

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

JULY 23, 2009

CH 260A 2.3 KW 163 M

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for modification of construction permit for a new radio station to be licensed to Homosassa, Florida on Channel 260A. The applicant proposes, via this minor-change application, to modify the proposed transmitter site location.

Proposed Transmitter Location

A sketch showing the proposed antenna and supporting structure is shown on Figure 1. An existing registered tower is being proposed.

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 for all radials.

Predicted Coverage Contours

The predicted coverage contours were calculated in accordance with Section 73.313 of the FCC Rules. The average terrain elevations from 3 to 16 km from the proposed site were computed using the NGDC 30-second terrain database. The distances to the predicted coverage contours were determined using the average elevations of 3-16 km portions of radials spaced every 10-degrees of azimuth. The antenna radiation center HAAT in each radial direction and the ERP were used in conjunction with the propagation prediction curves of Section 73.333 to determine the distances to contours.

Sheet 1 of Figure 2 is a map showing the predicted coverage contours. As indicated in Sheet 1 of Figure 2, although the predicted 60 dBu contour based on the normal FCC prediction method does entirely encompass the community of Homosassa, the predicted 70 dBu contour does not.

Due to smooth terrain between the proposed transmitter site and the city of Homosassa and pursuant to Section 73.313(e) of the FCC Rules, a supplemental method for contour prediction has been employed to predict the extent of the 70 dBu contour over Homosassa. Use of a supplemental

prediction method is justified in this instance since the terrain roughness in the direction of Homosassa "departs widely" from the average 50-meter terrain roughness (Δh) employed in the normal FCC prediction method.¹ The terrain roughness (Δh) was determined to be 18 meters along the direct radial through Homosassa.²

The supplemental prediction method used was the Commission's Point-to-Point propagation model. Based on this model, the predicted 70 dBu contour extends 27.0 km from the transmitter site along the 315° T bearing toward Homosassa. Based on a 70 dBu contour distance of 27.0 km, the predicted 70 dBu contour for the proposed facility will encompass 100% of the city of Homosassa. Sheet 2 of Figure 2 shows the extent of the 70 dBu contour by the normal FCC method and by the supplemental Point-to-Point method. Since the normally predicted 70 dBu contour extends 16.3 km from the proposed transmitter site, the Point-to-Point model predicts an increase of 10.7 km (65%) in the distance to the 70 dBu contour. Therefore, it is concluded that the proposal complies with all of the Commission technical requirements.

¹ The FCC considers terrain to "depart widely" from the 50-meter Δh standard where the Δh value is 20 meters or less or 100 meters or greater.

² Δh was determined along the terrain segment from 10 km to 26 km, the furthest point of Homosassa from the proposed transmitter site. Terrain data were derived from the USGS 3-second database at 0.1-km intervals along the radial.

Allocation Study

Figure 3 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 the Channel 259A vacant allotment at Silver Springs Shores, Florida.

This application hereby proposes to modify the reference coordinates of the vacant Silver Springs Shores allotment to satisfy the minimum separation distance requirement with respect to this herein proposal.

Figure 4 is a separation study indicating that the modified reference coordinates for the channel 259A Silver Springs Shores vacant allotment will meet the minimum separation distance requirements to all stations and allotments. There is no change in channel, class or city of license.

The proposed Silver Springs Shores reference coordinates are located at the site of a registered power, ASR 1027936, indicating the proposed allotment reference point is suitable for construction. Figure 5 is a coverage map indicating that the vacant allotment will continue to serve Silver Springs Shores, Florida. Uniform terrain was used in calculation of the 70 dBu coverage contour (16 kilometer circle).

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*.³ 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 4.6 kilowatts is employed with a radiation center of 145 meters above ground level. A downward relative field value of 0.5 was assumed. It is calculated that the power density will not exceed 0.002 mW/cm² at two meters above ground level. This is less than 5 percent of the Commission's guideline value for an uncontrolled environment for a FM radio station.⁴ 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.

³ OET Bulletin 65, Second Edition 97-01, August, 1997.

⁴ The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is 0.2 mW/cm².

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.

