

TECHNICAL EXHIBIT  
APPLICATION FOR FM CONSTRUCTION PERMIT  
NEW FM RADIO STATION - AUCTION 68  
HOMOSASSA, FLORIDA

JANUARY 25, 2007

CH 260A    6.0 KW    100 M

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Table of Contents

Technical Narrative

Figure 1	Map of Proposed Transmitter Site
Figure 2	Sketch of Antenna and Supporting Structure
Figure 3	Map of Predicted Coverage Contours
Figure 4	Allocation Study
Figure 5	Gain/Loss Map and Tabulation
Figure 6	Protected Services Map and Tabulation

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for a new radio station to be licensed to Homosassa, Florida on Channel 260A. The applicant is the Auction 68 winner for the Channel 261A allotment at Cedar Key, Florida. The applicant proposes, via this minor-change application, to re-allot the vacant allotment on Channel 261A at Cedar Key, Florida to Channel 260A at Homosassa, Florida.

Proposed Transmitter Location

A map showing the transmitter site location is provided in Figure 1. A sketch showing the proposed antenna and supporting structure is shown on Figure 2. An FAA *Determination of No Aeronautical Hazard* is in the process of being sought.

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially less than 1 kilometer from the transmitting site. No interference is expected. However, the applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-

induced interference, as required by Sections 73.315(b), 73.316(e) and 73.318.

#### Determination of Overall Antenna HAAT

The overall antenna height above average terrain (HAAT) was determined by the method outlined in Section 73.313. The average terrain elevations along the standard eight radials, evenly spaced at 45-degree intervals, were obtained from the N.G.D.C. 30-second terrain database. The full 3 to 16 km portions of the radials were used except for those radials with portions of the 3 to 16 km segments extending over water. The portions over water were excluded from the calculation of the overall height above average terrain.<sup>1</sup>

#### Coverage Contours

The predicted coverage contours for the proposed operation were calculated in accordance with the provisions of Section 73.313. In accordance with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors. The average terrain elevations along 36 evenly spaced radials, beginning with 0° True were obtained from the N.G.D.C. 30-second terrain database. The antenna HAAT along each radial was used in combination with the effective radiated power (ERP) to determine the distance to the predicted 70 dBu and 60 dBu contours.

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<sup>1</sup> The 3 to 16 km portion of each radial was used to determine the average terrain elevation except along the 225° radial and the 270° radial where the portions over the Gulf of Mexico were excluded. The 3 to 12.7 km portion of the 225° radial was used, and the 3 to 8.1 km portion of the 270° radial was used.

The coverage contours are shown on a map included as Figure 3. As can be seen on the map, the predicted 70 dBu contour encompasses all of Homosassa, Florida. The Homosassa limits were obtained from the 2000 U.S. Census.

#### Allocation Study

Figure 4 is an allocation study for Channel 260A at the proposed site. The figure contains a tabulation of actual and required separation distances from other pertinent stations and allotments. The proposed site meets the FCC's minimum separation requirements, specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations except with respect to its own Channel 261A allotment at Cedar Key, Florida, which is the subject of this application.

It should be noted that the allocation study reflects a prohibited short-spacing to the WGNE-FM Channel 260C0 at Middleburg, Florida allotment reference point. However, this Channel 260C0 allotment reference point is not valid. WGNE-FM, in MM Docket Number 01-177 was ordered from Channel 260C at Palatka, Florida to Channel 260C0 at Middleburg, Florida. In response to this Order, WGNE-FM filed is application for construction permit, FCC File Number: BPH-20030417ABW, for operation at Middleburg, but the application further modified the station Class to C1. The application even stated within its technical exhibit (see Attachment 26 within application) "This is a downgrade from the allocated C0 facility for this station." WGNE-FM constructed and licensed this Class C1 facility (FCC File Number: BLH-20050516ACS).

Furthermore, the Commission also granted the allotment for a new FM service at Silver Springs, Florida on Channel 259A in MB Docket 05-275 that does not provide allocation protection to the WGNE-FM Class C0 allotment reference point. Therefore, for these reasons, the WGNE-FM Class C0 reference point is no longer entitled to allocation protection as it was downgraded by the licensee to Channel 260C1.

