

## **W276CR - MINOR MODIFICATION**

This application requests minor changes to the W276CR construction permit to change site, ERP, antenna, and HAAT. This further modification is required as a result of eagles nesting on the tower specified in the current CP.

The translator will function as a fill-in in translator for station WLSS(AM) at Sarasota, FL (facility ID #59126).

### **Allocation discussion:**

All exhibits were developed utilizing the FCC 30 second terrain database.

Allocation exhibits are provided as follows:

- E1 Channel study
- E1A Interference plot to WHPT
- E1B Interference to WFUS
- E1C Aerial view of interference area
- E1D DA and elevation pattern
- E2 60 dBu and 2 mV/m AM contours
- E3 ASR and NADCON

A channel study is included as E1 demonstrating compliance with 74.1204 with the exception of 2nd adjacent channel stations WFUS and WHBT. A plot of the proposed and CP 60 dBu contours is provided as E2 showing that the proposed 60 dBu overlaps the long form CP 60 dBu and is contained within the WLSS(AM) 2 mV/m and 25 mile radius.

### **WHBT and WFUS analysis:**

The proposed channel 276 facility will be located inside the protected contour of 2nd adjacent channel stations WHBT on 273C and WFUS on 2278C0. Therefore, an interference analysis has been conducted based on the D/U ratio of +40 dB at the proposed site. The WHPT contour at that site is 83.174 dBu and the proposed interference contour is 123.174 dBu (50:10). Exhibit E1A demonstrates that the contour does not reach any populated area or major highway.

The WFUS contour is 72.509 dBu and the proposed interference contour is 112.509 dBu (50:10). Exhibit E1B demonstrates that the interference contour's minimum ground clearance is 9.7 meters. A careful examination of the area using Google earth aerial and street views show

## Anderson Associates

---

that all of the buildings are one story (an aerial photograph is included as E1B). Therefore, since there is no interference to populated areas or major highways, 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 a two bay Shively SLV-2 circularly polarized antenna at 91 meters AGL. The RF contribution of the proposed translator was calculated using the formula included below and a worst case vertical factor of 1.0 to be 2.1  $\mu\text{Watts/cm}^2$  or 1.05% of the maximum permissible 200  $\mu\text{Watts/cm}^2$  exposure for general population/uncontrolled exposure, and less than the 5% requiring consideration.

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

E1 CHANNEL STUDY											
Caron Broadcasting, Inc.											
CH# 276D - 103.1 MHz, Pwr= 0.25 kW DA, HAAT= 96.6 M, COR= 99 M											
Average Protected F(50-50)= 12.65 km											
Standard Directional											
DISPLAY DATES											
DATA 11-03-14											
SEARCH 11-04-14											
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kw)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
273C	WHPT	LIC	_CX	100.2	34.35	27 24 30.0	100.000	12.6	86.9	9.4	-53.6*
Sarasota		FL		280.4	BMLH20100212AAW	82 15 00.0	503	520	Cox Radio, Inc.		(1)
276D	W276CR	CP	_C_	121.9	6.07	27 26 05.0	0.015	12.6	4.0	-19.0*	-41.0
Bradenton		FL		301.9	BMPFT20140909AFS	82 32 25.0		43	Caron Broadcasting, Inc.		
278C0	WFUS	LIC	_C_	39.5	51.30	27 49 09.7	68.000	11.1	81.0	27.9	-30.6*
Gulfport		FL		219.6	BLH20111004ADI	82 15 38.7	472	491	Citicasters Licenses, Inc.		(2)
276C2	WHKQ	LIC	ZCX	38.6	156.30	28 33 32.0	22.000	128.4	51.8	15.5	65.5
Windermere		FL		219.1	BLH20090317ACS	81 35 39.0	227	259	Ttb Media Corporation		
275D	W221CE	CP	_C_	9.5	48.31	27 53 31.9	0.200	12.8	9.2	23.7	24.5
Wesley Chapel	South	FL		189.5	BPFT20140811AAV	82 30 40.7		55	Reach Communications, Inc.		
275C1	WJGO	LIC	NCX	148.7	126.83	26 29 16.0	96.000	86.3	56.9	28.2	51.5
Tice		FL		329.0	BLH20071212ABB	81 55 46.0	142	144	Renda Broadcasting Corp. O		
223C2	WYUU	LIC	_C_	332.6	47.43	27 50 32.0	50.000	36.5	10.8	14.5R	32.9M
Safety Harbor		FL		152.5	BLH19990720KH	82 48 52.0	149	151	Cbs Radio Stations Inc.		
277D	W277CP	CP	DV_	141.5	65.40	27 00 09.0	0.200	3.5	2.4	49.5	42.0
Port Charlotte		FL		321.7	BNPFT20130829ADZ	82 10 54.0	95	97	Citicasters Licenses, L.p.		