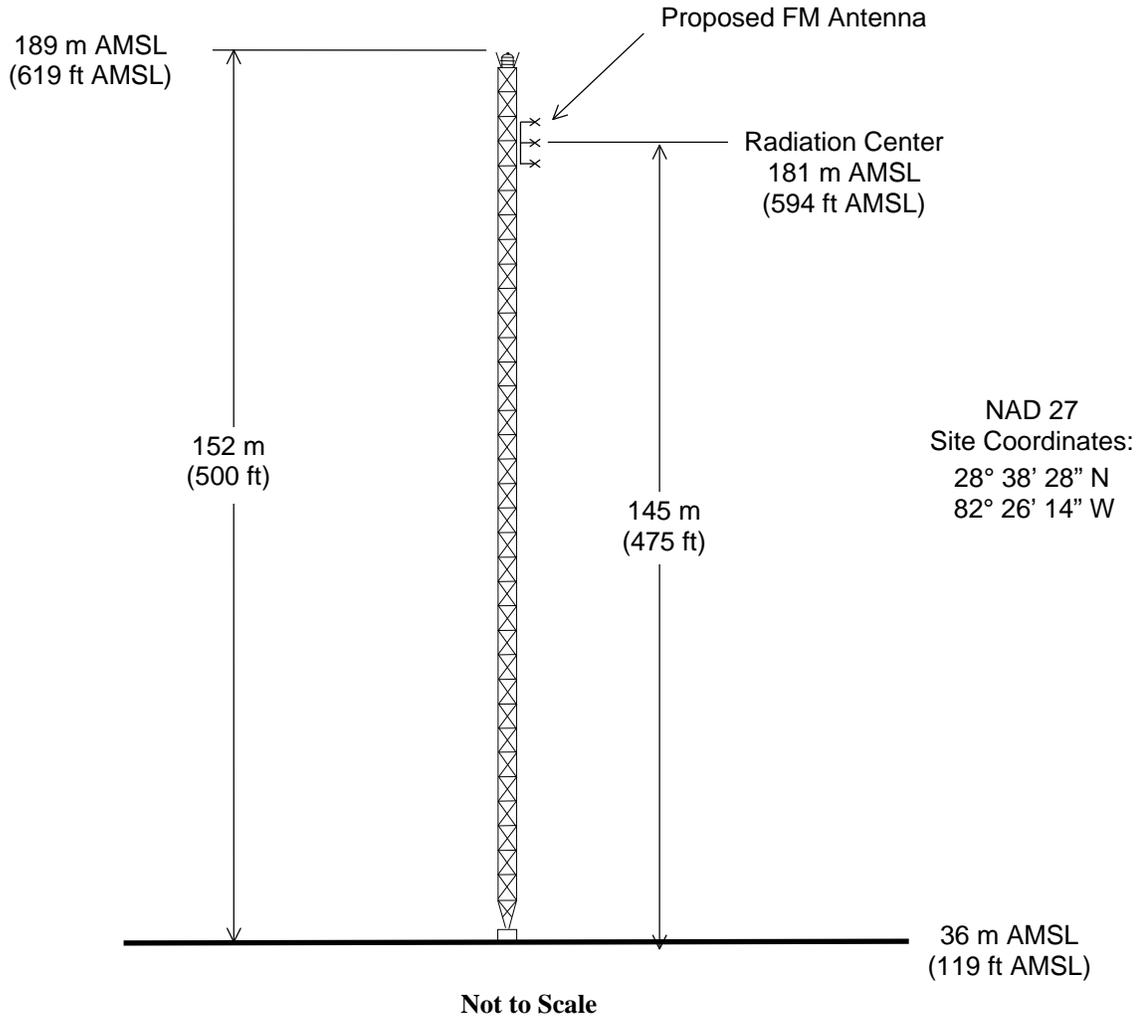
Charles A. Cooper

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

July 23, 2009



ASRN: 1213482



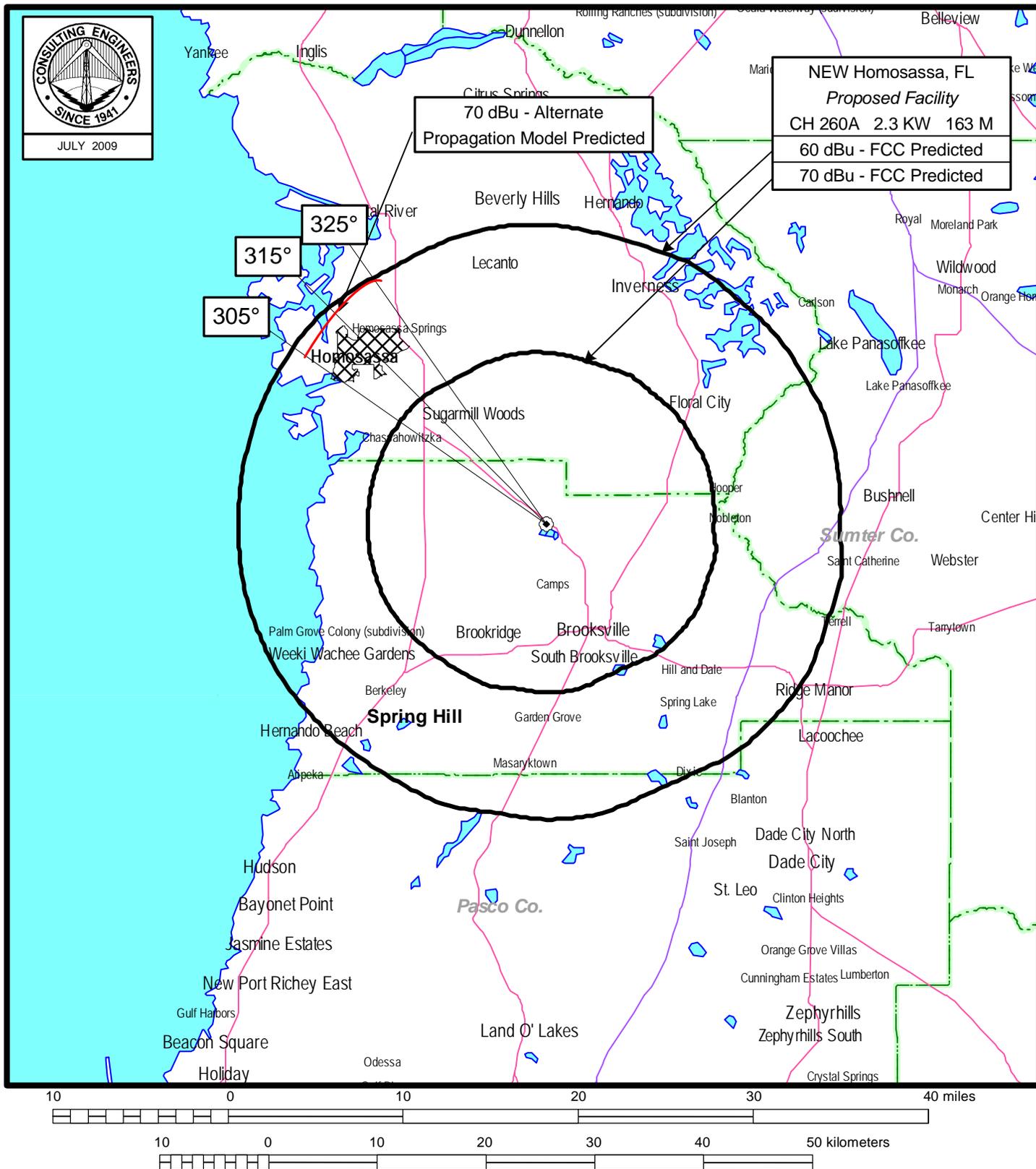
ANTENNA AND SUPPORTING STRUCTURE

NEW CHANNEL 260A

HOMOSASSA, FLORIDA

CH 260A 2.3 KW 163 M

