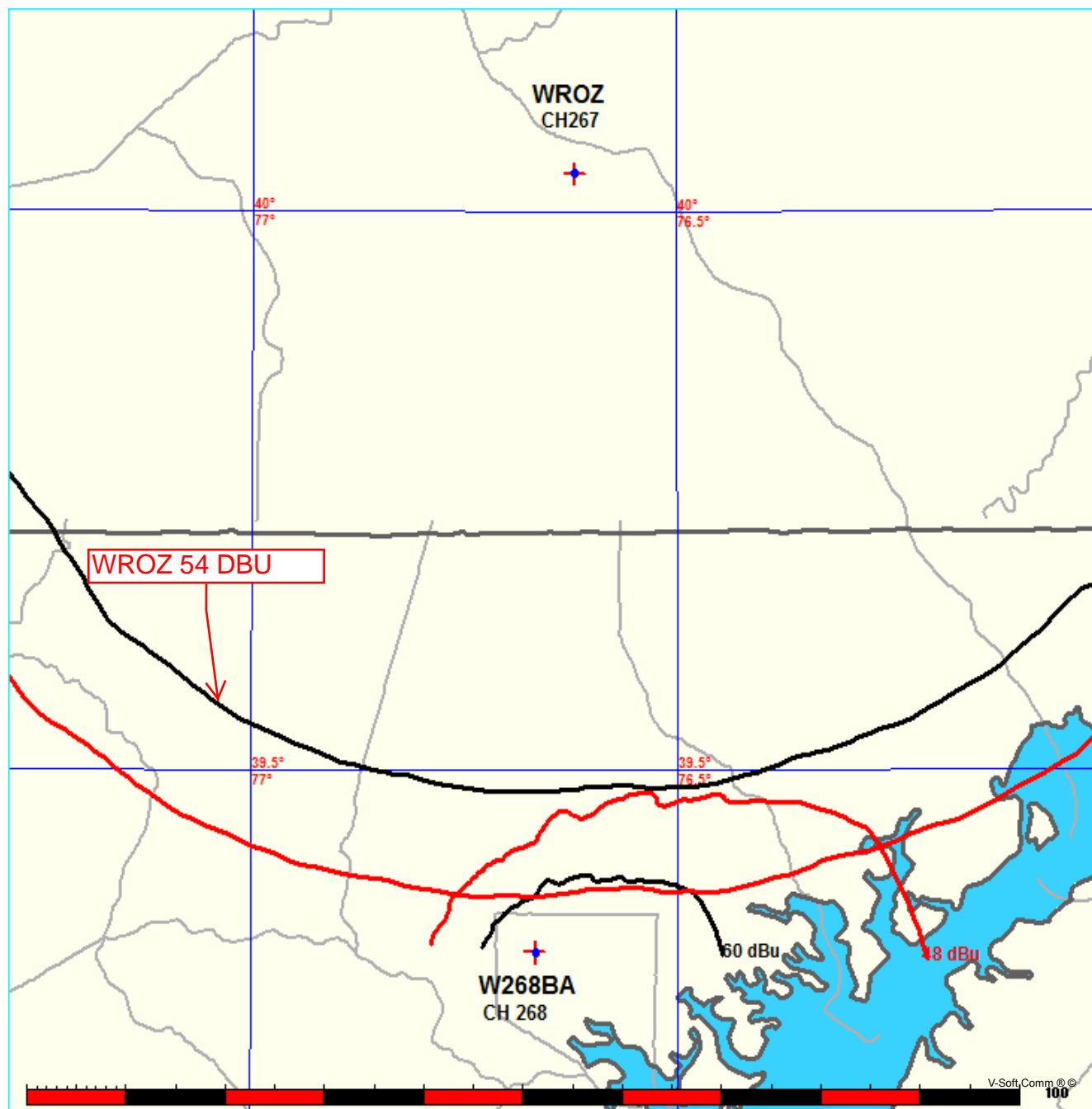
Tallest buildings at the edge of the interference contour at 129 degrees True. Eleven stories and 110 feet (33.5M)  
Interference contour clears the ground by at least 81.8 meters at this distance. All other buildings are 1 to 4 stories.