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 protected contour.

- (1) See E1A for disproof of interference to WHPT.  
(2) See E1B for disproof of interference to WFUS.

# E1A

W276CR.C BRADENTON, FL  
 74.1204(d) Showing  
 Translator or LPFM Maximum Licensed ERP = 0.25  
 Translator or LPFM Antenna Height AG = 91 Meters  
 W276CR.C Antenna Model = SHPX3H

Protected Station's Contour = 83.1741 dBu  
 Translator's or LPFM's full Interference contour 123.1741

Review Azimuth = 90 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 = 34.4 km  
 Protected Station= WHPT, 100 kW, 520 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	076.9600	076.9600	091.000
01.00	0.999	1.0	0.2495	076.8830	076.8713	089.658
02.00	0.998	1.0	0.2490	076.8061	076.7593	088.320
03.00	0.995	1.0	0.2475	076.5752	076.4702	086.992
04.00	0.992	1.0	0.2460	076.3443	076.1583	085.674
05.00	0.987	1.0	0.2435	075.9595	075.6705	084.380
06.00	0.981	1.0	0.2406	075.4978	075.0842	083.108
07.00	0.975	1.0	0.2377	075.0360	074.4767	081.855
08.00	0.967	1.0	0.2338	074.4203	073.6961	080.643
09.00	0.959	1.0	0.2299	073.8046	072.8960	079.454
10.00	0.949	1.0	0.2252	073.0350	071.9255	078.318
11.00	0.939	1.0	0.2204	072.2654	070.9377	077.211
12.00	0.928	1.0	0.2153	071.4189	069.8582	076.151
13.00	0.915	1.0	0.2093	070.4184	068.6136	075.159
14.00	0.902	1.0	0.2034	069.4179	067.3559	074.206
15.00	0.889	1.0	0.1976	068.4174	066.0862	073.292
16.00	0.874	1.0	0.1910	067.2630	064.6574	072.460
17.00	0.859	1.0	0.1845	066.1086	063.2200	071.672
18.00	0.843	1.0	0.1777	064.8773	061.7020	070.952
19.00	0.827	1.0	0.1710	063.6459	060.1784	070.279
20.00	0.81	1.0	0.1640	062.3376	058.5782	069.679
21.00	0.792	1.0	0.1568	060.9523	056.9039	069.157
22.00	0.774	1.0	0.1498	059.5670	055.2296	068.686
23.00	0.756	1.0	0.1429	058.1818	053.5566	068.267
24.00	0.737	1.0	0.1358	056.7195	051.8159	067.930
25.00	0.718	1.0	0.1289	055.2573	050.0801	067.647
26.00	0.698	1.0	0.1218	053.7181	048.2815	067.452
27.00	0.678	1.0	0.1149	052.1789	046.4917	067.311
28.00	0.658	1.0	0.1082	050.6397	044.7122	067.226
29.00	0.638	1.0	0.1018	049.1005	042.9442	067.196
30.00	0.617	1.0	0.0952	047.4843	041.1226	067.258
31.00	0.597	1.0	0.0891	045.9451	039.3826	067.337
32.00	0.576	1.0	0.0829	044.3290	037.5931	067.509
33.00	0.555	1.0	0.0770	042.7128	035.8220	067.737
34.00	0.535	1.0	0.0716	041.1736	034.1345	067.976
35.00	0.514	1.0	0.0660	039.5574	032.4036	068.311
36.00	0.494	1.0	0.0610	038.0182	030.7574	068.653
37.00	0.473	1.0	0.0559	036.4021	029.0720	069.093
38.00	0.453	1.0	0.0513	034.8629	027.4723	069.536