Community of License Change - Section 307(b)

*1. Proposal*

It is proposed to re-allot the unbuilt Channel 261A from Cedar Key, Florida to Channel 260A at Homosassa, Florida.

*2. City Populations and Local Service*

Cedar Key has a 2000 U.S. Census population of 790 persons. Cedar Key would have one assigned aural transmission service remaining, WRGO, Channel 274C3. Homosassa has a U.S. Census population of 2,294 persons and has no local FM or AM transmission service. Thus, the proposal will result in first local aural transmission service at Homosassa, Florida.

*3. Urbanized Area Considerations*

Homosassa is not located within an urbanized area. The proposed 70 dBu reference contour for the allotment reference coordinates will encompass 6.1% of the Brooksville urbanized population and 6.9% of its area. The 70 dBu allotment reference contour for Channel 261A at Cedar Key does not encompass any urbanized area.

*4. 60 dBu Gain and Loss Areas and Available Aural Services*

The Channel 261A Cedar Key loss area contains 2,212 persons over 802 square kilometers of land area. The Channel 260A Homosassa gain area contains 191,304 persons over 1,788 square kilometers of land area. Area was calculated using a root mean square algorithm.

*5. 70 dBu and 60 dBu Coverage*

The following tabulates the area and population within the 70 dBu and 60 dBu contours depicted in Figure 3.

Contour	Population (2000 Census)	Land Area (sq. km)
70 dBu	33,742	666
60 dBu	184,117	1,711

Contour locations calculated in accordance with the provisions of Section 73.313. Population calculated using a computer program that utilizes the 2000 U.S. Census database of "population centroids".

*6. Protected FM and AM Services Available*

It has been determined that there are four protected services available to Cedar Key<sup>2</sup> and at least nine to Homosassa as shown in Figure 6.

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<sup>2</sup> The other protected services at the community of Cedar Key are WKTK, WKZY, WRGO, and the vacant allotment on channel 240C3 at Otter Creek, FL

Radiofrequency Electromagnetic Field Exposure Analysis

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*.<sup>3</sup> The power density at the base of the tower was calculated using the appropriate procedure contained in Section 2, Supplement A, *Additional Information for Radio and Television Broadcast Stations*, of the Bulletin.

For the calculation, a combined horizontal and vertical polarized ERP of 12 kilowatts is employed with a radiation center of 105 meters above ground level. A downward relative field value of 0.5 was assumed. It is calculated that the power density will not exceed 0.0094 mW/cm<sup>2</sup> at two meters above ground level. This is 4.7 percent of the Commission's guideline value for an uncontrolled environment for a FM radio station.<sup>4</sup> There are no other known high-powered emitters in the nearby vicinity.

Access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

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<sup>3</sup> OET Bulletin 65, Second Edition 97-01, August, 1997.

<sup>4</sup> The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is 0.2 mW/cm<sup>2</sup>.

