

**W268BA MATTOON WAIVER CP
MINOR CHANGE IN DA PATTERN
TO AKE ADVANTAGE OF 25 MILE RADIUS
AND SERVE AS A FILL IN FOR
WWIN(AM) - FACILITY #54709**

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

This application requests a modification to a previous Mattoon Waiver by simply changing the antenna pattern to utilize the 25 mile radius rather than the 2 mV/m. 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 licensed W268BA facility because the proposed 40 dBu (50:10) interfering contour continues to overlap the licensed W268BA 60 dBu (50:50) contour as demonstrated in exhibit E2.

It is also noted that the previous change to the facility at the licensed site was an IF channel change at site and did not constitute a "hop".

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
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 25 mile 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 85.58 dBu and the (50,10) interference contour is 125.58 dBu. Exhibit E1A demonstrates that this interfering contour is at least 123.1 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 34.4 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 three story, one four story building, one seven story building at 0.88 km and 243 degrees and two ten (10) story structures located at the edge of the interfering contour where the clearance is at least 94.5 meters(street views included in E1C). The 10 story structures are no more than 110 feet (33.5 meters) in height. Therefore, there is ample clearance from the interference contour.

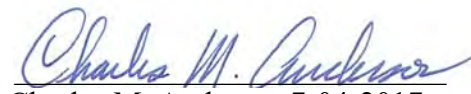
Clearly, these interference contours will not reach any populated area or major highways. Based on this showing a waiver of Section 74.1204 is requested in accordance with *Living Way Ministries, Inc.* (FCC 08-242).

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 128 meters AGL. The RF contribution of the proposed translator was calculated to be 1.05 μ Watts/cm² using the formula included below and a worst case vertical factor of 1.0. This is 0.53% of the maximum permissible 200 microwatts/cm² exposure for general population/uncontrolled exposure, and well below 5% of that limit which requires consideration.

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

The proposed translator facility complies with Commission RF radiation limits.


Charles M. Anderson 7-04-2017

E1 CHANNEL STUDY

REFERENCE
39 20 18.0 N.
76 40 00.0 W.

CH# 268D - 101.5 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M,
Average Protected F(50-50)= 7.09 km
Standard Directional

COR= 252 M

DISPLAY DATES
DATA 07-03-17
SEARCH 07-04-17

CH CITY	CALL	TYPE STATE	ANT STATE	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	13.13 BLH20151117AJM	39 25 07.0 76 33 17.0	13.500 290	5.3 383	63.4 Cbs Radio Wlif, Inc.	-4.2	-51.4*

See E1A and E1C for disproof of WLIF interference per Living Way.

268D Baltimore	W268BA	CP DC_ MD		0.0 0.0	0.00 BMPFT20170123FLC	39 20 18.0 76 40 00.0	0.250 252	17.2	5.3	-24.4*	-29.4*
268B Fredericksburg	WBQB	LIC DCN VA		209.6 29.2	128.31 BLH19910701KC	38 19 57.0 77 23 41.0	50.000 150	138.8 186	66.1	-25.0*	1.3
268D Church Hill	W268BA	LIC _C_ MD		103.9 284.2	51.37 BLFT20150423ABH	39 13 35.0 76 05 20.0	0.018	17.7 69	5.4	14.1	-14.4*
266B Washington	WWDC	LIC _C_ DC		221.9 41.7	50.53 BMLH20130909ABL	38 59 59.0 77 03 27.0	22.500 232	5.5 313	63.1	30.3	-14.1*

See E1B and E1C for disproof of WWDC interference per Living Way.

267B Lancaster	WROZ	LIC _C_ PA		3.0 183.0	77.39 BLH20010126AAK	40 02 04.0 76 37 08.0	7.400 379	72.9 517	61.8	-2.6	0.7
268B Waynesboro	WBHB-FM	LIC DEN PA		306.0 125.4	93.60 BLH19861114KA	39 49 44.0 77 33 10.0	50.000 70	65.4 369	21.8	14.9	6.2
268L1 Cambridge	WHCP-LP	LIC ____ MD		148.7 329.1	98.93 BLL20150716ACF	38 34 34.1 76 04 30.5	0.090 32	34		59.6	31.1
215B Washington	WETA	LIC _CX DC		219.1 38.8	63.86 BMLED20070511AAI	38 53 30.0 77 07 55.0	75.000 186	0.0 252	0.0	14.5R	49.4M
265D North East	W265BG	LIC _C_ MD		61.5 241.9	66.15 BLFT20051101AAY	39 37 12.0 75 59 21.0	0.010 116	0.2 177	6.0	49.4	58.1

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.