## E1A

39.00	0.433	1.0	0.0469	033.3237	025.8974	070.029
40.00	0.414	1.0	0.0428	031.8614	024.4073	070.520
41.00	0.394	1.0	0.0388	030.3222	022.8845	071.107
42.00	0.375	1.0	0.0352	028.8600	021.4472	071.689
43.00	0.357	1.0	0.0319	027.4747	020.0937	072.262
44.00	0.338	1.0	0.0286	026.0125	018.7118	072.930
45.00	0.32	1.0	0.0256	024.6272	017.4141	073.586
46.00	0.303	1.0	0.0230	023.3189	016.1987	074.226
47.00	0.286	1.0	0.0204	022.0106	015.0112	074.902
48.00	0.269	1.0	0.0181	020.7022	013.8525	075.615
49.00	0.253	1.0	0.0160	019.4709	012.7740	076.305
50.00	0.227	1.0	0.0129	017.4699	011.2294	077.617
51.00	0.222	1.0	0.0123	017.0851	010.7520	077.722
52.00	0.207	1.0	0.0107	015.9307	009.8079	078.446
53.00	0.193	1.0	0.0093	014.8533	008.9389	079.138
54.00	0.179	1.0	0.0080	013.7758	008.0972	079.855
55.00	0.166	1.0	0.0069	012.7754	007.3276	080.535
56.00	0.154	1.0	0.0059	011.8518	006.6275	081.174
57.00	0.142	1.0	0.0050	010.9283	005.9520	081.835
58.00	0.13	1.0	0.0042	010.0048	005.3017	082.515
59.00	0.119	1.0	0.0035	009.1582	004.7168	083.150
60.00	0.109	1.0	0.0030	008.3886	004.1943	083.735
61.00	0.099	1.0	0.0025	007.6190	003.6938	084.336
62.00	0.09	1.0	0.0020	006.9264	003.2517	084.884
63.00	0.082	1.0	0.0017	006.3107	002.8650	085.377
64.00	0.073	1.0	0.0013	005.6181	002.4628	085.951
65.00	0.066	1.0	0.0011	005.0794	002.1466	086.397
66.00	0.059	1.0	0.0009	004.5406	001.8468	086.852
67.00	0.052	1.0	0.0007	004.0019	001.5637	087.316
68.00	0.046	1.0	0.0005	003.5402	001.3262	087.718
69.00	0.04	1.0	0.0004	003.0784	001.1032	088.126
70.00	0.035	1.0	0.0003	002.6936	000.9213	088.469
71.00	0.03	1.0	0.0002	002.3088	000.7517	088.817
72.00	0.026	1.0	0.0002	002.0010	000.6183	089.097
73.00	0.022	1.0	0.0001	001.6931	000.4950	089.381
74.00	0.019	1.0	0.0001	001.4622	000.4030	089.594
75.00	0.016	1.0	0.0001	001.2314	000.3187	089.811
76.00	0.013	1.0	0.0000	001.0005	000.2420	090.029
77.00	0.011	1.0	0.0000	000.8466	000.1904	090.175
78.00	0.008	1.0	0.0000	000.6157	000.1280	090.398
79.00	0.007	1.0	0.0000	000.5387	000.1028	090.471
80.00	0.005	1.0	0.0000	000.3848	000.0668	090.621
81.00	0.004	1.0	0.0000	000.3078	000.0482	090.696
82.00	0.003	1.0	0.0000	000.2309	000.0321	090.771
83.00	0.002	1.0	0.0000	000.1539	000.0188	090.847
84.00	0.001	1.0	0.0000	000.0770	000.0080	090.923
85.00	0.001	1.0	0.0000	000.0770	000.0067	090.923
86.00	0.001	1.0	0.0000	000.0770	000.0054	090.923
87.00	0.0	1.0	0.0000	000.0077	000.0004	090.992
88.00	0.0	1.0	0.0000	000.0077	000.0003	090.992
89.00	0.0	1.0	0.0000	000.0077	000.0001	090.992
90.00	0.0	1.0	0.0000	000.0077	000.0000	090.992

# E1B

W276CR.C BRADENTON, FL

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 91 Meters

W276CR.C Antenna Model = SHPX3H

Protected Station's Contour = 72.50892 dBu

Translator's or LPFM's full Interference contour 112.50892

Review Azimuth = 90 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 = 51.3 km

Protected Station= WFUS, 68 kW, 491 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	262.7387	262.7387	091.000
01.00	0.999	1.0	0.2495	262.4759	262.4360	086.419
02.00	0.998	1.0	0.2490	262.2132	262.0535	081.849
03.00	0.995	1.0	0.2475	261.4250	261.0667	077.318
04.00	0.992	1.0	0.2460	260.6368	260.0019	072.819
05.00	0.987	1.0	0.2435	259.3231	258.3363	068.399
06.00	0.981	1.0	0.2406	257.7466	256.3347	064.058
07.00	0.975	1.0	0.2377	256.1702	254.2608	059.781
08.00	0.967	1.0	0.2338	254.0683	251.5957	055.641
09.00	0.959	1.0	0.2299	251.9664	248.8643	051.584
10.00	0.949	1.0	0.2252	249.3390	245.5510	047.703
11.00	0.939	1.0	0.2204	246.7116	242.1788	043.925
12.00	0.928	1.0	0.2153	243.8215	238.4934	040.307
13.00	0.915	1.0	0.2093	240.4059	234.2443	036.920
14.00	0.902	1.0	0.2034	236.9903	229.9507	033.667
15.00	0.889	1.0	0.1976	233.5747	225.6158	030.546
16.00	0.874	1.0	0.1910	229.6336	220.7380	027.704
17.00	0.859	1.0	0.1845	225.6925	215.8308	025.014
18.00	0.843	1.0	0.1777	221.4887	210.6483	022.556
19.00	0.827	1.0	0.1710	217.2849	205.4469	020.259
20.00	0.81	1.0	0.1640	212.8183	199.9838	018.212
21.00	0.792	1.0	0.1568	208.0890	194.2678	016.428
22.00	0.774	1.0	0.1498	203.3597	188.5519	014.820
23.00	0.756	1.0	0.1429	198.6304	182.8403	013.389
24.00	0.737	1.0	0.1358	193.6384	176.8975	012.240
25.00	0.718	1.0	0.1289	188.6464	170.9717	011.275
26.00	0.698	1.0	0.1218	183.3916	164.8313	010.606
27.00	0.678	1.0	0.1149	178.1368	158.7211	010.128
28.00	0.658	1.0	0.1082	172.8820	152.6458	009.837
29.00	0.638	1.0	0.1018	167.6273	146.6101	009.733
30.00	0.617	1.0	0.0952	162.1098	140.3912	009.945
31.00	0.597	1.0	0.0891	156.8550	134.4510	010.214
32.00	0.576	1.0	0.0829	151.3375	128.3415	010.803
33.00	0.555	1.0	0.0770	145.8200	122.2949	011.581
34.00	0.535	1.0	0.0716	140.5652	116.5338	012.397
35.00	0.514	1.0	0.0660	135.0477	110.6246	013.540
36.00	0.494	1.0	0.0610	129.7929	105.0047	014.710
37.00	0.473	1.0	0.0559	124.2754	099.2507	016.209
38.00	0.453	1.0	0.0513	119.0206	093.7895	017.724

## E1B

39.00	0.433	1.0	0.0469	113.7658	088.4127	019.405
40.00	0.414	1.0	0.0428	108.7738	083.3256	021.082
41.00	0.394	1.0	0.0388	103.5190	078.1268	023.085
42.00	0.375	1.0	0.0352	098.5270	073.2198	025.073
43.00	0.357	1.0	0.0319	093.7977	068.5993	027.030
44.00	0.338	1.0	0.0286	088.8057	063.8815	029.310
45.00	0.32	1.0	0.0256	084.0764	059.4510	031.549
46.00	0.303	1.0	0.0230	079.6098	055.3016	033.733
47.00	0.286	1.0	0.0204	075.1433	051.2476	036.044
48.00	0.269	1.0	0.0181	070.6767	047.2919	038.477
49.00	0.253	1.0	0.0160	066.4729	043.6101	040.832
50.00	0.227	1.0	0.0129	059.6417	038.3369	045.312
51.00	0.222	1.0	0.0123	058.3280	036.7070	045.671
52.00	0.207	1.0	0.0107	054.3869	033.4839	048.143
53.00	0.193	1.0	0.0093	050.7086	030.5172	050.502
54.00	0.179	1.0	0.0080	047.0302	027.6437	052.952
55.00	0.166	1.0	0.0069	043.6146	025.0163	055.273
56.00	0.154	1.0	0.0059	040.4618	022.6259	057.456
57.00	0.142	1.0	0.0050	037.3089	020.3199	059.710
58.00	0.13	1.0	0.0042	034.1560	018.0999	062.034
59.00	0.119	1.0	0.0035	031.2659	016.1031	064.200
60.00	0.109	1.0	0.0030	028.6385	014.3193	066.198
61.00	0.099	1.0	0.0025	026.0111	012.6104	068.250
62.00	0.09	1.0	0.0020	023.6465	011.1014	070.121
63.00	0.082	1.0	0.0017	021.5446	009.7810	071.804
64.00	0.073	1.0	0.0013	019.1799	008.4079	073.761
65.00	0.066	1.0	0.0011	017.3408	007.3285	075.284
66.00	0.059	1.0	0.0009	015.5016	006.3051	076.839
67.00	0.052	1.0	0.0007	013.6624	005.3383	078.424
68.00	0.046	1.0	0.0005	012.0860	004.5275	079.794
69.00	0.04	1.0	0.0004	010.5095	003.7663	081.188
70.00	0.035	1.0	0.0003	009.1959	003.1452	082.359
71.00	0.03	1.0	0.0002	007.8822	002.5662	083.547
72.00	0.026	1.0	0.0002	006.8312	002.1110	084.503
73.00	0.022	1.0	0.0001	005.7803	001.6900	085.472
74.00	0.019	1.0	0.0001	004.9920	001.3760	086.201
75.00	0.016	1.0	0.0001	004.2038	001.0880	086.939
76.00	0.013	1.0	0.0000	003.4156	000.8263	087.686
77.00	0.011	1.0	0.0000	002.8901	000.6501	088.184
78.00	0.008	1.0	0.0000	002.1019	000.4370	088.944
79.00	0.007	1.0	0.0000	001.8392	000.3509	089.195
80.00	0.005	1.0	0.0000	001.3137	000.2281	089.706
81.00	0.004	1.0	0.0000	001.0510	000.1644	089.962
82.00	0.003	1.0	0.0000	000.7882	000.1097	090.219
83.00	0.002	1.0	0.0000	000.5255	000.0640	090.478
84.00	0.001	1.0	0.0000	000.2627	000.0275	090.739
85.00	0.001	1.0	0.0000	000.2627	000.0229	090.738
86.00	0.001	1.0	0.0000	000.2627	000.0183	090.738
87.00	0.0	1.0	0.0000	000.0263	000.0014	090.974
88.00	0.0	1.0	0.0000	000.0263	000.0009	090.974
89.00	0.0	1.0	0.0000	000.0263	000.0005	090.974
90.00	0.0	1.0	0.0000	000.0263	000.0000	090.974



39th Ave W

112.509 (50:10) dBu

40th Ave W

43rd Ave W

W276CR APP (276)

44th Ave W

684

34th St W

35th St W

32nd St W

30th St W

45th Ave W

543 ft

© 2014 Google

Google Earth

Orange Cir

Main St

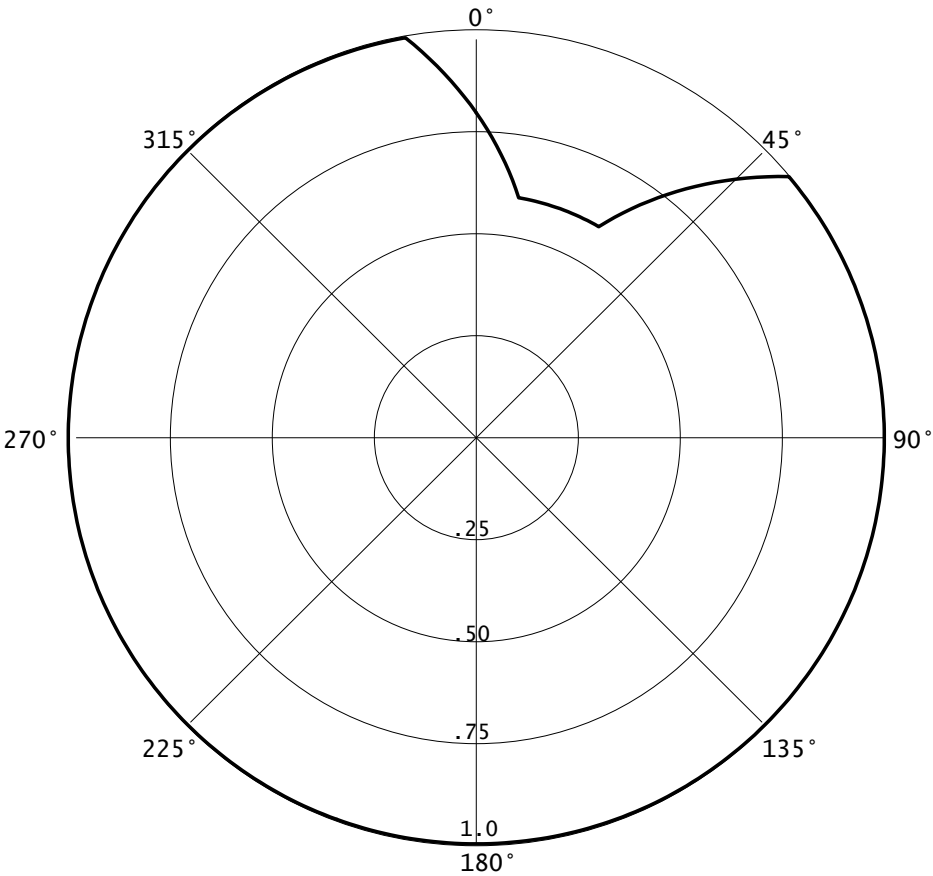
2nd St W



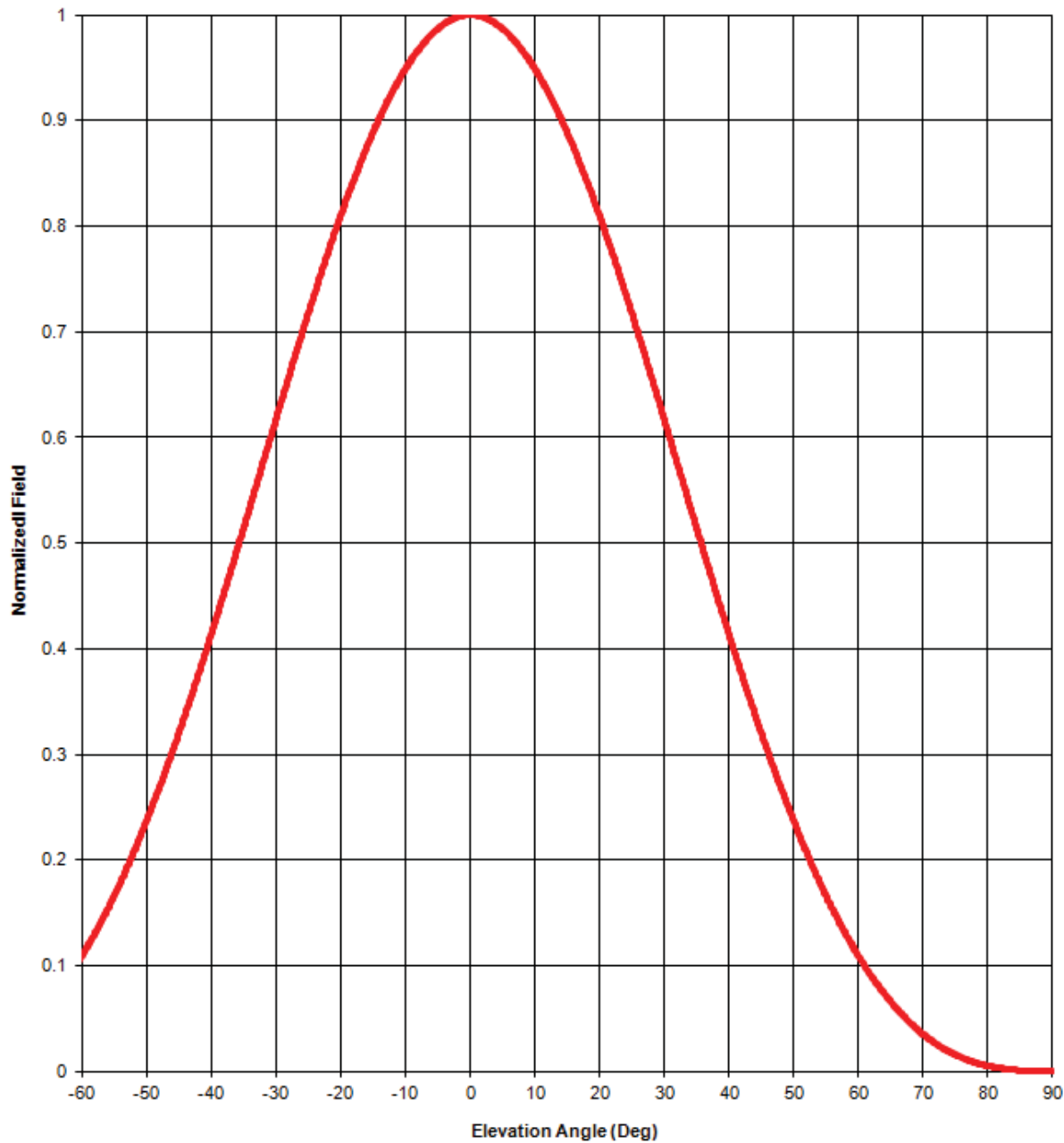


Graph is Relative Field

Azi	Field	dBk	kw
000	0.800	-07.959	0.160
010	0.600	-10.458	0.090
020	0.600	-10.458	0.090
030	0.600	-10.458	0.090
040	0.800	-07.959	0.160
050	1.000	-06.021	0.250
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	1.000	-06.021	0.250
190	1.000	-06.021	0.250
200	1.000	-06.021	0.250
210	1.000	-06.021	0.250
220	1.000	-06.021	0.250
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	1.000	-06.021	0.250
330	1.000	-06.021	0.250
340	1.000	-06.021	0.250
350	1.000	-06.021	0.250



