SECOND ADJACENT EXHIBIT & WAIVER REQUEST

WBUJ-LP - Miami, Florida - minor move
Facility ID# **192433**
NAD 27: 25 55 46.96 N, 80 12 14.03 W
NAD 83: 25 55 48.3 N, 80 12 13.2 W

- Waiver requested for site short-spaced on second-adjacent channel with WEDR BMLH-20090908ADD, WEDR, class C1, status LIC, Miami, FL, channel 256, facility ID 71418 [3]

- Waiver requested for site short-spaced on second-adjacent channel with WEDR, BLH-20151112XRD, WEDR, class C1, status LIC, Miami, FL, channel 256, facility ID 71418 [3]

- Waiver requested for site short-spaced on second-adjacent channel with WRTO, BLH-19920311KD, class C0, status LIC, Goulds, FL, channel 252, facility ID 37253 [3]

Of these facilities, worst-case interference would occur with WRTO-FM, BLH-19920311KD, and is calculated below:

Undesired-to-Desired Ratio Method

BLH-19920311KD f(50,50) signal	73.3 dBu [1][2]
Second-adjacent protection	+ 40 dB
Interference-zone boundary	133.3 dBu

Using a Shively 6812(b) three-bay full wave antenna at 71 watts 33 meters AGL, 'worst-case' interference to WRTO-FM will be limited to 18.5m radius at 26.2 meters, more than 2 meters above the rooftop. Elevation pattern calculations are provided below for the Shively antenna, demonstrating the field strength of the proposed antenna system falling quickly at depression angles below the horizon.

No population will be subject to interference from the proposed station according to the U/D method.

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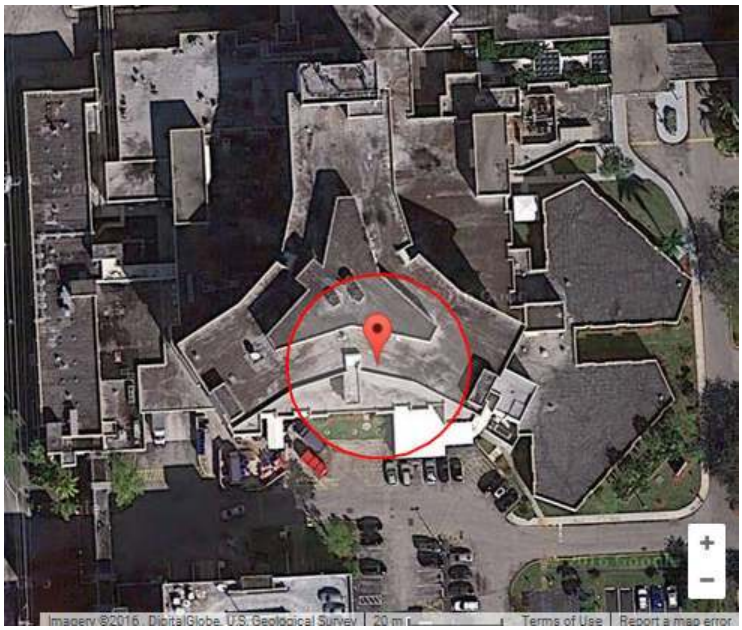

[1] tvfmfs() Fortran subroutine as distributed by the FCC. At distances less than or equal to 1.5 km, tvfmfs() uses the free-space method.
[2] FCC HAAT Calculator web page, http://transition.fcc.gov/mb/audio/bickel/haat_calculator.html
[3] CDBS database downloaded 2016-08-10 03:47:00

Shively 6812 (b) – Three-Bay Full Wave antenna

depression angle below horizon	relative field	db from relative	ERP	angular distance to contour	vertical distance	horizontal distance	clearance above ground	height above ground	interfering V/m	interfering dbu
0	1	0.00	**71.00**	127.746	0.000	127.746	33.000	**33**	0.462	**113.3**
5	0.926	-0.67	60.88	118.293	10.310	117.843	22.690	33	0.462	113.3
10	0.723	-2.82	37.11	92.360	16.038	90.957	16.962	33	0.462	113.3
15	0.443	-7.07	13.93	56.591	14.647	54.663	18.353	33	0.462	113.3
20	0.155	-16.19	1.71	19.801	6.772	18.607	**26.228**	33	0.462	113.3
25	0.081	-21.83	0.47	10.347	4.373	9.378	28.627	33	0.462	113.3
30	0.227	-12.88	3.66	28.998	14.499	25.113	18.501	33	0.462	113.3
35	0.274	-11.24	5.33	35.002	20.077	28.672	12.923	33	0.462	113.3
40	0.236	-12.54	3.95	30.148	19.379	23.095	13.621	33	0.462	113.3
45	0.146	-16.71	1.51	18.651	13.188	13.188	19.812	33	0.462	113.3
50	0.036	-28.87	0.09	4.599	3.523	2.956	29.477	33	0.462	113.3
55	0.066	-23.61	0.31	8.431	6.906	4.836	26.094	33	0.462	113.3
60	0.141	-17.02	1.41	18.012	15.599	9.006	17.401	33	0.462	113.3
65	0.183	-14.75	2.38	23.378	21.187	9.880	11.813	33	0.462	113.3
70	0.191	-14.38	2.59	24.399	22.928	8.345	10.072	33	0.462	113.3
75	0.17	-15.39	2.05	21.717	20.977	5.621	12.023	33	0.462	113.3
80	0.127	-17.92	1.15	16.224	15.977	2.817	17.023	33	0.462	113.3
85	0.069	-23.22	0.34	8.814	8.781	0.768	24.219	33	0.462	113.3
90	0.001	-60.00	0.00	0.128	0.128	0.000	32.872	33	0.462	113.3

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TOWAIR CALCULATIONS

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Antenna Structure Registration

FCC > WTB > ASR > Online Systems > TOWAIR

TOWAIR Determination Results

HELP

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A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 6355.68 MTRS (6.35569 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-54-49.00N	080-15-52.00W	OPA-LOCKA EXECUTIVE	DADE MIAMI, FL	1.8	2439.0

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7635.84 MTRS (7.63579 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-53-58.00N	080-16-19.00W	OPA-LOCKA EXECUTIVE	DADE MIAMI, FL	1.8	2439.0

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7506.61 MTRS (7.50659 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-54-2.00N	080-16-16.00W	OPA-LOCKA EXECUTIVE	DADE MIAMI, FL	1.8	2439.0

Your Specifications

NAD83 Coordinates	
Latitude	25-55-48.3 north
Longitude	080-12-13.2 west
Measurements (Meters)	
Overall Structure Height (AGL)	35
Support Structure Height (AGL)	24
Site Elevation (AMSL)	2.8
Structure Type	
B - Building	

Tower Construction Notifications
Notify Tribes and Historic Preservation Officers of your plans to build a tower.