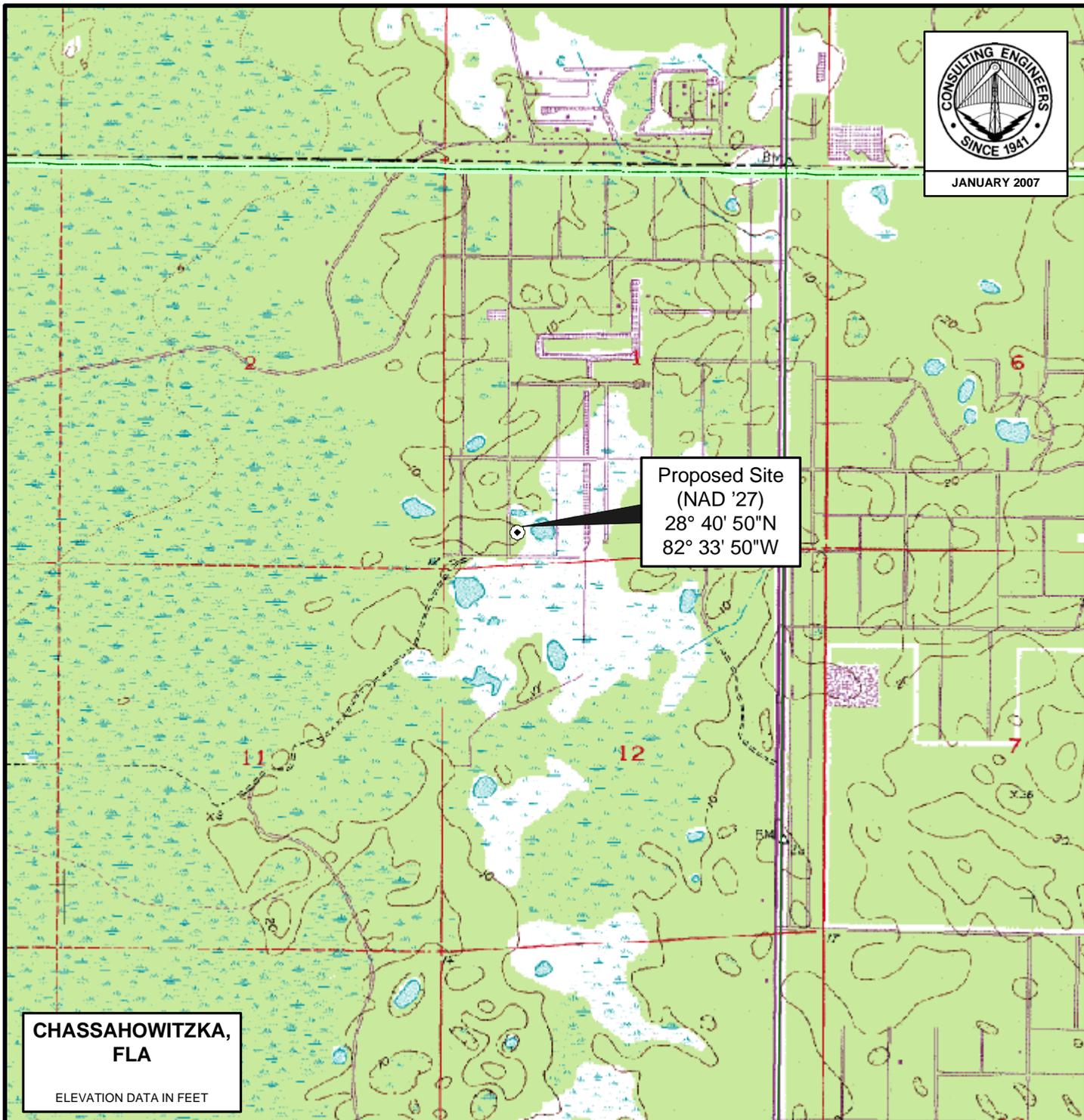
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