## Elevation pattern



Antenna models: 6014, 6015, 6020, 6510, 6513, 6600, & 68xx except 6832, 2-bay half-wave-spaced

Test frequency: 98.1 MHz

Gain (maximum):

	Power	dB
6014, 6015, 68xx:	0.71	-1.51 dB
6510, 6513, 6600:	1.42	1.49 dB

[Document No. 68xx 2-bay hw \(130628\)](#)

A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA

(207) 647-3327

1-888-SHIVELY

Fax: (207)647-8273

An Employee-Owned Company

[www.shively.com](http://www.shively.com)

[sales@shively.com](mailto:sales@shively.com)

Certified to ISO-9001

Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field	Degrees	Rel. Field
1	0.999	19	0.827	37	0.473	55	0.166	73	0.022
2	0.998	20	0.810	38	0.453	56	0.154	74	0.019
3	0.995	21	0.792	39	0.433	57	0.142	75	0.016
4	0.992	22	0.774	40	0.414	58	0.130	76	0.013
5	0.987	23	0.756	41	0.394	59	0.119	77	0.011
6	0.981	24	0.737	42	0.375	60	0.109	78	0.008
7	0.975	25	0.718	43	0.357	61	0.099	79	0.007
8	0.967	26	0.698	44	0.338	62	0.090	80	0.005
9	0.959	27	0.678	45	0.320	63	0.082	81	0.004
10	0.949	28	0.658	46	0.303	64	0.073	82	0.003
11	0.939	29	0.638	47	0.286	65	0.066	83	0.002
12	0.928	30	0.617	48	0.269	66	0.059	84	0.001
13	0.915	31	0.597	49	0.253	67	0.052	85	0.001
14	0.903	32	0.576	50	0.237	68	0.046	86	0.001
15	0.889	33	0.555	51	0.222	69	0.040	87	0.000
16	0.874	34	0.535	52	0.207	70	0.035	88	0.000
17	0.859	35	0.514	53	0.193	71	0.030	89	0.000
18	0.843	36	0.494	54	0.179	72	0.026	90	0.000

## Elevation Pattern Tabulation

Antenna models: 6014, 6015, 6020, 6510, 6513, 6600, 68xx except 6832, & Versa2une, 2-bay half-wave-spaced.

Relative Field at 0° Depression = 1.000

## EXHIBIT E2

**W276CR.APP**  
BMPFT20140909AFS  
Latitude: 27-27-49 N  
Longitude: 082-35-33 W  
ERP: 0.25 kW  
Channel: 276  
Frequency: 103.1 MHz  
AMSL Height: 99.0 m  
Elevation: 8.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

WLSS  
25 MILE  
RADIUS

WLSS 2 MV/M

PROPOSED 60 DBU

W276CR LONG FORM CP 60 DBU  
IS OVERLAPPED BY PROPOSED 60 DBU

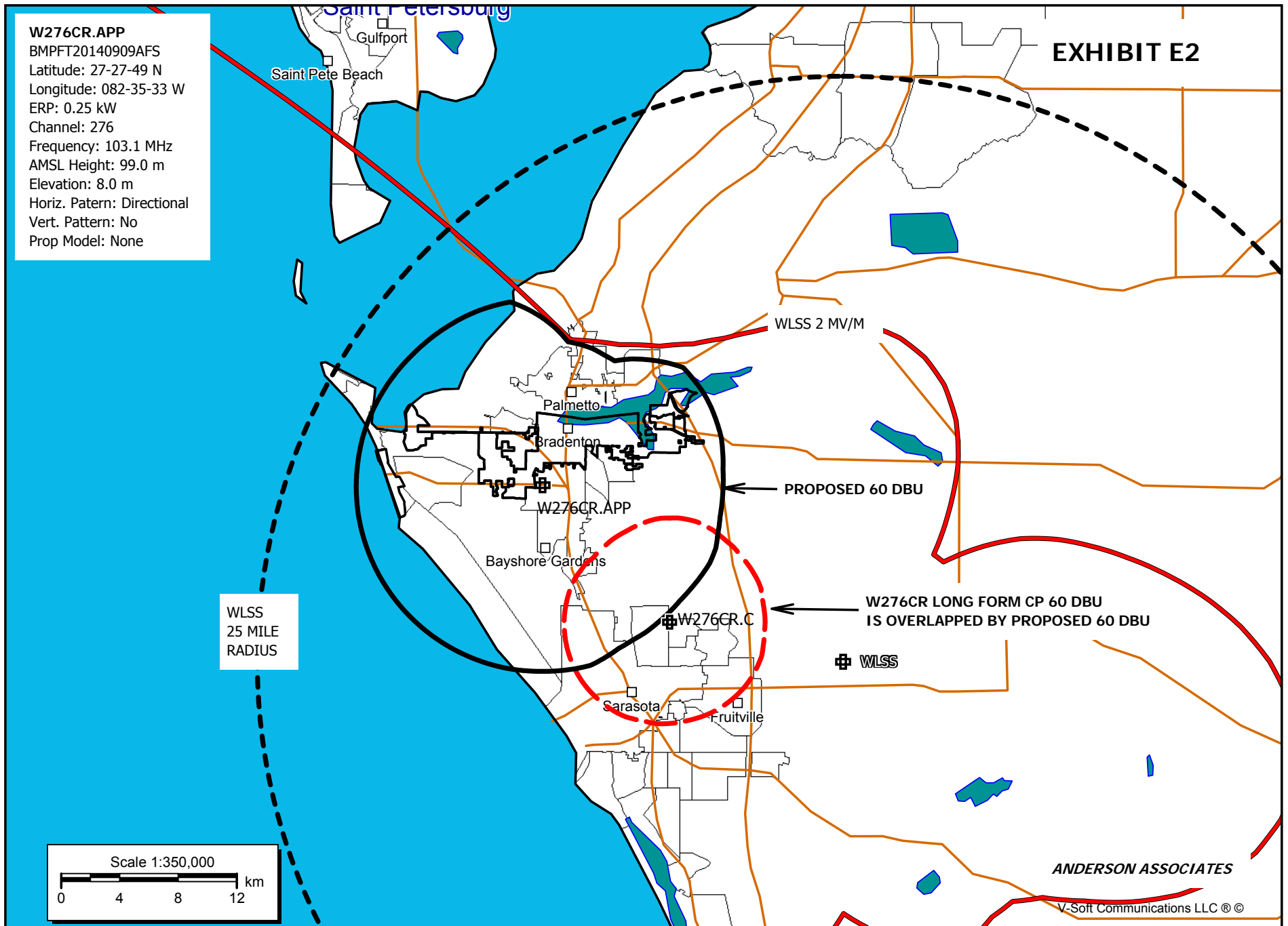
WLSS

Scale 1:350,000

0 4 8 12 km

ANDERSON ASSOCIATES

V-Soft Communications LLC ® ©



# Registration 1038785

 [Map Registration](#)

## Registration Detail

Reg Number	1038785	Status	Constructed
File Number	A0920106	Constructed	03/30/1995
EMI	No	Dismantled	
NEPA	No		

## Antenna Structure

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

### Location (in NAD83 Coordinates)

Lat/Long	27-27-50.0 N 082-35-32.0 W	Address	4301 32ND STREET WEST
City, State	BRADENTON , FL		
Zip	34205	County	MANATEE
Center of AM Array		Position of Tower in Array	

### Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
7.6	99.5
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
107.1	98.4

## Painting and Lighting Specifications

FAA Chapters 4, 6, 13

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

## FAA Notification

FAA Study	99-ASO-6633-OE	FAA Issue Date	12/21/1999
-----------	----------------	----------------	------------

## Owner & Contact Information

FRN	0011498342	Owner Entity Type	Limited Liability Company
Assignor FRN	0009764150	Assignor ID	L00759842

### Owner

Global Tower, LLC. through American Towers, LLC  
Attention To: FAA/FCC Regulatory  
10 Presidential Way  
Woburn , MA 01801

P: (678)265-6770  
F:  
E: faa-fcc@americantower.com

### Contact

Attention To: FAA/FCC Regulatory  
10 Presidential Way  
Woburn , MA 01801

P: (678)265-6770  
F:  
E: faa-fcc@americantower.com

## Last Action Status

Status	Constructed	Received	08/29/2014
Purpose	Change Owner	Entered	08/29/2014
Mode	Interactive		

## Related Applications

08/29/2014	A0920106	- Change Owner (OC)
08/29/2014	A0917711	- Change Owner (OC)

## Output from NADCON for station W276CR

# North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

Transformation #: 1                      Region: Conus

	Latitude	Longitude
NAD 27 datum values:	27 27 48.85533	82 35 32.64831
NAD 83 datum values:	27 27 50.00000	82 35 32.00000
NAD 27 - NAD 83 shift values:	-1.14467	0.64831(secs.)
	-35.234	17.801 (meters)
Magnitude of total shift:		39.475(meters)



**NGS HOME PAGE**