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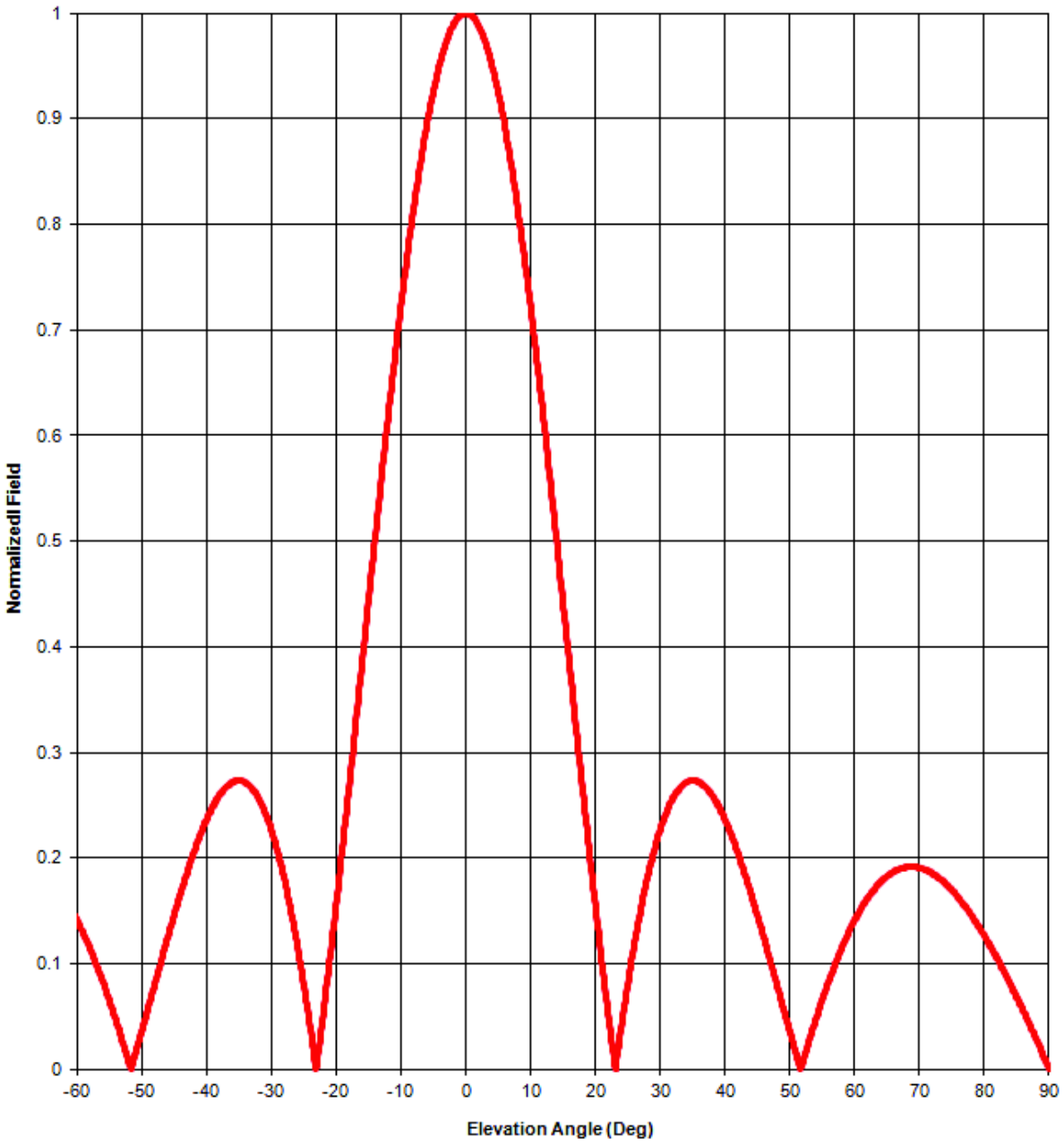
Elevation pattern



Antenna model: 6812b, 3-bay full-wave-spaced

Test frequency: 98.1 MHz

Gain (maximum):

Power	dB
1.55	1.91 dB

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(207) 647-3327 1-888-SHIVELY Fax: (207)647-8273
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Degrees	Rel. Field
1	0.997
2	0.988
3	0.973
4	0.952
5	0.926
6	0.894
7	0.858
8	0.816
9	0.771
10	0.723
11	0.671
12	0.616
13	0.560
14	0.502
15	0.443
16	0.384
17	0.325
18	0.267

Degrees	Rel. Field
19	0.210
20	0.155
21	0.102
22	0.052
23	0.004
24	0.040
25	0.081
26	0.118
27	0.151
28	0.181
29	0.206
30	0.227
31	0.244
32	0.257
33	0.266
34	0.272
35	0.274
36	0.272

Degrees	Rel. Field
37	0.267
38	0.260
39	0.249
40	0.236
41	0.221
42	0.205
43	0.186
44	0.167
45	0.146
46	0.124
47	0.103
48	0.080
49	0.058
50	0.036
51	0.014
52	0.007
53	0.028
54	0.047

Degrees	Rel. Field
55	0.066
56	0.083
57	0.100
58	0.115
59	0.129
60	0.141
61	0.153
62	0.162
63	0.171
64	0.177
65	0.183
66	0.187
67	0.190
68	0.191
69	0.192
70	0.191
71	0.189
72	0.185

Degrees	Rel. Field
73	0.181
74	0.176
75	0.170
76	0.163
77	0.155
78	0.146
79	0.137
80	0.127
81	0.116
82	0.105
83	0.093
84	0.081
85	0.069
86	0.056
87	0.042
88	0.029
89	0.015
90	0.000

Elevation Pattern Tabulation

Antenna model: 6812b, 3-bay full-wave-spaced

Relative Field at 0° Depression = 1.000