## E1D W268BA - WROZ PLOT

FMCommander Single Allocation Study - 04-23-2015 - USGS 03 SEC  
W268BA's Overlaps (In= -1.55 km, Out= 0.63 km)

W268BA CH 268 D DA  
Lat= 39 20 18.0, Lng= 76 39 60.0  
0.25 kW 168.6 M HAAT, 259 M COR  
Prot.= 60 dBu, Intef.= 48 dBu

WROZ CH 267 B BLH20010126AAK  
Lat= 40 02 04.0, Lng= 76 37 08.0  
7.4 kW 379 M HAAT, 517 M COR  
Prot.= 54 dBu, Intef.= 54 dBu



# E1D WROZ FMOVER

04-23-2015 Terrain Data: USGS 03 SEC FMOVER Analysis

WROZ BLH20010126AAK

W268BA

Channel = 267B  
Max ERP = 7.4 kW  
RCAMSL = 517 M  
N. Lat. 40 02 04.0  
W. Lng. 76 37 08.0  
Protected  
54 dBu

Channel = 268D  
Max ERP = 0.25 kW  
RCAMSL = 259 M  
N. Lat. 39 20 18.0  
W. Lng. 76 39 60.0  
Interfering  
48 dBu

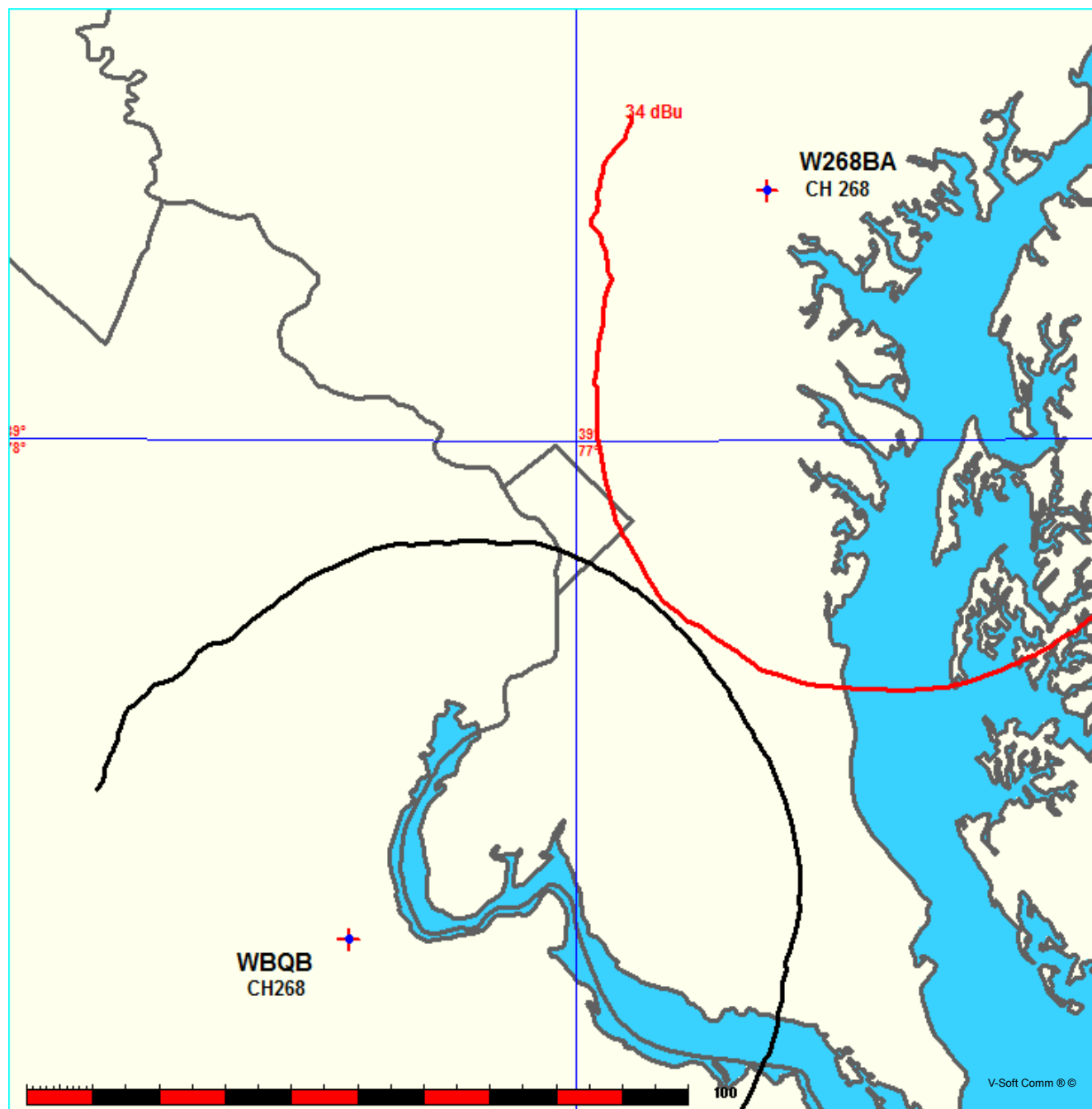
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
160.0	007.4000	0328.6	062.2	053.2	000.0888	0136.8	031.7	43.70	
161.0	007.4000	0330.0	062.3	052.8	000.0851	0138.4	030.6	44.18	
162.0	007.4000	0330.3	062.3	052.1	000.0796	0140.6	029.6	44.63	
163.0	007.4000	0330.9	062.3	051.5	000.0739	0144.8	028.5	45.20	
164.0	007.4000	0329.6	062.3	050.4	000.0659	0152.2	027.6	45.78	
165.0	007.4000	0329.6	062.3	049.5	000.0607	0154.3	026.6	46.21	
166.0	007.4000	0330.3	062.3	048.5	000.0574	0150.5	025.6	46.41	
167.0	007.4000	0330.8	062.3	047.4	000.0537	0144.8	024.6	46.44	
168.0	007.4000	0330.0	062.3	046.0	000.0492	0140.2	023.7	46.41	
169.0	007.4000	0329.6	062.3	044.5	000.0446	0138.7	022.8	46.55	
170.0	007.4000	0326.8	062.1	042.4	000.0387	0131.0	022.1	46.00	
171.0	007.4000	0323.1	061.8	040.1	000.0326	0138.5	021.4	46.26	
172.0	007.4000	0322.2	061.7	038.0	000.0288	0151.4	020.6	47.15	
173.0	007.4000	0320.5	061.6	035.5	000.0249	0158.8	020.0	47.50	