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



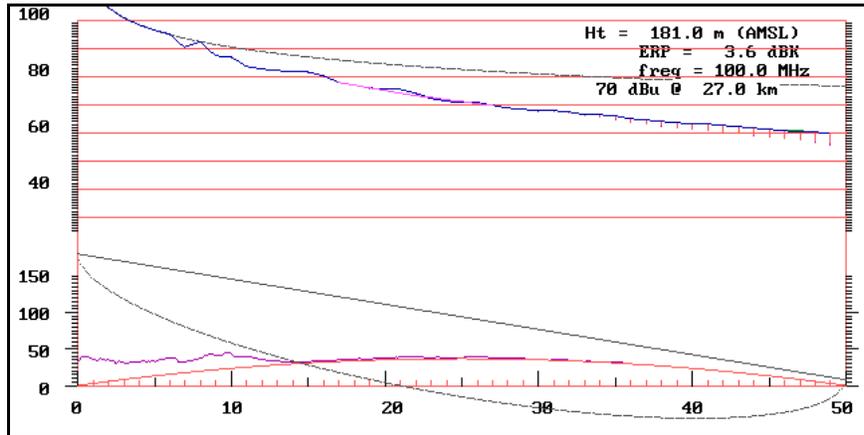
PREDICTED COVERAGE CONTOURS

NEW FM STATION
HOMOSSASSA, FLORIDA
CH 260A 2.3 KW 163 M

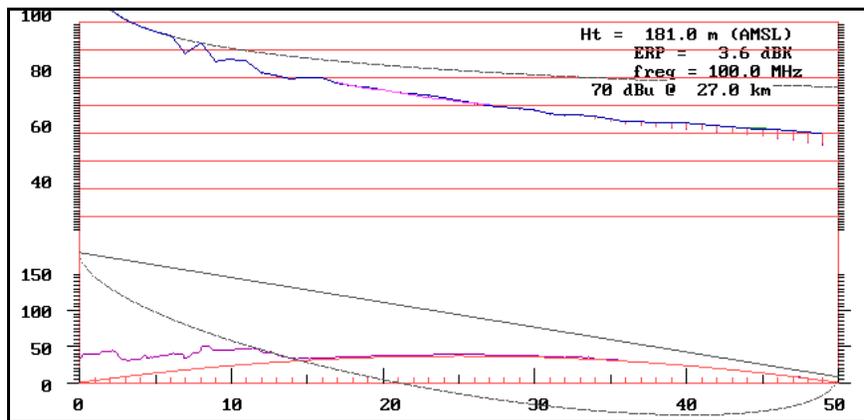
du Treil, Lundin & Rackley, Inc Sarasota, Florida