E1A WLIF INTERFERENCE ANALYSIS

W268BA BALTIMORE, MD

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 128 Meters

W268BA Antenna Model = PSI-6-75% SPACING

Protected Station's Contour = 85.57793 dBu

Translator's or LPFM's full Interference contour 125.57793

Review Azimuth = 130 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 = 13.1 km

Protected Station= WLIF, 13.5 kW, 383 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	1.00	1.0	0.2500	058.3544	058.3544	128.000
05.00	0.768	1.0	0.1475	044.8162	044.6456	124.094
10.00	0.261	1.0	0.0170	015.2305	014.9991	125.355
15.00	0.14	1.0	0.0049	008.1696	007.8912	125.886
20.00	0.215	1.0	0.0116	012.5462	011.7896	123.709
25.00	0.054	1.0	0.0007	003.1511	002.8559	126.668
30.00	0.111	1.0	0.0031	006.4773	005.6095	124.761
35.00	0.135	1.0	0.0046	007.8778	006.4532	123.481
40.00	0.041	1.0	0.0004	002.3925	001.8328	126.462
45.00	0.065	1.0	0.0011	003.7930	002.6821	125.318
50.00	0.109	1.0	0.0030	006.3606	004.0885	123.127
55.00	0.085	1.0	0.0018	004.9601	002.8450	123.937
60.00	0.029	1.0	0.0002	001.6923	000.8461	126.534
65.00	0.021	1.0	0.0001	001.2254	000.5179	126.889
70.00	0.047	1.0	0.0006	002.7427	000.9380	125.423
75.00	0.05	1.0	0.0006	002.9177	000.7552	125.182
80.00	0.039	1.0	0.0004	002.2758	000.3952	125.759
85.00	0.02	1.0	0.0001	001.1671	000.1017	126.837
90.00	0.0	1.0	0.0000	000.0058	000.0000	127.994

E1B WWDC INTERFERENCE ANALYSIS

W268BA BALTIMORE, MD

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 128 Meters

W268BA Antenna Model = PSI-6-75% SPACING

Protected Station's Contour = 59.94893 dBu

Translator's or LPFM's full Interference contour 99.94893

Review Azimuth = 130 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	1.00	1.0	0.2500	1115.6385	1115.6385	128.000
01.00	0.99	1.0	0.2450	1104.4822	1104.3139	108.724
02.00	0.96	1.0	0.2304	1071.0130	1070.3605	090.622
03.00	0.912	1.0	0.2079	1017.4623	1016.0679	074.750
04.00	0.847	1.0	0.1794	944.9458	942.6440	062.084
05.00	0.768	1.0	0.1475	856.8104	853.5500	053.324
06.00	0.677	1.0	0.1146	755.2873	751.1497	049.051
07.00	0.577	1.0	0.0832	643.7235	638.9252	049.550
08.00	0.472	1.0	0.0557	526.5814	521.4567	054.714
09.00	0.365	1.0	0.0333	407.2081	402.1947	064.299
10.00	0.261	1.0	0.0170	291.1817	286.7580	077.437
11.00	0.161	1.0	0.0065	179.6178	176.3177	093.727
12.00	0.069	1.0	0.0012	076.9791	075.2969	111.995
13.00	0.013	1.0	0.0000	014.5033	014.1316	124.737
14.00	0.083	1.0	0.0017	092.5980	089.8474	105.599
15.00	0.14	1.0	0.0049	156.1894	150.8674	087.575
16.00	0.182	1.0	0.0083	203.0462	195.1805	072.033
17.00	0.21	1.0	0.0110	234.2841	224.0470	059.502
18.00	0.224	1.0	0.0125	249.9030	237.6719	050.776
19.00	0.226	1.0	0.0128	252.1343	238.3977	045.913
20.00	0.215	1.0	0.0116	239.8623	225.3968	045.962
21.00	0.195	1.0	0.0095	217.5495	203.1000	050.037
22.00	0.166	1.0	0.0069	185.1960	171.7107	058.624
23.00	0.132	1.0	0.0044	147.2643	135.5575	070.459
24.00	0.094	1.0	0.0022	104.8700	095.8035	085.346
25.00	0.054	1.0	0.0007	060.2445	054.6000	102.540
26.00	0.014	1.0	0.0000	015.6189	014.0382	121.153
27.00	0.023	1.0	0.0001	025.6597	022.8629	116.351
28.00	0.058	1.0	0.0008	064.7070	057.1329	097.622
29.00	0.087	1.0	0.0019	097.0605	084.8911	080.944
30.00	0.111	1.0	0.0031	123.8359	107.2450	066.082
31.00	0.128	1.0	0.0041	142.8017	122.4050	054.452
32.00	0.14	1.0	0.0049	156.1894	132.4561	045.232
33.00	0.144	1.0	0.0052	160.6519	134.7341	040.503
34.00	0.142	1.0	0.0050	158.4207	131.3367	039.412
35.00	0.135	1.0	0.0046	150.6112	123.3735	041.613
36.00	0.123	1.0	0.0038	137.2235	111.0162	047.342
37.00	0.106	1.0	0.0028	118.2577	094.4448	056.831
38.00	0.087	1.0	0.0019	097.0605	076.4848	068.244
39.00	0.065	1.0	0.0011	072.5165	056.3559	082.364
40.00	0.041	1.0	0.0004	045.7412	035.0398	098.598
41.00	0.018	1.0	0.0001	020.0815	015.1557	114.825