174.0	007.4000	0316.4	061.3	032.6	000.0205	0161.5	019.5	47.20	
175.0	007.4000	0314.3	061.2	029.8	000.0168	0161.9	019.0	46.76	
176.0	007.4000	0313.3	061.1	027.0	000.0146	0160.9	018.4	46.53	
177.0	007.4000	0312.9	061.1	024.0	000.0125	0151.6	018.0	45.69	
178.0	007.4000	0312.9	061.1	020.9	000.0105	0149.5	017.5	45.17	
179.0	007.4000	0313.1	061.1	017.6	000.0100	0148.3	017.1	45.20	
180.0	007.4000	0315.8	061.3	014.3	000.0100	0152.3	016.6	45.85	
181.0	007.4000	0317.7	061.4	010.7	000.0100	0151.8	016.3	46.12	
182.0	007.4000	0319.8	061.6	007.0	000.0080	0148.9	016.0	45.21	
183.0	007.4000	0321.1	061.7	003.2	000.0058	0143.6	015.8	43.57	
184.0	007.4000	0321.7	061.7	359.3	000.0042	0133.9	015.8	41.56	
185.0	007.4000	0321.4	061.7	355.4	000.0042	0126.7	016.0	40.96	
186.0	007.4000	0322.9	061.8	351.6	000.0042	0123.9	016.1	40.67	
187.0	007.4000	0325.8	062.0	347.7	000.0042	0120.4	016.2	40.34	
188.0	007.4000	0327.7	062.1	344.0	000.0042	0115.3	016.5	39.75	
189.0	007.4000	0327.3	062.1	340.7	000.0042	0107.3	017.0	38.70	
190.0	007.4000	0328.3	062.2	337.5	000.0042	0109.9	017.5	38.51	
191.0	007.4000	0328.3	062.2	334.6	000.0042	0110.1	018.1	38.03	
192.0	007.4000	0328.5	062.2	332.0	000.0042	0107.0	018.8	37.23	
193.0	007.4000	0330.6	062.3	329.2	000.0042	0110.1	019.4	36.99	
194.0	007.4000	0330.6	062.3	327.0	000.0042	0104.8	020.2	35.93	
195.0	007.4000	0329.3	062.2	325.2	000.0042	0104.5	021.0	35.21	
196.0	007.4000	0330.3	062.3	323.2	000.0042	0105.1	021.8	34.65	
197.0	007.4000	0333.2	062.5	321.2	000.0042	0103.8	022.6	33.95	
198.0	007.4000	0335.2	062.7	319.4	000.0042	0104.8	023.4	33.42	
199.0	007.4000	0336.6	062.7	317.9	000.0042	0104.4	024.3	32.73	
200.0	007.4000	0338.2	062.9	316.5	000.0042	0103.5	025.3	32.00	

# E1E W268BA - WBQB PLOT

FMCommander Single Allocation Study - 04-23-2015 - USGS 03 SEC  
W268BA's Overlaps (In= -24.83 km, Out= 1.38 km)

W268BA CH 268 D DA  
Lat= 39 20 18.0, Lng= 76 39 60.0  
0.25 kW 168.6 M HAAT, 259 M COR  
Prot.= 60 dBu, Intef.= 34 dBu

WBQB CH 268 B DA BLH19910701KC  
Lat= 38 19 57.0, Lng= 77 23 41.0  
50.0 kW 150 M HAAT, 186 M COR  
Prot.= 54 dBu, Intef.= 40 dBu





# E1E WBQB FMOVER

04-23-2015 Terrain Data: USGS 03 SEC FMOVER Analysis

WBQB BLH19910701KC

W268BA

Channel = 268B  
Max ERP = 50 kW  
RCAMSL = 186 M  
N. Lat. 38 19 57.0  
W. Lng. 77 23 41.0  
Protected  
54 dBu

Channel = 268D  
Max ERP = 0.25 kW  
RCAMSL = 259 M  
N. Lat. 39 20 18.0  
W. Lng. 76 39 60.0  
Interfering  
34 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
030.0	043.2450	0171.0	066.2	208.8	000.0430	0171.8	062.2	29.58	
031.0	043.7580	0171.1	066.3	207.7	000.0457	0175.2	062.1	30.03	
032.0	044.2740	0171.7	066.5	206.6	000.0485	0178.5	062.0	30.47	
033.0	044.7931	0172.7	066.7	205.5	000.0514	0182.3	062.0	30.92	
034.0	045.3152	0172.7	066.8	204.5	000.0544	0187.3	062.0	31.36	
035.0	045.8403	0173.1	067.0	203.4	000.0575	0188.4	062.1	31.62	
036.0	046.3684	0173.6	067.2	202.3	000.0607	0190.2	062.2	31.89	
037.0	046.8996	0173.4	067.3	201.2	000.0638	0191.6	062.4	32.10	
038.0	047.4338	0173.3	067.4	200.2	000.0671	0193.5	062.7	32.30	
039.0	047.9710	0173.7	067.5	199.1	000.0702	0197.3	062.9	32.57	
040.0	048.5113	0174.2	067.7	198.1	000.0733	0202.2	063.2	32.86	
041.0	048.6591	0174.3	067.7	197.1	000.0763	0207.1	063.6	33.09	
042.0	048.8072	0174.6	067.8	196.1	000.0793	0211.0	064.1	33.25	
043.0	048.9555	0175.1	067.9	195.1	000.0823	0216.1	064.5	33.46	
044.0	049.1040	0175.7	068.0	194.2	000.0853	0218.1	065.0	33.52	
045.0	049.2528	0175.7	068.0	193.2	000.0883	0218.3	065.6	33.48	
046.0	049.4018	0175.7	068.0	192.4	000.0912	0217.6	066.3	33.38	
047.0	049.5510	0175.2	068.0	191.6	000.0939	0219.7	067.0	33.35	
048.0	049.7004	0175.4	068.0	190.7	000.0968	0222.1	067.6	33.34	
049.0	049.8501	0175.6	068.1	189.9	000.0997	0220.7	068.3	33.18	
050.0	050.0000	0174.9	068.0	189.2	000.1037	0217.7	069.1	32.97	
051.0	050.0000	0174.7	068.0	188.5	000.1076	0216.5	070.0	32.81	
052.0	050.0000	0174.2	068.0	187.8	000.1114	0216.3	070.8	32.66	
053.0	050.0000	0173.9	067.9	187.1	000.1151	0216.1	071.7	32.51	
054.0	050.0000	0174.3	068.0	186.5	000.1190	0215.9	072.5	32.36	
055.0	050.0000	0175.0	068.1	185.8	000.1229	0215.2	073.4	32.20	
056.0	050.0000	0175.2	068.1	185.2	000.1265	0215.2	074.3	32.03	
057.0	050.0000	0175.3	068.1	184.7	000.1299	0215.5	075.2	31.85	
058.0	050.0000	0174.8	068.0	184.1	000.1330	0216.1	076.2	31.65	
059.0	050.0000	0174.7	068.0	183.6	000.1361	0216.7	077.2	31.46	
060.0	050.0000	0174.8	068.0	183.2	000.1393	0217.4	078.1	31.26	
061.0	050.0000	0175.2	068.1	182.7	000.1424	0218.5	079.1	31.08	
062.0	050.0000	0175.4	068.1	182.2	000.1452	0219.8	080.1	30.88	
063.0	050.0000	0176.2	068.2	181.8	000.1482	0220.9	081.1	30.69	
064.0	050.0000	0177.1	068.3	181.3	000.1511	0221.7	082.2	30.48	
065.0	050.0000	0178.4	068.4	180.9	000.1541	0221.7	083.2	30.24	
066.0	050.0000	0180.0	068.6	180.4	000.1571	0221.3	084.2	29.98	
067.0	050.0000	0181.2	068.7	180.0	000.1598	0221.1	085.2	29.71	
068.0	050.0000	0181.6	068.7	179.7	000.1612	0221.0	086.3	29.40	
069.0	050.0000	0182.3	068.8	179.4	000.1625	0221.3	087.4	29.09	
070.0	050.0000	0183.2	068.9	179.1	000.1637	0221.7	088.5	28.79	