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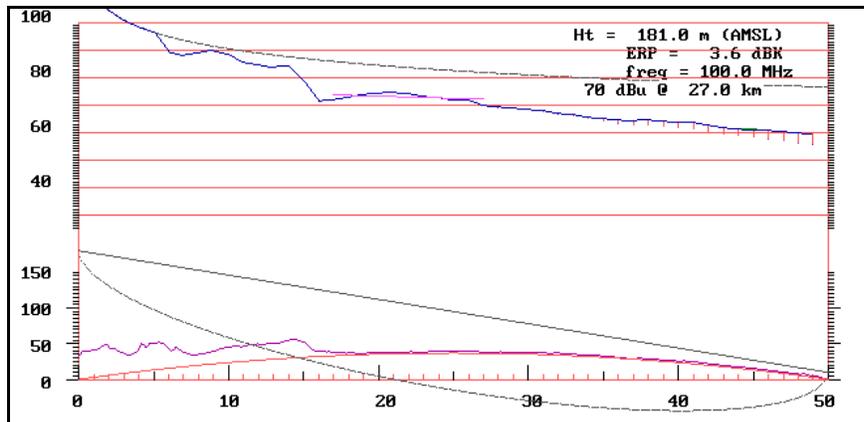
Alternate Propagation Model Results



Graph 1. Point-to-Point Coverage Model for 305° Radial.



Graph 2. Point-to-Point Coverage Model for 315° Radial.



Graph 3. Point-to-Point Coverage Model for 325° Radial.