Charles A. Cooper

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
941.329.6000

January 25, 2007

Figure 1



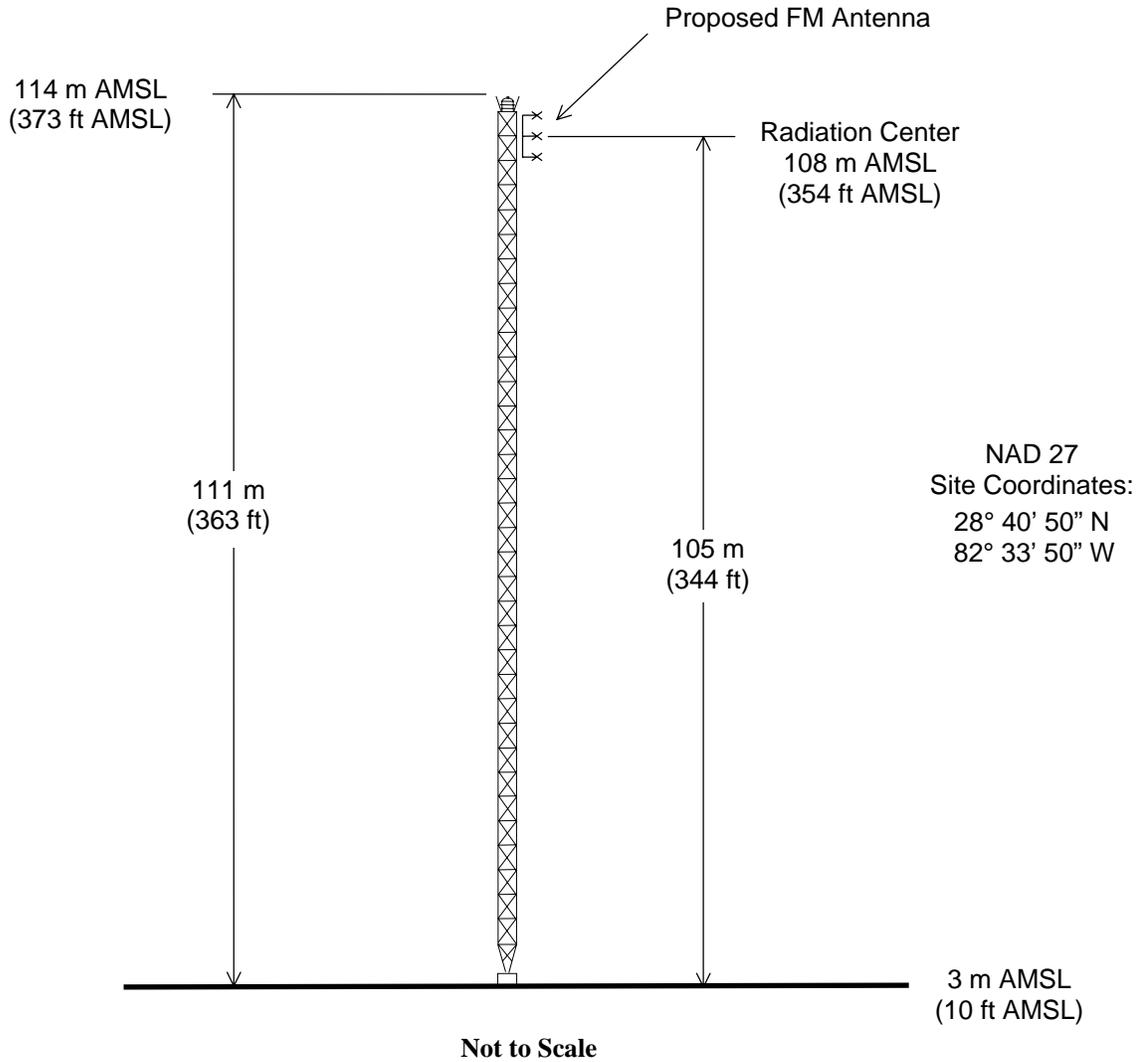
## PROPOSED TRANSMITTER SITE

NEW CHANNEL 260A  
HOMOSASSA, FLORIDA  
CH 260A 6.0 KW 100 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



ASRN: To Be Filed



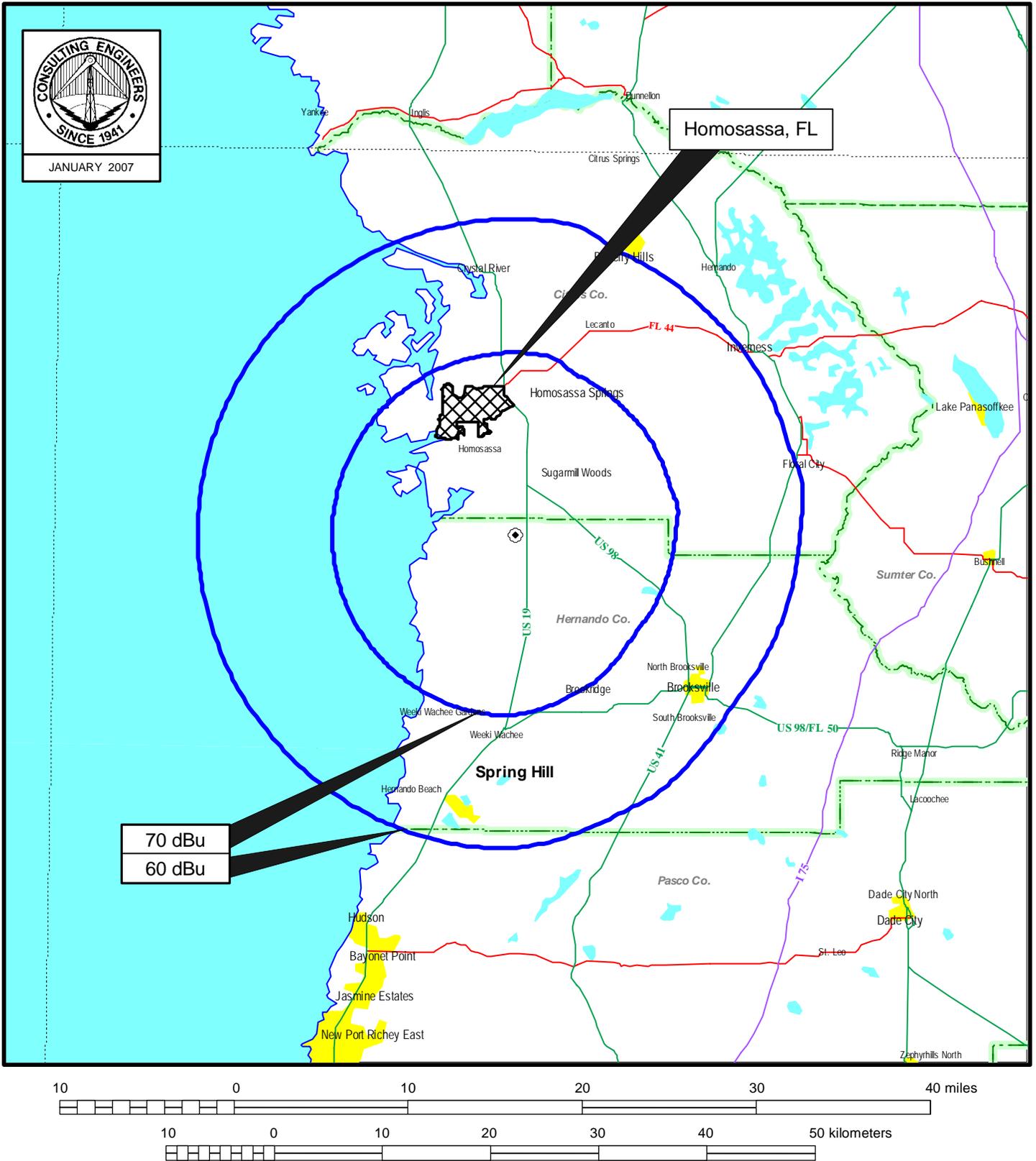
## ANTENNA AND SUPPORTING STRUCTURE

NEW CHANNEL 260A

HOMOSSASSA, FLORIDA

CH 260A 6.0 KW 100 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



**FCC PREDICTED COVERAGE CONTOURS**

NEW CHANNEL 260A  
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Allocation Study

Job Title: HOMOSASSA FL  
 Channel: 260 A

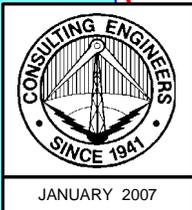
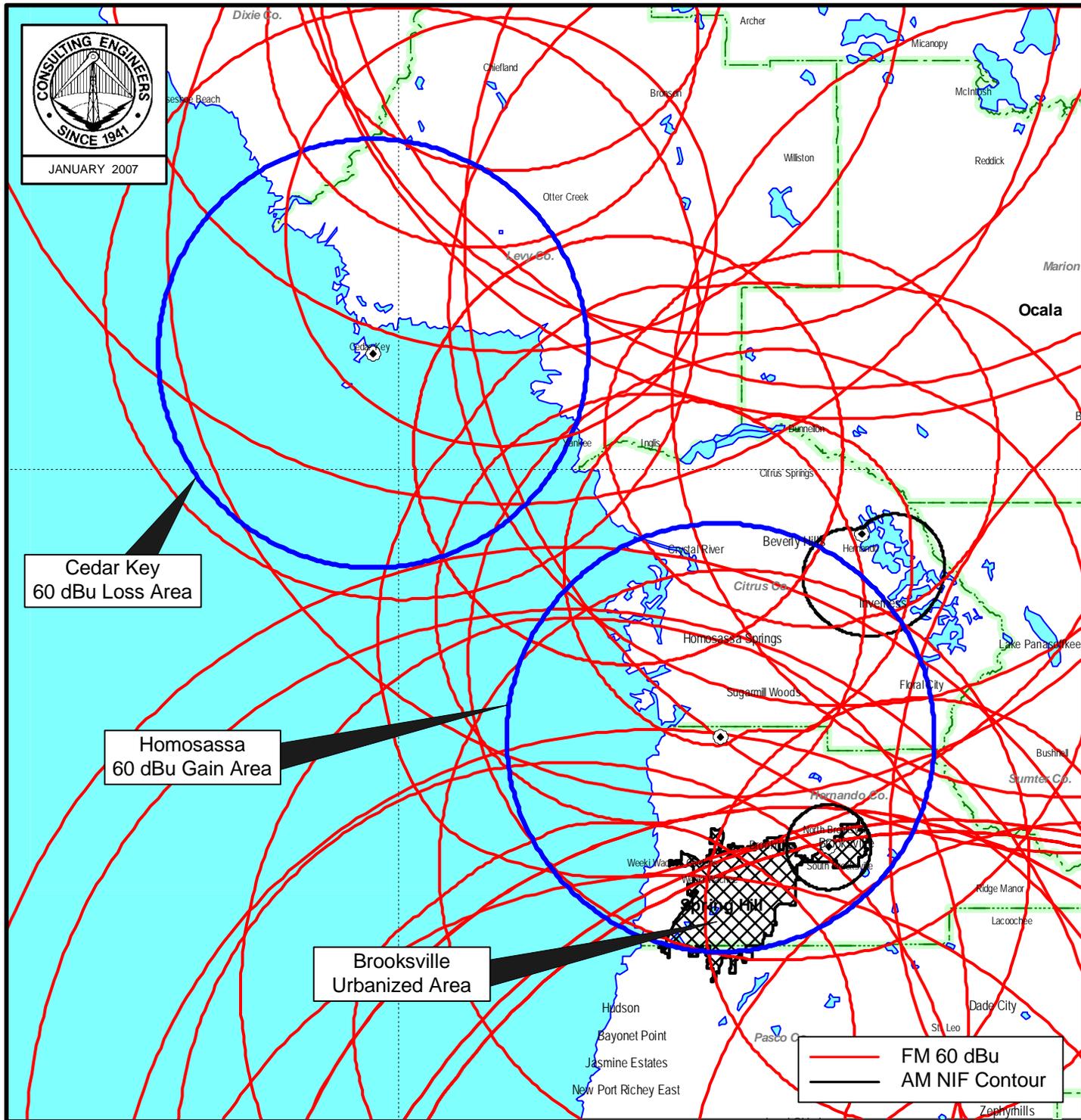
Separation Buffer: 32 km  
 Coordinates: 284050 0823350

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WFBI 164174	INGLIS FL CP	BNPH C 20050103AHE	257 A 99.3	4.600 114	N	29-08-04 082-38-34	N	351.4	50.89	31.0
WQYK-FMST. 28619	PETERSB FL LIC	BMLH C 20010220AAI	258 C1 99.5	100.000 168	N	27-56-51 082-27-33	N	172.8	81.88	75.0
0	SILVER FL VAC	SPRI RM C 11275	259 A 99.7	0.000		29-08-09 082-02-33		44.9	71.64	72.0 <sup>1</sup>
0	MIDDLEBURG FL RSV	RM C 10389	260 C0 99.9	0.000		29-59-40 081-19-39		39.1	188.75	215.0 <sup>2</sup>
WGNE-FM 15897	MIDDLEBURG FL LIC	BLH C 20050516ACS	260 C1 99.9	48.000 300	N	30-19-22 081-38-34	Y	25.8	202.76	200.0
106534	CEDAR KEY FL VAC	C	261 A 100.1	0.000	N	29-08-12 083-02-06	N	318.0	68.31	72.0 <sup>3</sup>

<sup>1</sup> Distance rounds to 72 km.

<sup>2</sup> Modified per one-step downgrade application, see licensed WGNE-FM, channel 260C1, Middleburg, FL.