E1B WWDC INTERFERENCE ANALYSIS

42.00	0.005	1.0	0.0000	005.5782	004.1454	124.267
43.00	0.027	1.0	0.0002	030.1222	022.0300	107.457
44.00	0.047	1.0	0.0006	052.4350	037.7186	091.576
45.00	0.065	1.0	0.0011	072.5165	051.2769	076.723
46.00	0.08	1.0	0.0016	089.2511	061.9990	063.798
47.00	0.092	1.0	0.0021	102.6387	069.9995	052.935
48.00	0.1	1.0	0.0025	111.5639	074.6508	045.092
49.00	0.106	1.0	0.0028	118.2577	077.5840	038.750
50.00	0.109	1.0	0.0030	121.6046	078.1659	034.845
51.00	0.108	1.0	0.0029	120.4890	075.8262	034.362
52.00	0.106	1.0	0.0028	118.2577	072.8067	034.812
53.00	0.1	1.0	0.0025	111.5639	067.1408	038.901
54.00	0.093	1.0	0.0022	103.7544	060.9853	044.061
55.00	0.085	1.0	0.0018	094.8293	054.3918	050.320
56.00	0.075	1.0	0.0014	083.6729	046.7893	058.632
57.00	0.064	1.0	0.0010	071.4009	038.8877	068.118
58.00	0.052	1.0	0.0007	058.0132	030.7423	078.802
59.00	0.04	1.0	0.0004	044.6255	022.9839	089.748
60.00	0.029	1.0	0.0002	032.3535	016.1768	099.981
61.00	0.017	1.0	0.0001	018.9659	009.1948	111.412
62.00	0.007	1.0	0.0000	007.8095	003.6663	121.105
63.00	0.003	1.0	0.0000	003.3469	001.5195	125.018
64.00	0.013	1.0	0.0000	014.5033	006.3578	114.965
65.00	0.021	1.0	0.0001	023.4284	009.9013	106.767
66.00	0.028	1.0	0.0002	031.2379	012.7056	099.463
67.00	0.035	1.0	0.0003	039.0473	015.2570	092.057
68.00	0.04	1.0	0.0004	044.6255	016.7170	086.624
69.00	0.044	1.0	0.0005	049.0881	017.5916	082.172
70.00	0.047	1.0	0.0006	052.4350	017.9338	078.727
71.00	0.05	1.0	0.0006	055.7819	018.1608	075.257
72.00	0.051	1.0	0.0007	056.8976	017.5823	073.887
73.00	0.052	1.0	0.0007	058.0132	016.9614	072.522
74.00	0.051	1.0	0.0007	056.8976	015.6831	073.307
75.00	0.05	1.0	0.0006	055.7819	014.4374	074.119
76.00	0.049	1.0	0.0006	054.6663	013.2250	074.958
77.00	0.047	1.0	0.0006	052.4350	011.7953	076.909
78.00	0.045	1.0	0.0005	050.2037	010.4379	078.893
79.00	0.042	1.0	0.0004	046.8568	008.9407	082.004
80.00	0.039	1.0	0.0004	043.5099	007.5554	085.151
81.00	0.035	1.0	0.0003	039.0473	006.1084	089.433
82.00	0.032	1.0	0.0003	035.7004	004.9685	092.647
83.00	0.028	1.0	0.0002	031.2379	003.8069	096.995
84.00	0.024	1.0	0.0001	026.7753	002.7988	101.371
85.00	0.02	1.0	0.0001	022.3128	001.9447	105.772
86.00	0.016	1.0	0.0001	017.8502	001.2452	110.193
87.00	0.012	1.0	0.0000	013.3877	000.7007	114.631
88.00	0.008	1.0	0.0000	008.9251	000.3115	119.080
89.00	0.004	1.0	0.0000	004.4626	000.0779	123.538
90.00	0.0	1.0	0.0000	000.1116	000.0000	127.888

This aerial view of East Arlington, DC, shows a dense residential area with a grid-like street pattern. The neighborhood is bounded by a yellow line. Key streets include Langston Ave, Central Park Heights, Lucille Park, Edgecomb, Greenspring, Woodberry, East Arlington, Callaway Garrison, and Ashburton. Major roads like I-495 and I-26 are visible. The Google Earth logo is in the bottom right corner.



E1C STREET VIEW OF SEVEN STORY BUILDING AT 877 METERS/ 243 DEGREES



E1C STREET VIEW OF TALLEST BUILDING WITHIN 99.95 DBU



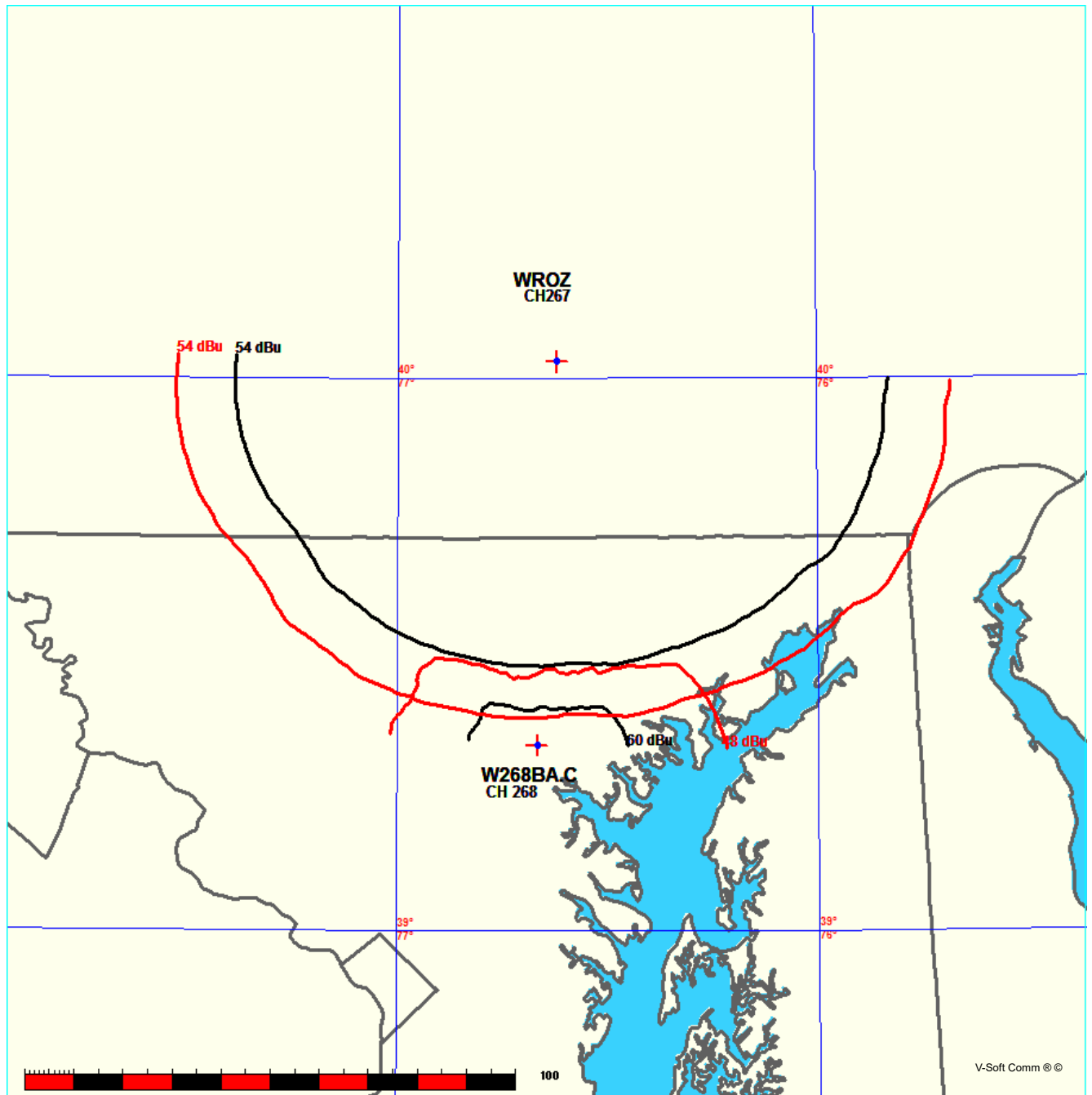
Tallest buildings at the edge of the interference contour at 129 degrees True. Eleven stories and 110 feet (33.5M) Interference contour clears the ground by at least 81.8 meters at this distance. All other buildings are 1 to 4 stories except for seven story building identified above.

E1D WROZ PLOT

FMCommander Single Allocation Study - 07-04-2017 - USGS 03 SEC
W268BA.C's Overlaps (In= -2.63 km, Out= 0.68 km)

W268BA.C CH 268 D DA
Lat= 39 20 18.0, Lng= 76 40 00.0
0.25 kW 0 m HAAT, 252 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

07-08-2017 Terrain Data: USGS 03 SEC FMOVER Analysis

WROZ BLH20010126AAK

W268BA.C

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 = 252 m
N. Lat. 39 20 18.0
W. Lng. 76 40 00.0
Interfering
48 dBu