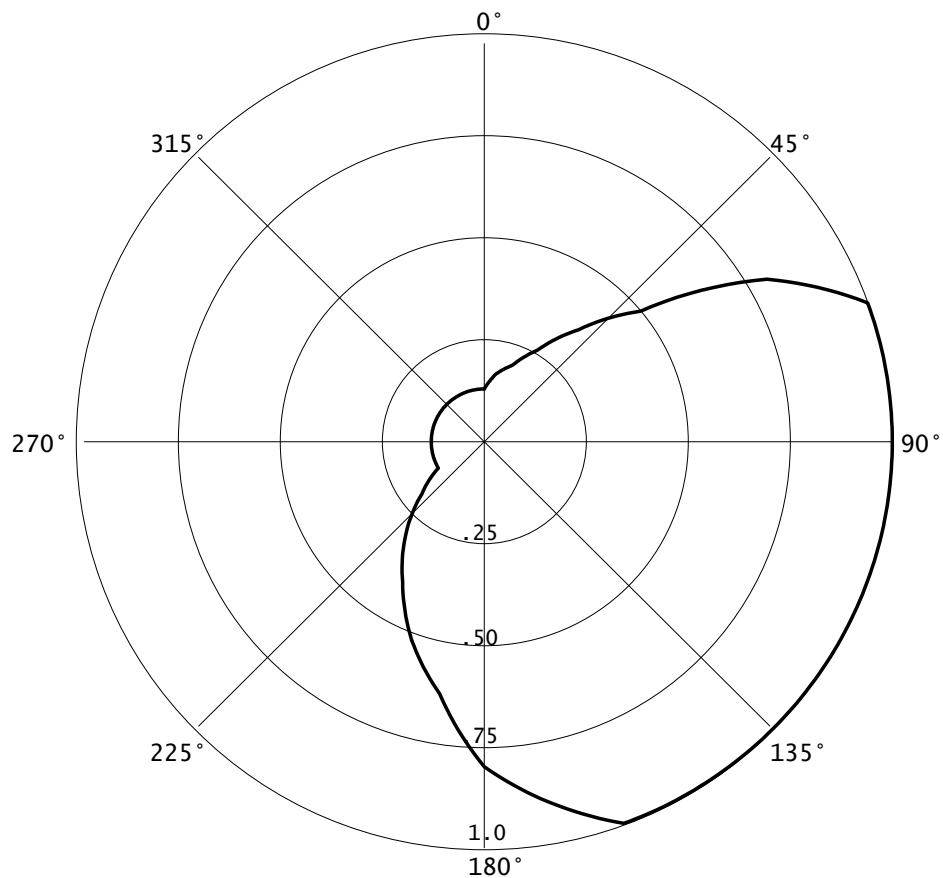
E1F W268BA DA

04-23-2015

RMS(V)= .618

Graph is Relative Field

Azi	Field	dBk	kw
000	0.130	-23.742	0.004
010	0.170	-21.412	0.007
020	0.200	-20.000	0.010
030	0.260	-17.721	0.017
040	0.360	-14.895	0.032
050	0.500	-12.041	0.063
060	0.800	-07.959	0.160
070	1.000	-06.021	0.250
080	1.000	-06.021	0.250
090	1.000	-06.021	0.250
100	1.000	-06.021	0.250
110	1.000	-06.021	0.250
120	1.000	-06.021	0.250
130	1.000	-06.021	0.250
140	1.000	-06.021	0.250
150	1.000	-06.021	0.250
160	1.000	-06.021	0.250
170	0.900	-06.936	0.202
180	0.800	-07.959	0.160
190	0.630	-10.034	0.099
200	0.520	-11.701	0.068
210	0.400	-13.979	0.040
220	0.300	-16.478	0.023
230	0.200	-20.000	0.010
240	0.130	-23.742	0.004
250	0.130	-23.742	0.004
260	0.130	-23.742	0.004
270	0.130	-23.742	0.004
280	0.130	-23.742	0.004
290	0.130	-23.742	0.004
300	0.130	-23.742	0.004
310	0.130	-23.742	0.004
320	0.130	-23.742	0.004
330	0.130	-23.742	0.004
340	0.130	-23.742	0.004
350	0.130	-23.742	0.004



E2

**W268BA-APP**

Latitude: 39-20-18 N  
Longitude: 076-39-59 W  
ERP: 0.25 kW  
Channel: 268  
Frequency: 101.5 MHz  
AMSL Height: 258.8 m  
Elevation: 123.8 m  
Horiz. Pattern: Directional

FCC 60 DBU

WWIN 2MV/M

W268BA-APP

WWIN

Baltimore

Dundalk

Glen Burnie

Severna Park

Annapolis

WWIN 25 MILE RADIUS

W268BA

W268BA 60 DBU

Washington

Scale 1:500,000



W268BA-APPLICATION 40 DBU (50:10)  
MATTOON OVERLAP

# E3 Registration 1048112

 [Map Registration](#)

## Registration Detail

Reg Number	1048112	Status	Constructed
File Number	A0056603	Constructed	01/01/1987
EMI	No	Dismantled	
NEPA	No		

## Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

### Location (in NAD83 Coordinates)

Lat/Long	39-20-18.0 N 076-39-59.0 W	Address	BOARMAN AVE BETWEEN PARK HEIGHTS & REISTERSTOWN RD
City, State	BALTIMORE , MD		
Zip	21215	County	BALTIMORE CITY
Center of AM Array		Position of Tower in Array	

### Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
123.8	154.5
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
278.3	154.5

## Painting and Lighting Specifications

FAA Chapters 3, 4, 5, 13

Paint and Light in Accordance with FAA Circular Number 70/7460-1J

## FAA Notification

FAA Study	98-AEA-1528-OE	FAA Issue Date	07/04/1998
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## Owner & Contact Information

FRN	Owner Entity Type
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### Owner

RADIO ONE INC DBA = WERQ FM	P: (410)332-8200
Attention To: KARL GOEHRING	F:
100 SAINT PAUL ST	E:
BALTIMORE , MD 21202	

### Contact

P:  
F:  
E:

## Last Action Status

Status	Constructed	Received	05/14/1998
Purpose	New	Entered	05/19/1998
Mode	Mail In (Manual)		

## Related Applications

05/14/1998 A0056603 - New (NE)

## Comments

### Comments



## Output from NADCON for station W268BA

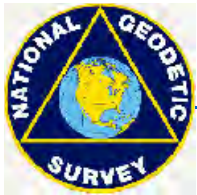
# North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

Transformation #: 1                      Region: Conus

	Latitude	Longitude
NAD 27 datum values:	39 20 17.61633	76 40 0.10833
NAD 83 datum values:	39 20 18.00000	76 39 59.00000
NAD 27 - NAD 83 shift values:	-0.38367	1.10833(secs.)
	-11.832	26.542 (meters)
Magnitude of total shift:		29.060(meters)



**NGS HOME PAGE**