<sup>3</sup> Applicant is the auction winner for this allotment at Cedar Key, Florida. This application and petition for rule-making requests re-allotment of channel 261A at Cedar Key, Florida to channel 260A at Homosassa, Florida.



Cedar Key  
60 dBu Loss Area

Homosassa  
60 dBu Gain Area

Brooksville  
Urbanized Area

— FM 60 dBu  
— AM NIF Contour



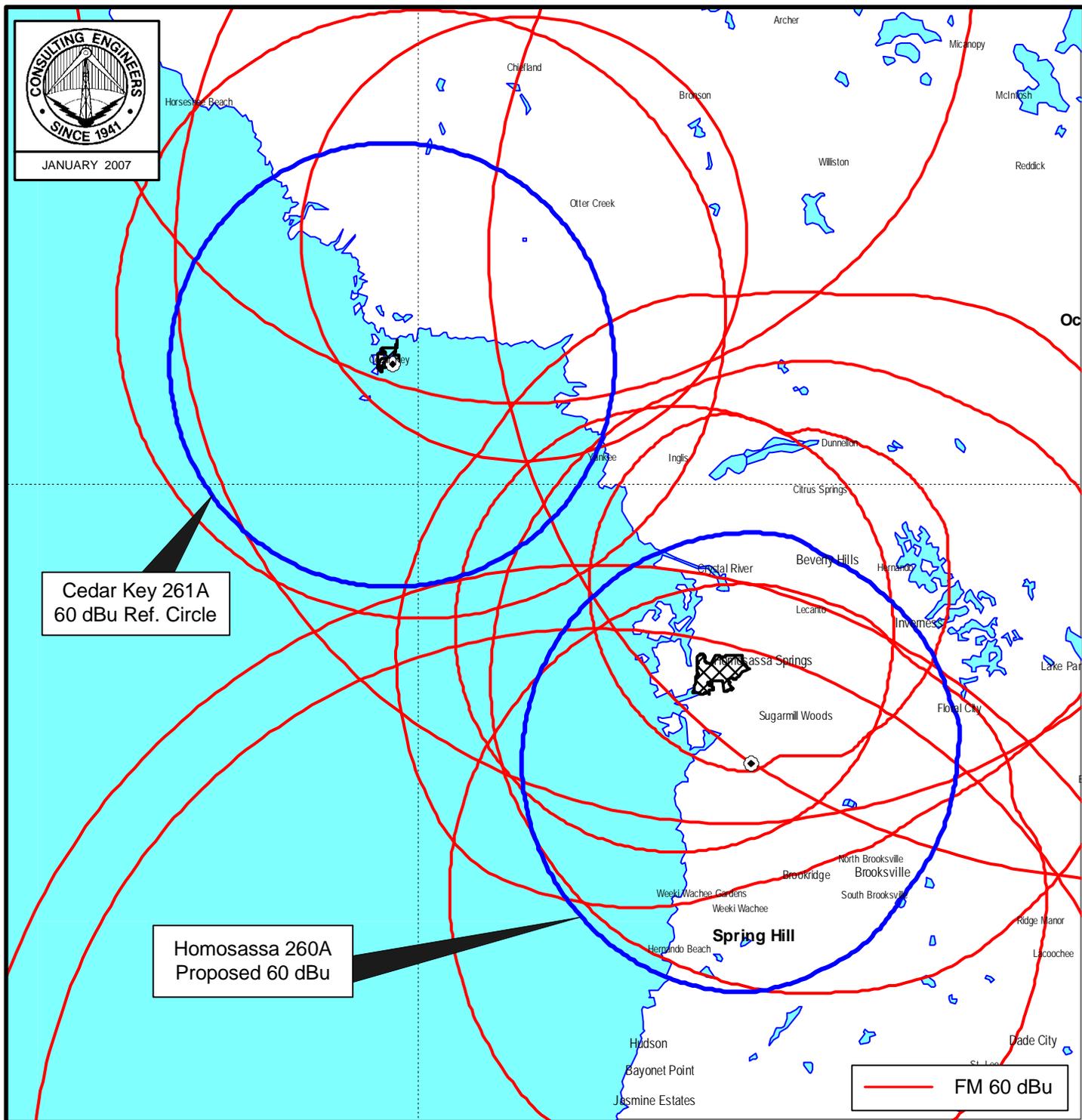
**GAIN - LOSS MAP**

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Other Stations Available to Gain - Loss Area

Number	Facility
1	WRZN, HERNANDO, FL, 720 KHZ
2	WWJB, BROOKSVILLE, FL, 1450 KHZ
3	WLMS, LECANTO, FL, CHANNEL 202
4	WYFE, TARPON SPRINGS, FL, CHANNEL 205
5	WUFT-F, GAINESVILLE, FL, CHANNEL 206
6	WJUF, INVERNESS, FL, CHANNEL 211
7	WAQV, CRYSTAL RIVER, FL, CHANNEL 215
8	WKES, LAKELAND, FL, CHANNEL 216
9	WLPI, NEW PORT RICHEY, FL, CHANNEL 218
10	WHGN, CRYSTAL RIVER, FL, CHANNEL 220
11	WMFQ, OCALA, FL, CHANNEL 225
12	WFLZ-F, TAMPA, FL, CHANNEL 227
13	WOGK, OCALA, FL, CHANNEL 229
14	WWRM, TAMPA, FL, CHANNEL 235
15	WXCV, HOMOSASSA SPRINGS, FL, CHANNEL 237
16	WBTP, CLEARWATER, FL, CHANNEL 239
17	WTMP-F, DADE CITY, FL, CHANNEL 241
18	WXOF, YANKEETOWN, FL, CHANNEL 242
19	WSUN-F, HOLIDAY, FL, CHANNEL 246
20	WSKY-F, MICANOPY, FL, CHANNEL 247
21	WXTB, CLEARWATER, FL, CHANNEL 250
22	WTKK, CRYSTAL RIVER, FL, CHANNEL 253
23	WQYK-F, ST. PETERSBURG, FL, CHANNEL 258
24	WHHZ, NEWBERRY, FL, CHANNEL 263
25	WMTX, TAMPA, FL, CHANNEL 264
26	WPOI, ST. PETERSBURG, FL, CHANNEL 268
27	WDVH-F, TRENTON, FL, CHANNEL 269
28	WTRS, DUNNELLON, FL, CHANNEL 272
29	WRGO, CEDAR KEY, FL, CHANNEL 274
30	WFUS, BRADENTON, FL, CHANNEL 278
31	WRUF-F, GAINESVILLE, FL, CHANNEL 279
32	WIFL, INGLIS, FL, CHANNEL 282
33	WRBQ-F, TAMPA, FL, CHANNEL 284
34	WDUV, NEW PORT RICHEY, FL, CHANNEL 288
35	WJQB, SPRING HILL, FL, CHANNEL 292
36	WXXL, TAVARES, FL, CHANNEL 294
37	WKZY, CROSS CITY, FL, CHANNEL 295
38	WXGL, ST. PETERSBURG, FL, CHANNEL 297
39	WNDN, CHIEFLAND, FL, CHANNEL 300
40	VACANT ALLOTMENT, OTTER CREEK, FL, CHANNEL 240



**OTHER FM PROTECTED SERVICES  
AVAILABLE TO CEDAR KEY AND HOMOSASSA**

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du Treil, Lundin & Rackley, Inc., Sarasota, Florida

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Tabulation of Other Protected 60 dBu FM Services Available

Number	Facility
1	WLMS, LECANTO, FL, CHANNEL 202
2	WJUF, INVERNESS, FL, CHANNEL 211
3	WHGN, CRYSTAL RIVER, FL, CHANNEL 220
4	WOGK, OCALA, FL, CHANNEL 229
5	WXCW, HOMOSASSA SPRINGS, FL, CHANNEL 237
6	WXTB, CLEARWATER, FL, CHANNEL 250
7	WTKK, CRYSTAL RIVER, FL, CHANNEL 253
8	WRGO, CEDAR KEY, FL, CHANNEL 274
9	WDUV, NEW PORT RICHEY, FL, CHANNEL 288
10	WJQB, SPRING HILL, FL, CHANNEL 292
11	WKZY, CROSS CITY, FL, CHANNEL 295
12	VACANT ALLOTMENT, OTTER CREEK, FL, CHANNEL 240