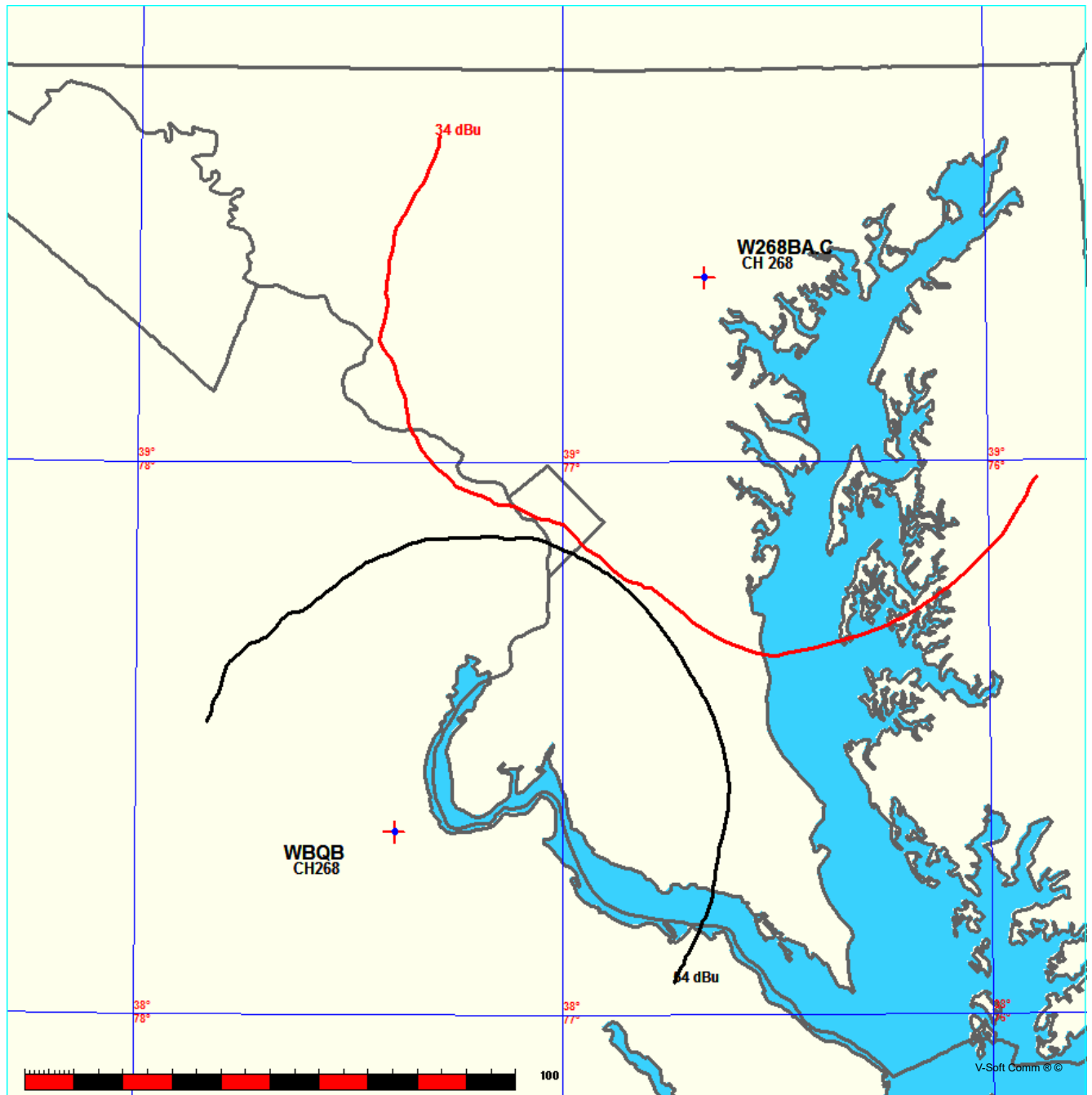
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
160.0	007.4000	0328.6	062.2	053.2	000.1228	0129.8	031.7	44.66	
161.0	007.4000	0330.0	062.3	052.8	000.1163	0131.4	030.6	45.09	
162.0	007.4000	0330.3	062.3	052.1	000.1070	0133.6	029.6	45.46	
163.0	007.4000	0330.9	062.3	051.5	000.0974	0137.8	028.5	45.95	
164.0	007.4000	0329.6	062.3	050.4	000.0839	0145.2	027.6	46.39	
165.0	007.4000	0329.6	062.3	049.5	000.0757	0147.3	026.6	46.73	
166.0	007.4000	0330.3	062.3	048.5	000.0707	0143.5	025.6	46.87	
167.0	007.4000	0330.8	062.3	047.4	000.0652	0137.8	024.6	46.83	
168.0	007.4000	0330.0	062.3	046.0	000.0584	0133.2	023.7	46.69	
169.0	007.4000	0329.6	062.3	044.5	000.0517	0131.7	022.8	46.73	
170.0	007.4000	0326.8	062.1	042.4	000.0432	0124.0	022.1	46.00	
171.0	007.4000	0323.1	061.8	040.1	000.0344	0131.5	021.4	46.04	
172.0	007.4000	0322.2	061.7	038.0	000.0298	0144.4	020.6	46.85	
173.0	007.4000	0320.5	061.6	035.5	000.0250	0151.8	020.0	47.10	
174.0	007.4000	0316.4	061.3	032.6	000.0198	0154.5	019.5	46.63	
175.0	007.4000	0314.3	061.2	029.8	000.0156	0154.9	019.0	46.03	
176.0	007.4000	0313.3	061.1	027.0	000.0152	0153.9	018.4	46.29	
177.0	007.4000	0312.9	061.1	024.0	000.0149	0144.6	018.0	45.99	
178.0	007.4000	0312.9	061.1	020.9	000.0145	0142.5	017.5	46.11	
179.0	007.4000	0313.1	061.1	017.6	000.0144	0141.3	017.1	46.33	
180.0	007.4000	0315.8	061.3	014.3	000.0144	0145.3	016.6	46.99	
181.0	007.4000	0317.7	061.4	010.7	000.0144	0144.8	016.3	47.25	
182.0	007.4000	0319.8	061.6	007.0	000.0144	0141.9	016.0	47.30	
183.0	007.4000	0321.1	061.7	003.2	000.0144	0136.6	015.8	47.07	
184.0	007.4000	0321.7	061.7	359.3	000.0144	0126.9	015.8	46.42	
185.0	007.4000	0321.4	061.7	355.4	000.0144	0119.7	016.0	45.81	
186.0	007.4000	0322.9	061.8	351.6	000.0144	0116.9	016.1	45.52	
187.0	007.4000	0325.8	062.0	347.7	000.0161	0113.4	016.2	45.65	
188.0	007.4000	0327.7	062.1	344.0	000.0190	0108.3	016.5	45.74	
189.0	007.4000	0327.3	062.1	340.7	000.0218	0100.3	017.0	45.23	
190.0	007.4000	0328.3	062.2	337.5	000.0264	0102.9	017.5	45.88	
191.0	007.4000	0328.3	062.2	334.6	000.0313	0103.1	018.1	46.14	
192.0	007.4000	0328.5	062.2	332.0	000.0362	0100.0	018.8	45.95	
193.0	007.4000	0330.6	062.3	329.2	000.0436	0103.1	019.4	46.54	
194.0	007.4000	0330.6	062.3	327.0	000.0547	0097.8	020.2	46.41	
195.0	007.4000	0329.3	062.2	325.2	000.0644	0097.5	021.0	46.41	
196.0	007.4000	0330.3	062.3	323.2	000.0764	0098.1	021.8	46.58	
197.0	007.4000	0333.2	062.5	321.2	000.0898	0096.8	022.6	46.58	
198.0	007.4000	0335.2	062.7	319.4	000.1050	0097.8	023.4	46.73	
199.0	007.4000	0336.6	062.7	317.9	000.1241	0097.4	024.3	46.76	
200.0	007.4000	0338.2	062.9	316.5	000.1435	0096.5	025.3	46.66	

E1E WBQB PLOT

FMCommander Single Allocation Study - 07-04-2017 - USGS 03 SEC
W268BA.C's Overlaps (In= -24.98 km, Out= 1.27 km)

W268BA.C CH 268 D DA
Lat= 39 20 18.0, Lng= 76 40 00.0
0.25 kW 0 m HAAT, 252 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



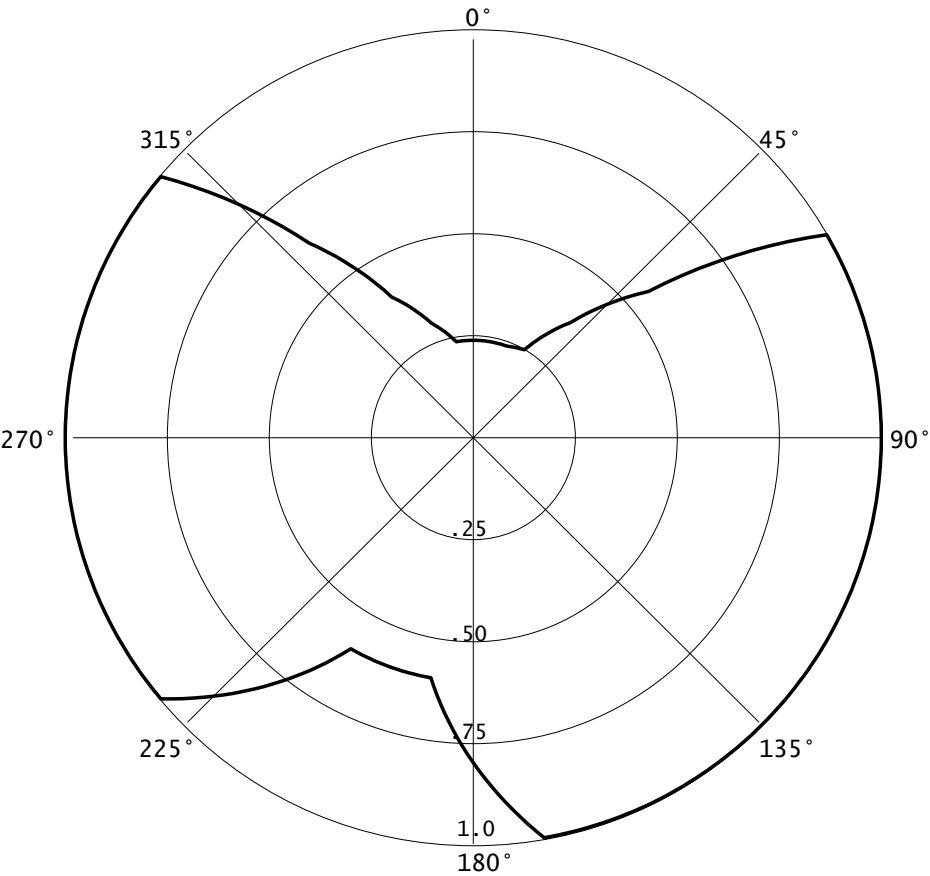
E1F DA TABULATION

07-04-2017

RMS(V)= .827

Graph is Relative Field

Azi	Field	dBk	kw
000	0.240	-18.416	0.014
010	0.240	-18.416	0.014
020	0.240	-18.416	0.014
030	0.250	-18.062	0.016
040	0.370	-14.657	0.034
050	0.560	-11.057	0.078
060	1.000	-06.021	0.250
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	1.000	-06.021	0.250
180	0.800	-07.959	0.160
190	0.600	-10.458	0.090
200	0.600	-10.458	0.090
210	0.600	-10.458	0.090
220	0.800	-07.959	0.160
230	1.000	-06.021	0.250
240	1.000	-06.021	0.250
250	1.000	-06.021	0.250
260	1.000	-06.021	0.250
270	1.000	-06.021	0.250
280	1.000	-06.021	0.250
290	1.000	-06.021	0.250
300	1.000	-06.021	0.250
310	1.000	-06.021	0.250
320	0.625	-10.103	0.098
330	0.400	-13.979	0.040
340	0.300	-16.478	0.023
350	0.240	-18.416	0.014



W268BA-MOD

Latitude: 39-20-18 N
Longitude: 076-39-59 W
ERP: 0.25 kW
Channel: 268
Frequency: 101.5 MHz
AMSL Height: 252.0 m
Elevation: 124.0 m
Horiz. Pattern: Directional

WWIN 25 MILE RADIUS

E2 CONTOURS

60 DBU

Baltimore

W268BA-MOD

WWIN

Baltimore

**W268BX
LIC 60 DBU**

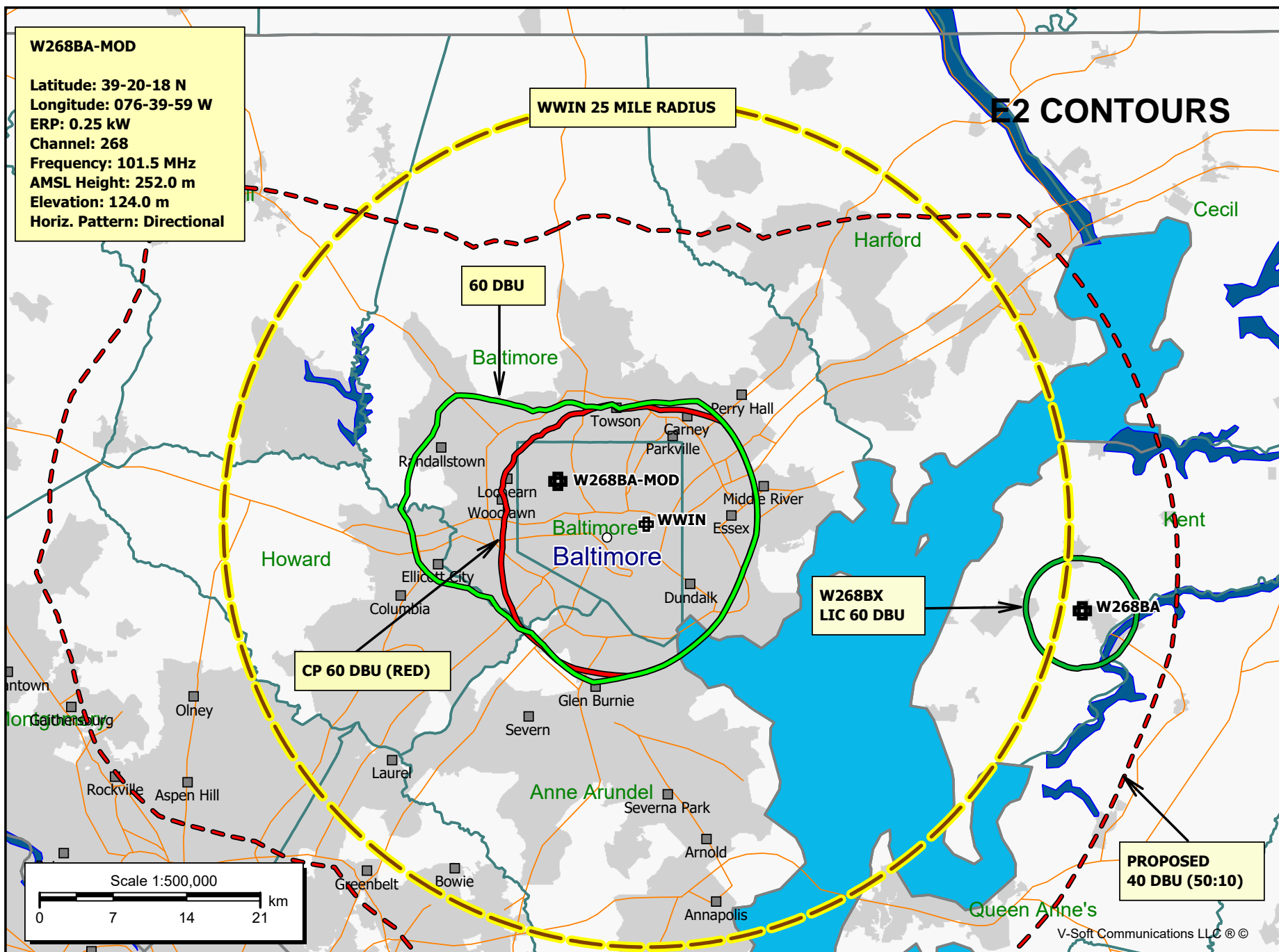
W268BA

CP 60 DBU (RED)

**PROPOSED
40 DBU (50:10)**

Scale 1:500,000

0 7 14 21 km



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
-----------	----------------	----------------	------------

Owner & Contact Information

FRN	Owner Entity Type
-----	-------------------

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

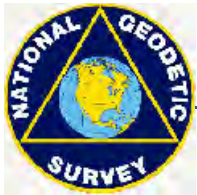
North American Datum Conversion

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



Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSIFML-6A-75WS

Bay spacing: 3/4-wave

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.000	-50.0	0.109	-19.280	-10.0	0.261	-11.665
-89.0	0.004	-47.764	-49.0	0.106	-19.501	-9.0	0.366	-8.736
-88.0	0.008	-41.743	-48.0	0.100	-19.987	-8.0	0.472	-6.516
-87.0	0.012	-38.221	-47.0	0.091	-20.799	-7.0	0.577	-4.777
-86.0	0.016	-35.803	-46.0	0.079	-22.021	-6.0	0.677	-3.393
-85.0	0.020	-33.849	-45.0	0.064	-23.844	-5.0	0.768	-2.296
-84.0	0.024	-32.308	-44.0	0.047	-26.648	-4.0	0.847	-1.441
-83.0	0.028	-31.047	-43.0	0.027	-31.530	-3.0	0.912	-0.799
-82.0	0.032	-29.988	-42.0	0.005	-46.848	-2.0	0.960	-0.352
-81.0	0.035	-29.044	-41.0	0.018	-34.735	-1.0	0.990	-0.089
-80.0	0.039	-28.260	-40.0	0.042	-27.541	0.0	1.000	0.000
-79.0	0.042	-27.604	-39.0	0.065	-23.722	1.0	0.990	-0.087
-78.0	0.044	-27.054	-38.0	0.087	-21.213	2.0	0.960	-0.352
-77.0	0.047	-26.592	-37.0	0.107	-19.452	3.0	0.912	-0.798
-76.0	0.049	-26.234	-36.0	0.123	-18.200	4.0	0.847	-1.440
-75.0	0.050	-25.968	-35.0	0.135	-17.384	5.0	0.768	-2.294
-74.0	0.051	-25.838	-34.0	0.142	-16.928	6.0	0.677	-3.391
-73.0	0.051	-25.813	-33.0	0.144	-16.836	7.0	0.577	-4.775
-72.0	0.051	-25.890	-32.0	0.139	-17.115	8.0	0.472	-6.513
-71.0	0.049	-26.127	-31.0	0.128	-17.843	9.0	0.366	-8.729
-70.0	0.047	-26.564	-30.0	0.111	-19.124	10.0	0.261	-11.660
-69.0	0.044	-27.173	-29.0	0.087	-21.228	11.0	0.161	-15.844
-68.0	0.040	-28.058	-28.0	0.057	-24.841	12.0	0.069	-23.193
-67.0	0.034	-29.309	-27.0	0.023	-32.754	13.0	0.013	-38.009
-66.0	0.028	-31.095	-26.0	0.015	-36.745	14.0	0.083	-21.663
-65.0	0.021	-33.720	-25.0	0.054	-25.313	15.0	0.139	-17.134
-64.0	0.012	-38.329	-24.0	0.094	-20.515	16.0	0.182	-14.814
-63.0	0.003	-50.816	-23.0	0.132	-17.571	17.0	0.210	-13.562
-62.0	0.007	-42.949	-22.0	0.167	-15.563	18.0	0.224	-12.986
-61.0	0.018	-34.880	-21.0	0.195	-14.199	19.0	0.226	-12.933
-60.0	0.029	-30.680	-20.0	0.215	-13.339	20.0	0.215	-13.339
-59.0	0.041	-27.764	-19.0	0.226	-12.933	21.0	0.195	-14.199
-58.0	0.053	-25.584	-18.0	0.224	-12.986	22.0	0.167	-15.563
-57.0	0.064	-23.864	-17.0	0.210	-13.562	23.0	0.132	-17.561
-56.0	0.075	-22.499	-16.0	0.182	-14.814	24.0	0.094	-20.515
-55.0	0.085	-21.427	-15.0	0.139	-17.125	25.0	0.054	-25.313
-54.0	0.094	-20.571	-14.0	0.083	-21.663	26.0	0.015	-36.745
-53.0	0.101	-19.948	-13.0	0.013	-37.905	27.0	0.023	-32.754
-52.0	0.106	-19.514	-12.0	0.069	-23.193	28.0	0.057	-24.841
-51.0	0.108	-19.293	-11.0	0.161	-15.852	29.0	0.087	-21.243

file: FML 6-bay elevation tabulation

revision:

Date: 9/14/2011