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Proposed Site Allocation Study

28° 38' 28" North Latitude
 82° 26' 14" West Longitude

Callsign	Status	Chan.	Serv.	Freq.	City	State	Latitude	Dist.(km)	Sep.(km)	Spacing(km)	
Fac. ID	ARN			Class	DA Ant. ID	ERP(kW)	HAAT(m)	Longitude	Bear.(deg)	73.215	Comment
WKFA	LIC	207	FM	89.3	ST. CATHERINE	FL	028-32-22	36.72	10	26.72	
89697	BLED	20090305AFX		A	D 83627	3.9	98	082-04-48	107.87		CLEAR
WXRA	LIC	257	FM	99.3	INGLIS	FL	029-09-19	57	31	26	
164174	BLH	20080630ADG		A	D 84427	3.7	128	082-27-01	358.73	25 Y	CLEAR
WQYK-FM	LIC	258	FM	99.5	ST. PETERSBURG	FL	027-56-51	76.9	75	1.9	
28619	BMLH	20010220AAI		C1	N	100	168	082-27-33	181.6	69 N	CLOSE
WQYK-FM	CP	258	FM	99.5	ST. PETERSBURG	FL	027-55-53.8	78.71	75	3.71	
28619	BPH	20070807AAE		C1	N	100	174	082-24-04.6	177.44	69 N	CLOSE
0	VAC	259	FA	99.7	SILVER SPRINGS SHORE	FL	029-08-09	67	72	-5	
	RM	11275		A				082-02-33	34.84	49	SHORT
<i>(Proposed to shift Silver Springs Shores, FL Vacant Allotment Reference Point.)</i>											
0	ADD	259	FR	99.7	SILVER SPRINGS SHORE	FL	029-08-06	76.32	72	4.32	
				A				081-53-31	43.9	49	CLOSE
<i>(Proposed new allotment reference point for Silver Springs Shore, Florida).</i>											
NEW	CP	260	FM	99.9	HOMOSASSA	FL	028-40-50	13.13	115	-101.87	
170182	BNPH	20070201BQE		A	N	6	100	082-33-50	289.57	92 N	SHORT
<i>(Applicant's existing authorization)</i>											
WGNE-FM	LIC	260	FM	99.9	MIDDLEBURG	FL	030-19-22	201.69	200	1.69	
15897	BLH	20050516ACS		C1	N	48	300	081-38-34	22.16	178 Y	CLOSE

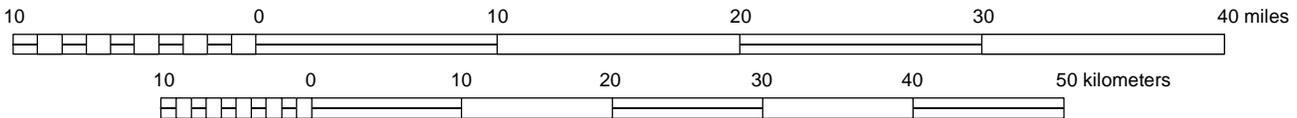
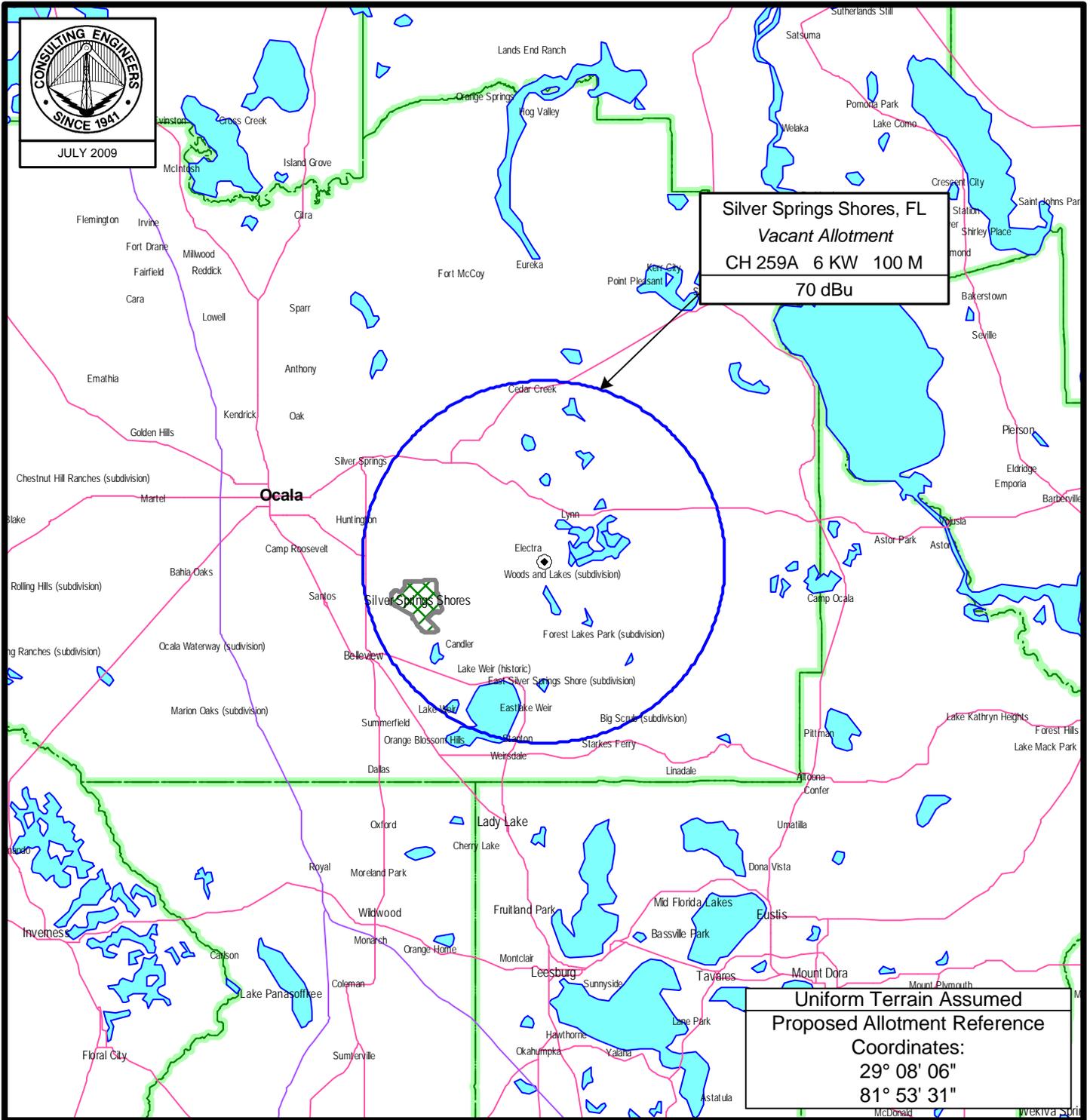
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Proposed Channel 259A Silver Springs Shores Allocation Study

29° 08' 06" North Latitude
 81° 53' 31" West Longitude

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. min
WXRA 164174	INGLIS FL LIC	BLH C 20080630ADG	257A 99.3	3.7 128	Y	29-09-19 082-27-01	Y	272.5	54.37	31.0
WBXY 76433	LA CROSSE FL LIC	BLH C 19990311KB	258A 99.5	2.2 144	N	29-44-22 082-23-09	Y	324.7	72.0	
0	DAYTONA FL VAC	BEA RM C 10843	258A 99.5	0.000		29-15-06 081-02-29		80.9	72.0	
WQYK-FMST. 28619	PETERSB FL LIC	BMLH C 20010220AAI	258C1 99.5	100.000 168	N	27-56-51 82-27-33	N	202.9	133.0	
WQYK-FMST. 28619	PETERSB FL CP	BPH C 20070807AAE	258C1 99.5	100.000 174	N	27-55-54 82-24-05	N	200.5	133.0	
0	SILVER FL VAC	SPRI RM C 11275	259A 99.7	0.000		29-08-09 082-02-33		270.4	14.65	
<i>(Current allotment reference site for Silver Springs Shores).</i>										
WGNE-FMMIDDLEBURG 15897	BLH FL LIC	C 20050516ACS	260C1 99.9	48.000 300	N	30-19-22 81-38-34	Y	10.3	133.85	133.0
NEW 170182	HOMOSASSA FL CP	BNPH C 20070201BQE	260A 99.9	6.000 100	N	28-40-50 82-33-50	N	232.5	82.65	72.0

Figure 5



70 DBU ALLOTMENT COVERAGE CONTOUR

VACANT ALLOTMENT

SILVER SPRINGS SHORES, FLORIDA

CH 259A 6 KW 100 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida