

ENGINEERING EXHIBIT
IN SUPPORT OF AN
APPLICATION FOR MODIFICATION OF
CONSTRUCTION PERMIT
NEW - SWEETWATER, FLORIDA
FCC FILE NO. BNP-20001023ADQ
880 kHz - 4.0 kW DAY/5.0 kW NIGHT - DA-2-U
Facility ID: 21763

Applicant: Florida City Radio

November, 2007

***CARL T. JONES***
CORPORATION

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FCC FORM 301

ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON, P.E.

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ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON
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NEW - SWEETWATER, FLORIDA
880 kHz - 4.0 kW DAY/5.0 kW NIGHT - DA-2-U
Facility ID: 21763

Applicant: Florida City Radio

I am a Radio Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia.

My education and experience are a matter of record with the Federal Communications Commission. I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 027914.

GENERAL

This office has been authorized by Florida City Radio ("FCR") to prepare this statement, FCC Form 301, and the attached exhibits in support of an Application for Modification of Construction Permit (FCC File No. BNP-20001023ADQ) for a NEW AM facility on 880 kHz for Sweetwater, Florida. The current construction permit authorizes operation on 880 kHz with a nominal power of 4.0 kW day and 1.5 kW night, employing a directional antenna system.

The instant application proposes to diplex the NEW facility at the licensed transmitter site of WMCU. WMCU is licensed to Coral Gables, Florida and operates on a frequency of 1080 kHz, at a daytime antenna power of 50 kW and a nighttime power of 10 kW. The proposed site is 7.2 kilometers northwest of the authorized construction permit site. It is proposed to operate with 4.0 kW day and 5.0 kW night while employing a directional antenna system for both modes. The daytime array will consist of four elements while the nighttime will consist of eight elements.

PROPOSED TRANSMITTER SITE AND VICINITY

The center of array geographic coordinates (NAD-27) of the directional antenna are:

25 - 44 - 56 North Latitude

80 - 32 - 50 West Longitude

The site elevation was obtained from data on file with the FCC. The antenna/transmitter site photographs are contained in the WMCU files at the FCC, and therefore not supplied herein. Attached as Figure 4 is a USGS map depicting the proposed site.

ANTENNA SYSTEM AND DIRECTIONAL PATTERNS

The instant application proposes no new tower construction at the WMCU property. The present WMCU antenna system consists of a total of eight, series-excited, uniform

cross-section, guyed, vertical steel towers¹. At the proposal's frequency of 880 kHz, the towers are 73.4 electrical degrees in height. Further details of the antenna system are specified in Figure 1.

The proposed Sweetwater daytime antenna system will duplex onto four of the existing WMCU towers. The proposed daytime horizontal plane standard radiation pattern is shown on the polar graph of Figure 5. The daytime horizontal plane inverse distance fields are tabulated in Figure 6.

The proposed night antenna system will employ all eight of the towers at the WMCU site. Figure 7 contains a polar graph of the proposed nighttime horizontal plane standard and Figure 8 (Sheets 1-13) contains a tabulation of the proposed nighttime horizontal and vertical plane inverse distance fields for the proposed nighttime pattern.

GROUND SYSTEM

It is proposed to use the existing ground system in place at the WMCU transmitter site. The ground system for each tower consists of 120 evenly spaced, buried, copper radial wires, 69.5 meters in length, except where bonded to a transverse copper strap between towers, see Figure 3.

¹WMCU utilizes only six of the existing eight towers.

FAA NOTIFICATION AND TOWER REGISTRATION

A vertical plan sketch of the WMCU towers is shown in Figure 2 (Sheets 1 and 2). The overall height of the existing antenna structures is 72.2 AGL (74.1 MSL).

Since FCR is proposing to utilize existing towers without alteration, notification to the Federal Aviation Administration is not necessary.

Towers # 4,5,6 and 8 are unlit, whereas Towers #1, 2, 3 and 7 are lit with a top beacon.

The proposed antennas are existing, registered structures. The Tower Registration Number for each tower is as follows:

Tower #1:	1027450
Tower #2:	1027451
Tower #3:	1027452
Tower #4:	1027453
Tower #5:	1027454
Tower #6:	1027455
Tower #7:	1027456
Tower #8:	1027457

BLANKETING AND STATION INTERACTION

The present and proposed daytime 1000 mV/m contours are depicted in Figure 9, Sheet 1. The population within the proposed 1000 mV/m daytime contour is less than 300 persons.

The present and proposed 1000 mV/m nighttime contours are shown in Figure 12, Sheet 1. The population within the proposed nighttime 1000 mV/m contours is less than 300 persons.

In response to all complaints of blanketing interference, the applicant will undertake steps to mitigate the blanketing effects in accordance with requirements of Section 73.88.

With the exception of WMCU, there are no AM stations located within 3.2 kilometers of the proposed site. There are no licensed FM or TV stations located within 10 kilometers of the proposed site.

It is expected that no detrimental interaction will occur with any station due to the proposal of Sweetwater.

COVERAGE CONTOURS

The present and proposed daytime service contours are shown in Figure 9, Sheet 2 of 2. The proposed 5.0 mV/m daytime contour encompasses the entire community of Sweetwater, Florida.

The present and proposed nighttime service contours are shown in Figure 12, Sheet 2. The proposed 9.97 mV/m nighttime interference-free contour will provide service to 100% area of the community of license.

DAYTIME ALLOCATION STUDY

The results of the daytime study are shown in Figure 10, Sheets 1-4. A tabulation of stations considered in the daytime allocation is attached as Figure 11.

The distances to all groundwave contours were calculated using the equivalent distance method. Contours were calculated at 5 degree intervals using ground conductivity values shown on the M-3 soil map. The Region 2 curves were employed for International considerations. Tabulations of distances to groundwave contours and conductivity profiles are not included herein, but can be provided upon request.

CO-CHANNEL PROTECTION

The original application for construction permit, FCC File No. BP-19860331AL (as subsequently amended) specified the city of license as Florida City and was listed in the IFL "master register" (ITU Assignment# 093023281) **without international objection** and the Region 2 Agreement. Consequently, in the 2000 "Major Change Window", FCR filed to change its city of license to Sweetwater and relocate the site. Because the notification process was underway for Florida City, the further inconsequential change was noted. For purposes of determining existing interference to Cuban stations CMAB and CMKG, the ITU notified facility will be considered to be the "existing" or "present" authorization.

As depicted on the map of Figure 10, Sheet 1, there is existing overlap with the ITU notified facilities of FCR and CMAB and CMKG. In both instances, the proposal will decrease the existing overlap.

The currently proposed 0.005 mV/m contour lies entirely within the existing (ITU notified) 0.005 mV/m in the arc toward the 0.1 mV/m contour of Class A station, CMAB. Therefore, no new area of overlap is created and any existing overlap to CMAB has been reduced from that which was originally notified without international objection.

Likewise the proposed 0.025 mV/m contour will not overlap the 0.5 mV/m contour of CMKG within the land boundaries of Cuba.

Since the proposed contour lies within the contour of the notified facility in the arc toward CMAB, it is believed that no International notification is necessary. The applicant respectfully requests that the Commission grant the herein Modification of Construction Permit without any international condition.

FIRST-ADJACENT CHANNEL PROTECTION

Figure 10, Sheet 2 indicates that no overlap of the 0.5 mV/m and 0.25 mV/m contours is proposed between the proposal and NEW, Longwood, Florida, with the exception of that which exists entirely over sea water.

SECOND-ADJACENT CHANNEL PROTECTION

The map of Figure 10, Sheet 3 shows the authorized and proposed 5.0 mV/m contours of the Sweetwater facility and the licensed facilities of WSWN. No prohibited contour overlap presently exists nor will any be created by this proposed modification of the Sweetwater authorization with respect to WSWN.

THIRD-ADJACENT CHANNEL PROTECTION

Figure 10, Sheet 4 depicts no prohibited overlap of the 25.0 mV/m contours will occur, between the Sweetwater proposal and WFTL license, construction permit and/or application facilities.

NIGHTTIME ALLOCATION STUDY

The results of the nighttime study are shown in Figure 13. Figure 13 is a tabulation of the RSS calculations for co-channel and first-adjacent stations in which Sweetwater may impact. The proposed facility at Sweetwater will not raise the limit of any station. A review of these studies on a station-by-station basis finds that the proposed Sweetwater nighttime facility is fully compliant with current Commission allocation standards.

NIGHTTIME SKYWAVE PROTECTION CRITERIA

The frequency of 880 kHz is a US Clear Channel. WCBS, New York, New York, is the US Class A authorized to operate on this frequency. Figure 14 depicts the proposed 0.025 mV/m - 10% skywave contour and the 0.5 mV/m - 50% skywave contour of WCBS. Figure 14 shows that no overlap will occur on land mass.

Figure 15 depicts the proposed 0.025 mV/m - 10% skywave contour of the ITU notified facility and the proposed Sweetwater facility. Much of the present and proposed skywave contour overlaps Cuba and therefore would overlap the 0.5 mV/m - 50% skywave contour of CMAB. As discussed in great detail regarding the daytime co-channel protection

of CMAB, it is believed that the proposed facility is compliant as the currently authorized overlap is reduced; thus, it is believed that no International notification is necessary.

Figure 16 depicts the 0.025 mV/m - 50% skywave contour of the proposed Sweetwater facility. The 880 kHz, Monserrat, MH Class A facility does not produce a 0.5 mV/m - 50% skywave contour. The 0.5 mV/m nighttime groundwave contour of the Monserrat station is protected within any land boundaries.

ENVIRONMENTAL IMPACT

This engineering statement certifies compliance with human exposure to radio-frequency radiation. The proposal described herein does not involve high intensity lighting as specified under Section 1.1307(a)(8), nor will it result in human exposure to radio-frequency radiation in excess of the standards specified in Section 1.1307(b). As an existing, unaltered structure, it is believed no other environmental review is necessary.

RADIO-FREQUENCY IMPACT

On January 1, 1986, the FCC amended its Rules to implement the National Environmental Policy Act of 1969 (NEPA). This amendment established RF radiation protection guidelines to be used to determine if potentially harmful RF exposure is possible from an FCC-regulated transmission facility. Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether

exposure occurs in a “controlled” (occupational) situation or an “uncontrolled” (general population) situation. The FCC has also revised OET Bulletin No. 65 entitled, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radio-frequency Electromagnetic Fields”, to aid in the radiation exposure analysis. This bulletin, as well as other current literature, provides detailed information for conducting an analysis including mathematical equations that can be used to determine compliance with the Commission’s guidelines.

The proposed facility will be co-located with the 1080 kHz operation of WMCU. Thus, the proposed site is considered a multiple use site.

CALCULATION METHODS

Verification of compliance with FCC-specified guidelines for human exposure to RF radiation was obtained from OET Bulletin No. 65

Tables 1 and 2 of Supplement A (Edition 97-01) to OET Bulletin 65 (Edition 97-01) provide compliance distances for tower heights of 0.25 wavelength and 0.1 wavelength, respectively. The electrical height of the towers at the WMCU frequency of 1080 kHz is 0.25 wavelength and the electrical height of the towers at the Sweetwater frequency of 880 kHz is 0.20 wavelength. The power from each station’s transmitter is distributed among the towers such that the input power to each tower is less than the combined total licensed power of each station. The highest combined input power to any tower in any operating mode is 23.42 kW. This power level would occur at the input to tower #2 of the proposed daytime directional antenna system, consisting of 21.57 kW from WMCU and 1.85 kW from

the Sweetwater proposal. Under this worst-case scenario, a fence of no less than 6.5 meters would be compliant with the radio-frequency energy requirements of the FCC regarding the occupational/controlled and the general population/uncontrolled MPE limits.

Fencing insuring compliance with the general population protection requirement will be provided. The fence will be locked to preclude public access to the tower and appropriate warning signs will also be posted. It is expected that electromagnetic field strength measurements will be conducted to establish that the MPE limits specified by the FCC are not exceeded and that the fencing is appropriate.

OCCUPATIONAL SAFETY

As stated above access to the area surrounding the base of each of the Sweetwater/WMCU towers will be restricted to authorized maintenance personnel only. The licensees of Sweetwater and WMCU, in a cooperative effort, will institute joint procedures to insure protection of station personnel and tower contractors working on or in the immediate vicinity of the towers. Procedures will be followed during times of service or maintenance of the transmission systems to insure that personnel are not exposed to energy levels in excess of the maximum permissible exposure limit.

In light of the above, the proposed facility would be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

STATEMENT OF CYNTHIA M. JACOBSON
NEW AM - SWEETWATER, FLORIDA
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CONCLUSION

It is submitted that the proposed facility as described herein would comply with the technical standards of the Commission's Rules and Regulations. This engineering statement, Section III of FCC Form 301, and the associated figures were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: December 3, 2007



ANTENNA SYSTEM SPECIFICATIONS
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2

Geographic Coordinates (NAD-27 - Center of Array)	25E 44N 560 North Latitude 80E 32N 500 West Longitude
Number of Radiating Elements	8
Power (nominal)	4 kW-D, 5 kW-N
Type of Radiators	Uniform cross-section, insulated, guyed tower

Height of Radiators

	Tower 1 (m / ft)	Tower 2 (m / ft)	Tower 3 (m / ft)	Tower 4 (m / ft)	Tower 5 (m / ft)	Tower 6 (m / ft)	Tower 7 (m / ft)	Tower 8 (m / ft)
Radiator (73.4 electrical degrees)	69.5 / 228	69.5 / 228	69.5 / 228	69.5 / 228	69.5 / 228	69.5 / 228	69.5 / 228	69.5 / 228
Overall height above ground (without lighting)	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237
Overall height above ground (with lighting)	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237	72.2 / 237
Overall height above mean sea level (with lighting)	74.1 / 243	74.1 / 243	74.1 / 243	74.1 / 243	74.1 / 243	74.1 / 243	74.1 / 243	74.1 / 243

Daytime Array Parameters

	<u>Tower 1</u>	<u>Tower 2</u>	<u>Tower 4</u>	<u>Tower 5</u>
Field Ratio	0.996	1.000	1.249	0.999
Phase Angle (deg.)	13.7	0.0	114.2	91.3
Spacing (deg./meters)	0.0 / 0.0	158.8 / 150.3	89.5 / 84.7	173.9 / 164.6
Orientation (deg. True)	0.0	340.0	244.0	309.2

Theoretical RMS at One Kilometer

565.6 mV/m

Nighttime Array Parameters

	<u>Tower 1</u>	<u>Tower 2</u>	<u>Tower 3</u>	<u>Tower 4</u>	<u>Tower 5</u>	<u>Tower 6</u>	<u>Tower 7</u>	<u>Tower 8</u>
Field Ratio	0.776	1.000	0.342	1.000	1.126	0.566	0.583	0.745
Phase Angle (deg.)	13.6	0.0	38.6	97.2	103.2	104.2	-37.4	99.0
Spacing (deg./meters)	0 / 0	158.8 / 150.3	317.6 / 300.5	89.5 / 84.7	173.9 / 164.6	320.8 / 303.6	142.7 / 135.0	171.1 / 161.9
Orientation (deg. True)	0.0	340.0	340.0	244.0	309.2	323.9	156.0	187.5

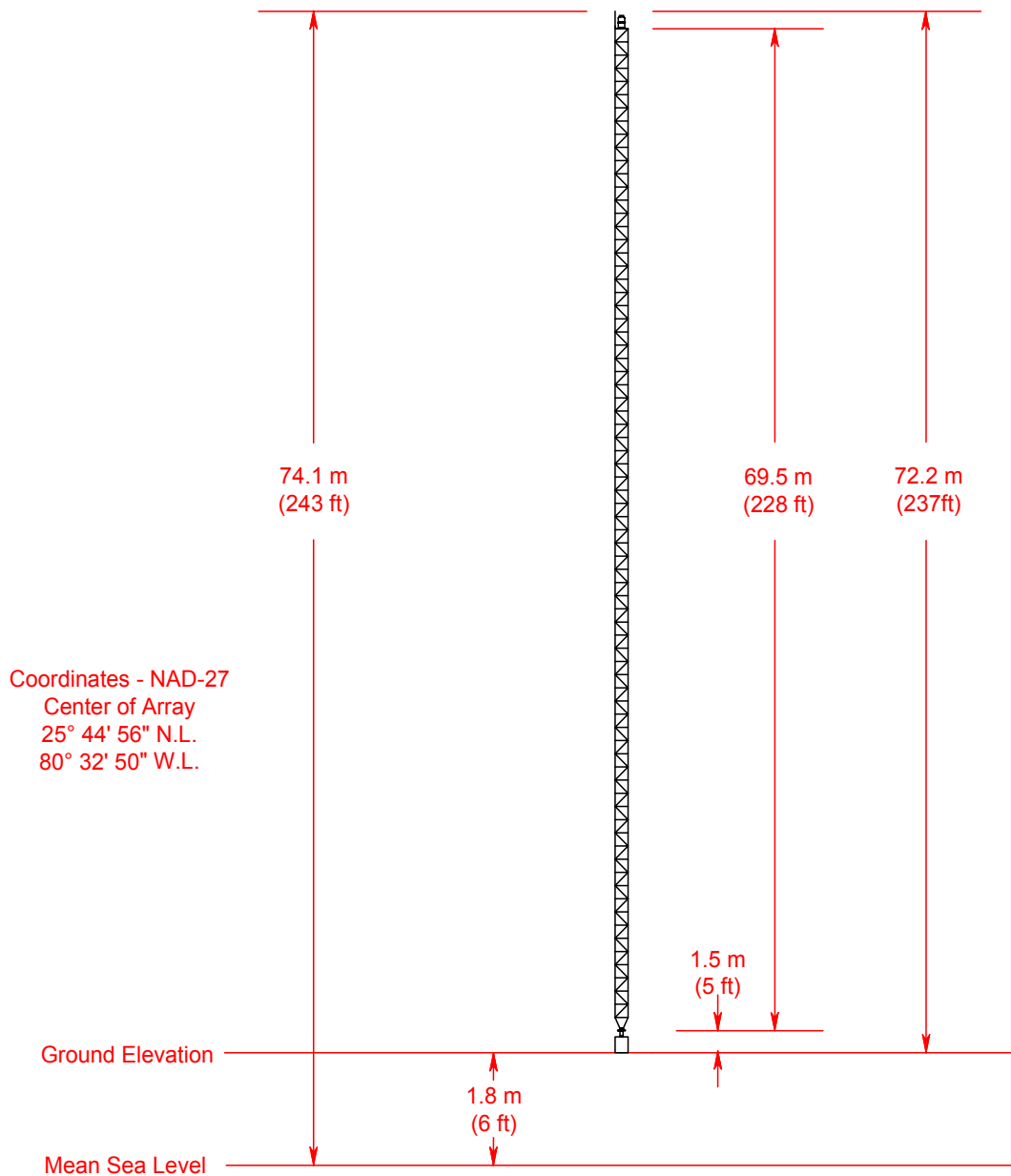
Theoretical RMS at One Kilometer

631.1 mV/m

Ground System:

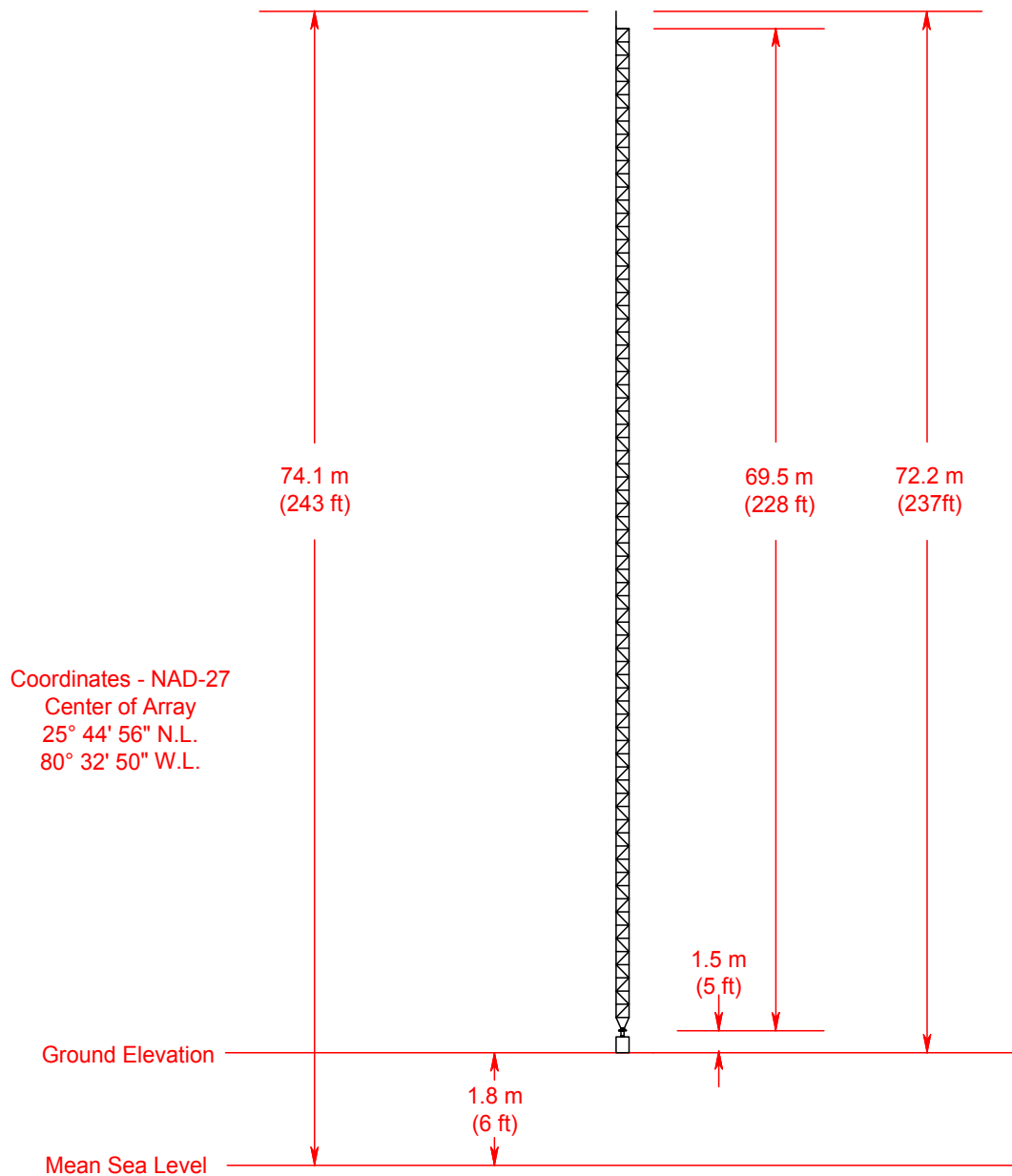
The proposed ground system will consist of 120 buried copper wire radials evenly spaced around each tower. Each radial will be 69.5 meters (228 feet) in length except where foreshortened between towers. Radials will be cut and bonded at the intersection with transverse copper straps.

Towers 1, 2, 3, & 7



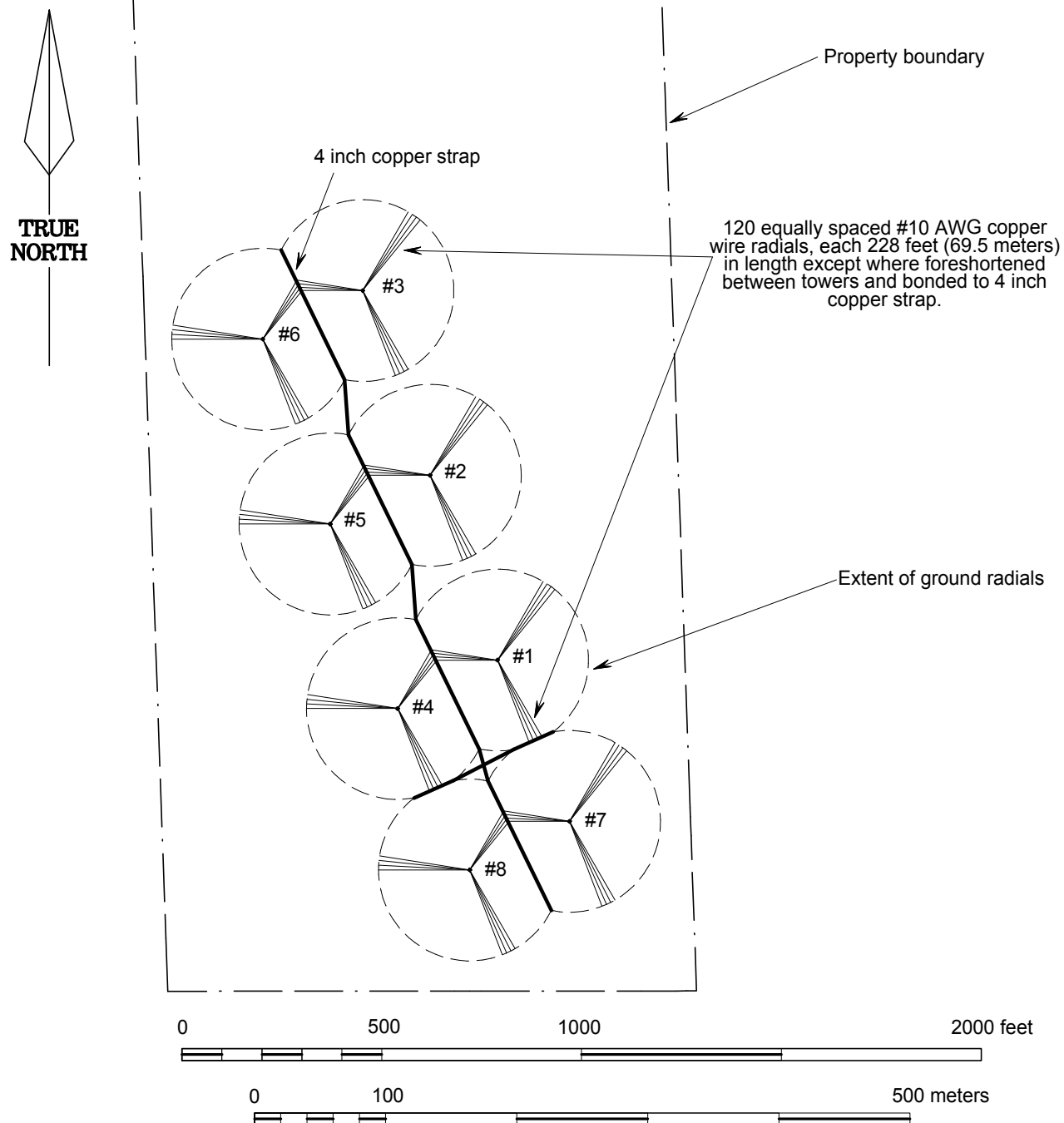
VERTICAL PLAN ANTENNA SKETCH
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2
NOVEMBER, 2007

Towers 4, 5, 6, & 8
(No Obstruction Lighting)



VERTICAL PLAN ANTENNA SKETCH
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2
NOVEMBER, 2007

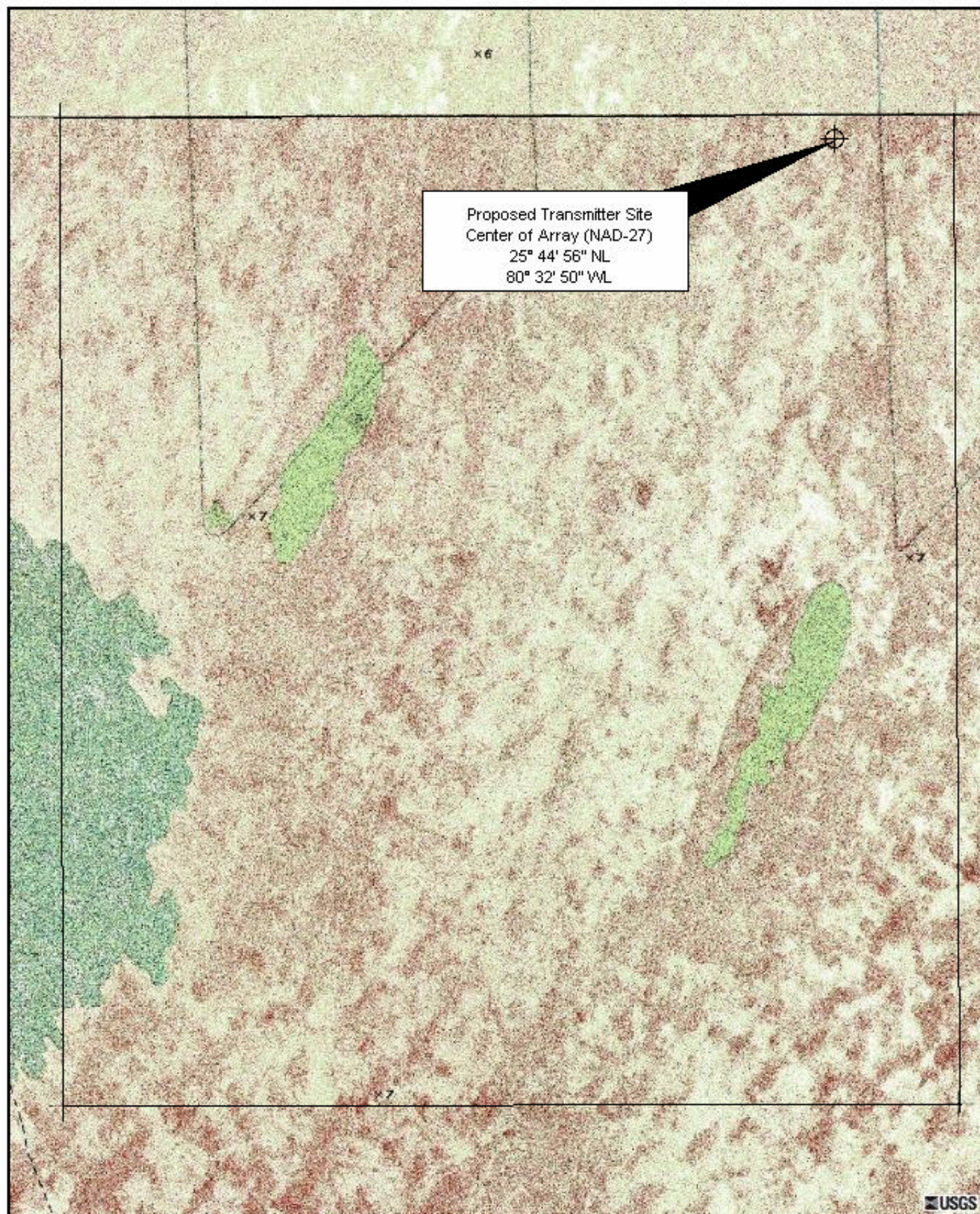
Figure 3



PROPOSED PROPERTY PLAT AND GROUND SYSTEM
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2
NOVEMBER, 2007

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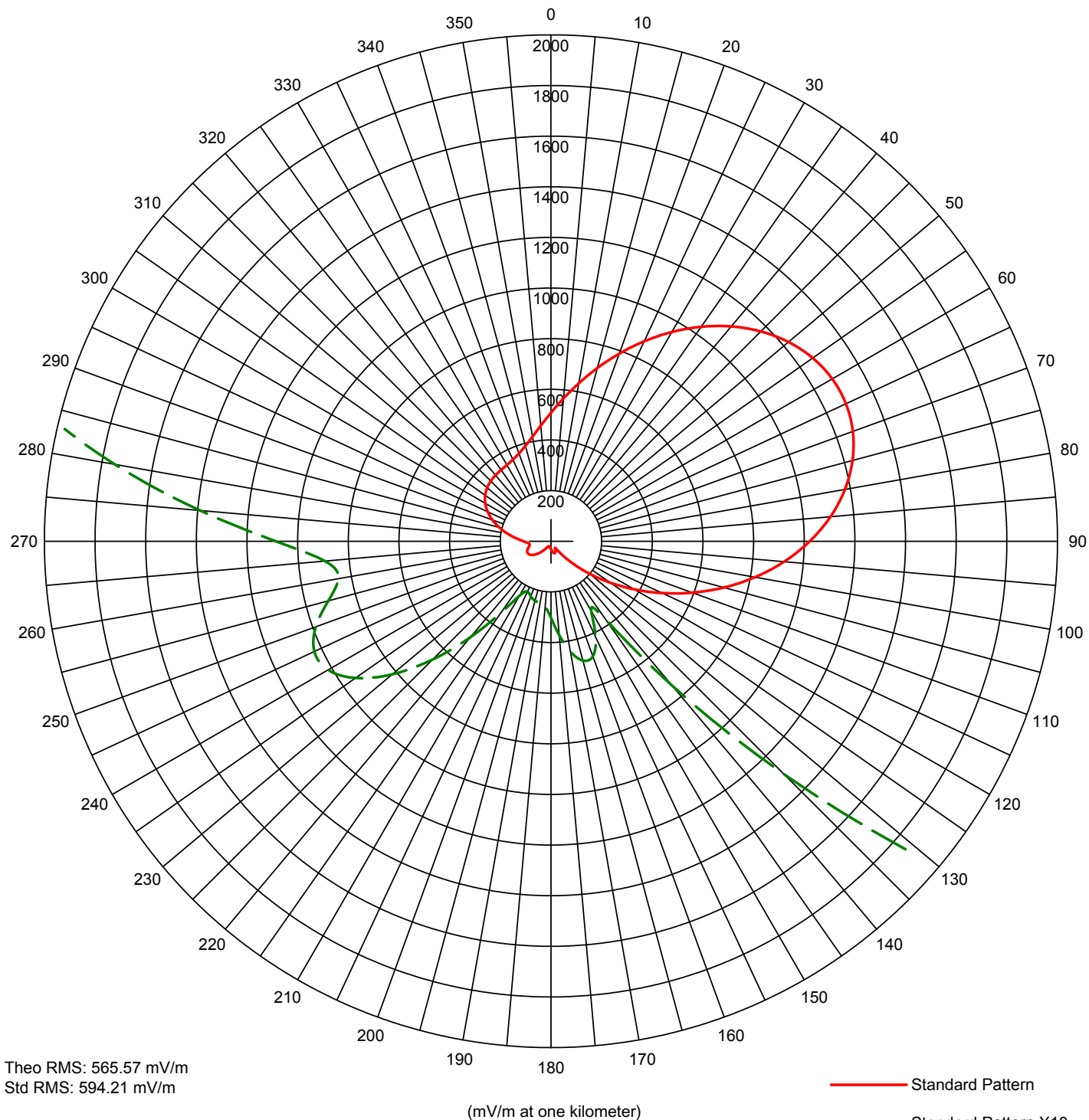
FIGURE 4



PROPOSED TRANSMITTER SITE
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2
NOVEMBER, 2007

Figure 5

PROPOSED DAYTIME HORIZONTAL PLANE STANDARD RADIATION PATTERN



#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	0.996	13.7	0.0	0.0	73.4	0	0	0.0	0.0	0.0	0.0
2	1.000	0.0	158.8	340.0	73.4	0	0	0.0	0.0	0.0	0.0
3	1.249	114.2	89.5	244.0	73.4	0	0	0.0	0.0	0.0	0.0
4	0.999	91.3	173.9	309.2	73.4	0	0	0.0	0.0	0.0	0.0

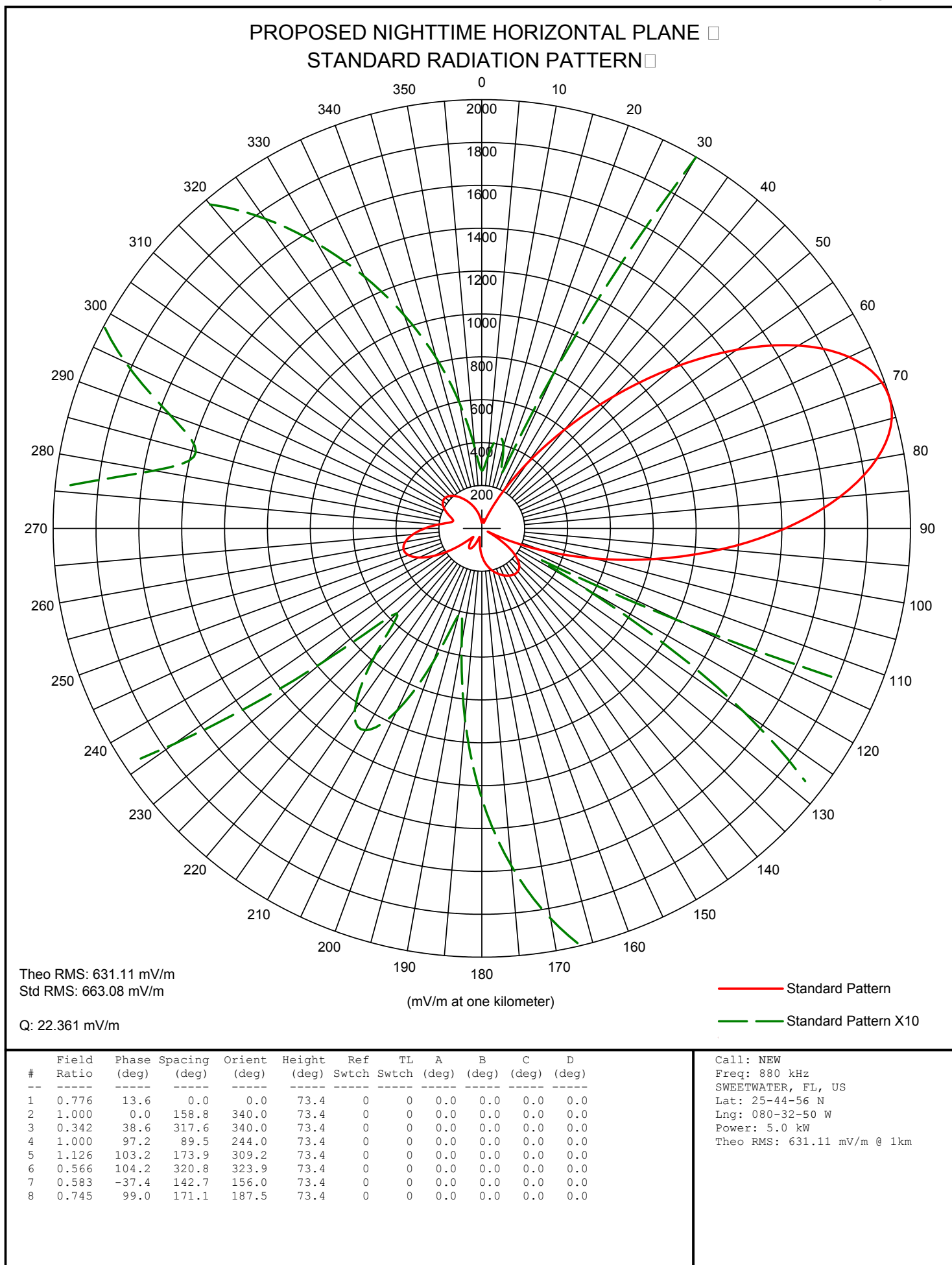
Call: NEW
Freq: 880 kHz
SWEETWATER, FL, US
Lat: 25-44-56 N
Lng: 080-32-50 W
Power: 4.0 kW
Theo RMS: 565.57 mV/m @ 1km

**TABULATION OF PROPOSED DAYTIME
HORIZONTAL PLANE RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Azimuth (deg)	Theoretical (mV/m)	Standard (mV/m)	Azimuth (deg)	Theoretical (mV/m)	Standard (mV/m)
0	480.40	504.86	180	106.00	113.27
5	535.53	562.70	185	101.77	108.90
10	598.04	628.29	190	99.27	106.33
15	667.66	701.35	195	98.93	105.98
20	743.97	781.45	200	102.13	109.27
25	826.47	868.04	205	110.50	117.91
30	914.42	960.37	210	124.31	132.20
35	1006.7	1057.2	215	141.42	149.97
40	1101.3	1156.5	220	157.82	167.04
45	1195.1	1255.0	225	168.78	178.46
50	1283.7	1348.0	230	169.80	179.52
55	1361.4	1429.6	235	157.39	166.59
60	1421.5	1492.7	240	129.74	137.83
65	1457.6	1530.6	245	87.12	93.86
70	1463.8	1537.2	250	32.91	40.44
75	1436.6	1508.6	255	35.55	42.83
80	1374.8	1443.7	260	100.99	108.10
85	1280.4	1344.6	265	164.10	173.58
90	1158.1	1216.2	270	218.28	230.16
95	1015.2	1066.2	275	259.18	272.95
100	860.51	903.78	280	284.62	299.59
105	703.14	738.60	285	294.80	310.25
110	551.84	579.81	290	292.22	307.55
115	414.18	435.40	295	281.18	295.98
120	296.45	311.98	300	266.95	281.08
125	204.29	215.53	305	254.71	268.27
130	143.94	152.59	310	248.24	261.49
135	119.38	127.09	315	249.02	262.32
140	120.85	128.62	320	256.48	270.12
145	130.11	138.22	325	269.10	283.34
150	136.78	145.14	330	285.65	300.66
155	138.06	146.48	335	305.68	321.65
160	134.46	142.74	340	329.52	346.63
165	127.64	135.66	345	358.00	376.48
170	119.60	127.32	350	392.09	412.23
175	112.03	119.50	355	432.68	454.80

Fields in mV/m @ 1 kilometer

Figure 7



**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 0°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	12.59	26.94	180.0	117.92	126.02
5.0	23.35	33.94	185.0	82.38	89.62
10.0	34.02	42.75	190.0	46.37	54.05
15.0	29.49	38.86	195.0	32.84	41.72
20.0	12.72	27.01	200.0	58.98	66.23
25.0	74.35	81.52	205.0	86.80	94.12
30.0	189.02	199.86	210.0	101.10	108.72
35.0	355.73	374.25	215.0	95.68	103.17
40.0	572.76	601.86	220.0	70.47	77.63
45.0	830.19	872.02	225.0	48.48	56.05
50.0	1109.3	1165.0	230.0	90.79	98.18
55.0	1383.9	1453.3	235.0	165.77	175.64
60.0	1624.1	1705.5	240.0	242.17	255.36
65.0	1801.2	1891.4	245.0	305.48	321.62
70.0	1892.5	1987.2	250.0	346.11	364.17
75.0	1886.0	1980.5	255.0	359.07	377.75
80.0	1782.7	1872.0	260.0	344.25	362.23
85.0	1595.8	1675.8	265.0	305.93	322.08
90.0	1348.1	1415.7	270.0	251.93	265.56
95.0	1067.5	1121.1	275.0	193.39	204.41
100.0	781.96	821.39	280.0	146.17	155.26
105.0	515.25	541.52	285.0	129.63	138.12
110.0	284.36	299.50	290.0	145.71	154.79
115.0	98.96	106.53	295.0	173.37	183.55
120.0	46.17	53.86	300.0	196.54	207.70
125.0	140.78	149.67	305.0	209.20	220.91
130.0	201.50	212.88	310.0	210.52	222.28
135.0	234.69	247.54	315.0	202.08	213.48
140.0	248.16	261.62	320.0	186.48	197.21
145.0	248.61	262.09	325.0	166.44	176.34
150.0	241.11	254.25	330.0	144.23	153.25
155.0	228.93	241.52	335.0	121.34	129.55
160.0	213.73	225.65	340.0	98.37	105.92
165.0	195.81	206.93	345.0	75.24	82.42
170.0	174.50	184.73	350.0	51.70	59.14
175.0	148.79	157.99	355.0	28.35	37.91

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 5°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	14.18	27.70	180.0	115.66	123.67
5.0	23.77	34.19	185.0	80.36	87.55
10.0	33.27	42.02	190.0	45.08	52.79
15.0	27.76	37.35	195.0	33.51	42.23
20.0	14.47	27.87	200.0	59.86	67.06
25.0	78.30	85.47	205.0	87.12	94.41
30.0	193.32	204.33	210.0	100.81	108.40
35.0	359.70	378.40	215.0	94.82	102.27
40.0	575.59	604.82	220.0	68.79	75.91
45.0	831.10	872.97	225.0	44.81	52.53
50.0	1107.6	1163.3	230.0	87.30	94.60
55.0	1379.5	1448.6	235.0	162.26	171.97
60.0	1617.1	1698.1	240.0	238.34	251.34
65.0	1792.2	1882.0	245.0	301.49	317.43
70.0	1882.6	1976.8	250.0	342.33	360.20
75.0	1876.4	1970.4	255.0	355.93	374.46
80.0	1774.6	1863.5	260.0	342.13	359.99
85.0	1590.1	1669.8	265.0	305.05	321.15
90.0	1345.3	1412.8	270.0	252.31	265.96
95.0	1067.7	1121.4	275.0	194.77	205.83
100.0	784.86	824.43	280.0	147.72	156.86
105.0	520.21	546.72	285.0	129.92	138.41
110.0	290.60	306.02	290.0	144.29	153.30
115.0	105.64	113.36	295.0	170.96	181.02
120.0	40.02	48.08	300.0	193.81	204.83
125.0	134.63	143.28	305.0	206.56	218.14
130.0	196.12	207.24	310.0	208.21	219.86
135.0	230.15	242.79	315.0	200.21	211.51
140.0	244.42	257.70	320.0	185.05	195.71
145.0	245.53	258.86	325.0	165.40	175.23
150.0	238.50	251.52	330.0	143.46	152.43
155.0	226.62	239.10	335.0	120.73	128.90
160.0	211.54	223.35	340.0	97.84	105.36
165.0	193.61	204.63	345.0	74.80	81.94
170.0	172.25	182.36	350.0	51.45	58.86
175.0	146.49	155.58	355.0	28.67	38.11

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 10°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	18.60	30.19	180.0	108.89	116.63
5.0	24.98	34.89	185.0	74.40	81.44
10.0	30.94	39.82	190.0	41.51	49.29
15.0	22.85	33.25	195.0	35.68	43.97
20.0	21.84	32.49	200.0	62.42	69.47
25.0	90.17	97.44	205.0	88.05	95.27
30.0	206.11	217.63	210.0	100.03	107.53
35.0	371.37	390.61	215.0	92.51	99.82
40.0	583.80	613.42	220.0	64.29	71.32
45.0	833.53	875.51	225.0	33.93	42.42
50.0	1102.6	1157.9	230.0	77.60	84.67
55.0	1366.1	1434.6	235.0	152.52	161.80
60.0	1596.1	1676.0	240.0	227.59	240.08
65.0	1765.4	1853.8	245.0	290.21	305.59
70.0	1853.0	1945.8	250.0	331.58	348.92
75.0	1847.7	1940.2	255.0	346.98	365.06
80.0	1750.2	1837.9	260.0	336.07	353.63
85.0	1572.8	1651.6	265.0	302.56	318.52
90.0	1336.7	1403.7	270.0	253.46	267.13
95.0	1068.0	1121.7	275.0	198.80	210.00
100.0	793.14	833.11	280.0	152.38	161.65
105.0	534.66	561.86	285.0	131.21	139.68
110.0	308.98	325.24	290.0	140.54	149.35
115.0	125.54	133.81	295.0	164.09	173.82
120.0	23.54	33.77	300.0	185.82	196.46
125.0	116.17	124.13	305.0	198.74	209.94
130.0	179.77	190.16	310.0	201.29	212.60
135.0	216.26	228.24	315.0	194.54	205.56
140.0	232.86	245.58	320.0	180.69	191.11
145.0	235.92	248.79	325.0	162.17	171.83
150.0	230.33	242.94	330.0	141.10	149.94
155.0	219.35	231.46	335.0	118.95	127.00
160.0	204.69	216.15	340.0	96.44	103.84
165.0	186.82	197.51	345.0	73.79	80.82
170.0	165.34	175.13	350.0	51.22	58.50
175.0	139.51	148.28	355.0	30.27	39.24

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 15°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	24.72	34.32	180.0	97.61	104.92
5.0	26.54	35.79	185.0	64.77	71.62
10.0	27.07	36.22	190.0	36.67	44.57
15.0	17.21	28.82	195.0	39.74	47.38
20.0	36.87	44.75	200.0	66.46	73.31
25.0	109.93	117.59	205.0	89.59	96.72
30.0	226.97	239.37	210.0	99.12	106.47
35.0	390.03	410.15	215.0	89.64	96.77
40.0	596.51	626.74	220.0	59.08	65.97
45.0	836.66	878.78	225.0	16.56	28.40
50.0	1093.4	1148.3	230.0	64.70	71.55
55.0	1343.5	1410.9	235.0	139.13	147.80
60.0	1561.1	1639.3	240.0	212.23	223.97
65.0	1721.1	1807.3	245.0	273.70	288.26
70.0	1804.3	1894.7	250.0	315.65	332.19
75.0	1800.3	1890.5	255.0	333.62	351.02
80.0	1709.7	1795.4	260.0	327.01	344.09
85.0	1543.6	1621.0	265.0	298.88	314.63
90.0	1321.5	1387.8	270.0	255.37	269.07
95.0	1067.3	1120.9	275.0	205.21	216.64
100.0	805.52	846.09	280.0	160.15	169.65
105.0	557.34	585.64	285.0	134.55	143.05
110.0	338.44	356.07	290.0	135.97	144.53
115.0	158.05	167.47	295.0	153.90	163.15
120.0	24.21	33.91	300.0	173.28	183.33
125.0	85.43	92.47	305.0	186.08	196.67
130.0	152.03	161.21	310.0	189.83	200.59
135.0	192.27	203.13	315.0	184.95	195.49
140.0	212.54	224.30	320.0	173.16	183.20
145.0	218.76	230.79	325.0	156.55	165.90
150.0	215.56	227.45	330.0	137.04	145.63
155.0	206.16	217.63	335.0	116.07	123.93
160.0	192.34	203.21	340.0	94.52	101.76
165.0	174.78	184.89	345.0	72.93	79.80
170.0	153.35	162.57	350.0	52.04	59.07
175.0	127.63	135.88	355.0	34.03	42.20

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 20°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	30.80	38.93	180.0	81.79	88.57
5.0	27.73	36.30	185.0	51.99	58.74
10.0	23.00	32.46	190.0	32.80	40.70
15.0	21.64	31.40	195.0	46.06	53.00
20.0	59.75	66.37	200.0	71.93	78.58
25.0	137.40	145.89	205.0	92.07	99.08
30.0	255.12	268.75	210.0	98.99	106.18
35.0	414.47	435.73	215.0	88.20	95.11
40.0	612.28	643.26	220.0	57.83	64.48
45.0	839.12	881.34	225.0	12.22	25.19
50.0	1079.1	1133.3	230.0	56.67	63.33
55.0	1311.3	1377.0	235.0	127.05	135.15
60.0	1512.3	1588.1	240.0	196.26	207.21
65.0	1660.1	1743.2	245.0	255.40	269.05
70.0	1737.4	1824.4	250.0	297.41	313.03
75.0	1735.0	1821.9	255.0	318.05	334.65
80.0	1653.4	1736.2	260.0	316.39	332.91
85.0	1502.2	1577.5	265.0	294.72	310.21
90.0	1298.6	1363.7	270.0	258.03	271.79
95.0	1063.9	1117.3	275.0	213.58	225.31
100.0	819.92	861.19	280.0	170.83	180.68
105.0	586.13	615.82	285.0	141.15	149.79
110.0	377.13	396.57	290.0	133.02	141.34
115.0	201.89	213.09	295.0	142.55	151.24
120.0	64.73	71.34	300.0	157.64	166.94
125.0	43.39	50.46	305.0	169.40	179.19
130.0	112.49	120.08	310.0	174.17	184.16
135.0	157.24	166.52	315.0	171.42	181.30
140.0	182.18	192.51	320.0	162.22	171.71
145.0	192.55	203.34	325.0	148.19	157.11
150.0	192.67	203.46	330.0	131.00	139.25
155.0	185.60	196.09	335.0	112.02	119.61
160.0	173.25	183.20	340.0	92.28	99.29
165.0	156.50	165.75	345.0	72.66	79.31
170.0	135.57	143.99	350.0	54.30	61.00
175.0	110.50	118.03	355.0	39.36	46.67

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 25°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	35.32	42.48	180.0	61.53	67.85
5.0	28.93	36.77	185.0	37.73	44.71
10.0	25.49	33.84	190.0	34.12	41.38
15.0	41.77	48.51	195.0	55.22	61.58
20.0	90.39	97.15	200.0	79.32	85.83
25.0	172.04	181.83	205.0	96.45	103.38
30.0	289.29	304.46	210.0	101.45	108.51
35.0	442.86	465.47	215.0	91.30	98.08
40.0	629.13	660.91	220.0	66.61	72.95
45.0	839.11	881.30	225.0	41.53	48.28
50.0	1058.5	1111.6	230.0	65.83	72.16
55.0	1268.9	1332.5	235.0	123.48	131.30
60.0	1450.1	1522.8	240.0	185.16	195.52
65.0	1583.2	1662.4	245.0	239.84	252.68
70.0	1653.3	1736.1	250.0	280.54	295.30
75.0	1652.8	1735.5	255.0	303.05	318.88
80.0	1581.6	1660.9	260.0	306.04	322.01
85.0	1448.1	1520.7	265.0	290.92	306.17
90.0	1266.7	1330.1	270.0	261.48	275.33
95.0	1055.5	1108.4	275.0	223.40	235.48
100.0	833.56	875.48	280.0	183.99	194.30
105.0	618.07	649.31	285.0	151.78	160.71
110.0	422.30	443.90	290.0	134.48	142.72
115.0	254.84	268.39	295.0	133.39	141.58
120.0	119.81	127.50	300.0	141.49	150.00
125.0	21.88	30.94	305.0	150.40	159.27
130.0	61.48	67.80	310.0	155.24	164.31
135.0	110.51	117.87	315.0	154.32	163.36
140.0	140.55	149.03	320.0	147.84	156.61
145.0	155.77	164.87	325.0	136.83	145.16
150.0	159.98	169.25	330.0	122.60	130.39
155.0	156.05	165.16	335.0	106.39	113.62
160.0	145.94	154.64	340.0	89.31	96.04
165.0	130.78	138.87	345.0	72.41	78.81
170.0	111.16	118.54	350.0	56.90	63.24
175.0	87.64	94.32	355.0	44.24	50.86

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 30°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	38.86	45.26	180.0	38.38	44.80
5.0	34.74	41.41	185.0	29.46	36.61
10.0	42.59	48.82	190.0	44.58	50.75
15.0	72.60	78.71	195.0	68.29	74.33
20.0	128.44	136.28	200.0	89.92	96.43
25.0	212.69	224.19	205.0	104.56	111.52
30.0	327.54	344.48	210.0	109.03	116.15
35.0	472.80	496.83	215.0	102.22	109.10
40.0	644.54	677.06	220.0	87.28	93.71
45.0	834.48	876.43	225.0	77.10	83.29
50.0	1030.1	1081.8	230.0	92.95	99.54
55.0	1215.9	1276.8	235.0	134.17	142.23
60.0	1374.9	1443.8	240.0	184.29	194.49
65.0	1491.6	1566.3	245.0	231.60	243.97
70.0	1553.8	1631.6	250.0	268.79	282.91
75.0	1554.9	1632.8	255.0	291.47	306.67
80.0	1495.2	1570.1	260.0	297.82	313.32
85.0	1381.0	1450.2	265.0	288.38	303.44
90.0	1224.1	1285.5	270.0	265.75	279.73
95.0	1039.5	1091.7	275.0	234.13	246.61
100.0	843.11	885.48	280.0	198.92	209.78
105.0	649.44	682.19	285.0	166.32	175.73
110.0	470.28	494.18	290.0	142.35	150.74
115.0	313.65	329.91	295.0	130.50	138.41
120.0	183.80	193.98	300.0	129.01	136.87
125.0	81.96	88.26	305.0	132.32	140.31
130.0	15.69	25.59	310.0	135.25	143.36
135.0	52.74	58.74	315.0	134.98	143.08
140.0	87.24	93.68	320.0	130.67	138.60
145.0	107.45	114.51	325.0	122.60	130.21
150.0	116.23	123.60	330.0	111.59	118.80
155.0	116.16	123.53	335.0	98.63	105.40
160.0	109.17	116.29	340.0	84.73	91.10
165.0	96.59	103.29	345.0	70.89	76.96
170.0	79.44	85.68	350.0	58.09	64.06
175.0	58.98	64.95	355.0	47.21	53.30

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 35°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	47.05	52.69	180.0	26.92	33.67
5.0	52.58	58.16	185.0	42.43	48.17
10.0	72.93	78.74	190.0	64.51	70.17
15.0	112.07	119.09	195.0	86.72	92.87
20.0	172.73	182.29	200.0	105.58	112.37
25.0	257.33	270.81	205.0	118.53	125.79
30.0	367.15	385.95	210.0	123.95	131.43
35.0	501.26	526.64	215.0	122.17	129.58
40.0	655.64	688.66	220.0	116.83	124.03
45.0	822.92	864.26	225.0	116.10	123.27
50.0	992.59	1042.38	230.0	129.35	137.05
55.0	1151.9	1209.7	235.0	158.17	167.09
60.0	1287.5	1352.0	240.0	195.64	206.24
65.0	1386.8	1456.3	245.0	233.35	245.70
70.0	1440.5	1512.6	250.0	264.69	278.53
75.0	1443.2	1515.5	255.0	285.33	300.16
80.0	1395.0	1464.9	260.0	293.08	308.28
85.0	1300.8	1366.0	265.0	287.74	302.68
90.0	1169.7	1228.3	270.0	270.82	284.95
95.0	1013.5	1064.3	275.0	245.20	258.11
100.0	844.91	887.34	280.0	214.73	226.21
105.0	675.92	709.95	285.0	183.77	193.83
110.0	516.52	542.65	290.0	156.69	165.54
115.0	373.92	393.04	295.0	136.88	144.88
120.0	252.41	265.66	300.0	125.45	132.99
125.0	153.63	162.35	305.0	120.54	127.89
130.0	77.33	83.23	310.0	118.68	125.95
135.0	24.11	31.24	315.0	116.79	123.98
140.0	25.64	32.56	320.0	113.10	120.16
145.0	48.46	54.08	325.0	107.07	113.91
150.0	61.58	67.20	330.0	98.88	105.42
155.0	65.78	71.46	335.0	89.09	95.32
160.0	62.76	68.40	340.0	78.46	84.39
165.0	54.06	59.64	345.0	67.83	73.53
170.0	41.43	47.19	350.0	58.10	63.69
175.0	28.65	35.21	355.0	50.43	56.03

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 40°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	68.11	73.49	180.0	53.45	58.62
5.0	84.28	90.10	185.0	72.62	78.10
10.0	113.52	120.39	190.0	92.60	98.69
15.0	158.31	167.08	195.0	111.53	118.32
20.0	220.87	232.53	200.0	127.65	135.10
25.0	302.85	318.44	205.0	139.54	147.49
30.0	404.62	425.18	210.0	146.58	154.84
35.0	524.70	551.20	215.0	149.60	157.99
40.0	659.28	692.45	220.0	151.33	159.79
45.0	802.07	842.34	225.0	156.23	164.91
50.0	944.59	991.97	230.0	168.57	177.81
55.0	1076.9	1130.9	235.0	189.52	199.71
60.0	1188.8	1248.3	240.0	216.31	227.76
65.0	1270.7	1334.4	245.0	244.15	256.92
70.0	1315.6	1381.5	250.0	268.26	282.18
75.0	1319.6	1385.7	255.0	284.99	299.71
80.0	1282.5	1346.7	260.0	292.14	307.22
85.0	1207.8	1268.3	265.0	289.06	303.98
90.0	1102.3	1157.6	270.0	276.42	290.73
95.0	974.93	1023.8	275.0	256.01	269.34
100.0	835.32	877.24	280.0	230.42	242.53
105.0	692.90	727.74	285.0	202.65	213.46
110.0	555.80	583.84	290.0	175.75	185.31
115.0	430.25	452.08	295.0	152.33	160.84
120.0	320.31	336.75	300.0	134.05	141.76
125.0	228.03	240.03	305.0	121.17	128.35
130.0	153.76	162.33	310.0	112.57	119.40
135.0	96.67	102.90	315.0	106.40	112.99
140.0	55.36	60.54	320.0	100.96	107.35
145.0	28.77	34.62	325.0	95.18	101.36
150.0	17.27	24.79	330.0	88.65	94.60
155.0	16.97	24.56	335.0	81.49	87.22
160.0	18.20	25.51	340.0	74.20	79.72
165.0	19.62	26.65	345.0	67.57	72.94
170.0	25.22	31.42	350.0	62.87	68.15
175.0	36.98	42.35	355.0	62.09	67.35

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 45°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	103.59	109.85	180.0	96.24	102.22
5.0	126.86	134.09	185.0	111.41	117.99
10.0	161.06	169.81	190.0	127.19	134.43
15.0	207.97	218.92	195.0	142.35	150.26
20.0	269.05	282.92	200.0	155.79	164.30
25.0	345.07	362.65	205.0	166.71	175.72
30.0	435.73	457.77	210.0	174.94	184.34
35.0	539.29	566.47	215.0	181.18	190.86
40.0	652.36	685.15	220.0	187.05	197.00
45.0	769.83	808.47	225.0	194.74	205.06
50.0	885.21	929.60	230.0	206.16	217.02
55.0	991.12	1040.8	235.0	221.86	233.46
60.0	1080.0	1134.2	240.0	240.62	253.12
65.0	1145.3	1202.6	245.0	259.92	273.35
70.0	1181.7	1240.8	250.0	276.84	291.09
75.0	1186.4	1245.8	255.0	288.79	303.62
80.0	1159.3	1217.3	260.0	293.98	309.06
85.0	1102.8	1158.0	265.0	291.62	306.59
90.0	1021.6	1072.8	270.0	281.88	296.38
95.0	921.99	968.21	275.0	265.76	279.48
100.0	811.09	851.78	280.0	244.89	257.59
105.0	695.89	730.85	285.0	221.24	232.81
110.0	582.69	612.02	290.0	196.89	207.31
115.0	476.56	500.62	295.0	173.72	183.05
120.0	381.12	400.47	300.0	153.16	161.55
125.0	298.54	313.84	305.0	136.00	143.63
130.0	229.71	241.69	310.0	122.34	129.37
135.0	174.52	183.89	315.0	111.66	118.25
140.0	132.14	139.60	320.0	103.19	109.43
145.0	101.37	107.54	325.0	96.18	102.16
150.0	80.79	86.21	330.0	90.21	95.96
155.0	68.95	74.02	335.0	85.21	90.79
160.0	64.45	69.40	340.0	81.58	87.04
165.0	65.99	70.98	345.0	80.14	85.55
170.0	72.48	77.64	350.0	82.17	87.64
175.0	82.90	88.40	355.0	89.34	95.07

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 50°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	148.62	156.66	180.0	143.80	151.62
5.0	175.13	184.41	185.0	154.16	162.46
10.0	210.57	221.52	190.0	165.45	174.27
15.0	255.98	269.13	195.0	176.79	186.14
20.0	312.07	327.97	200.0	187.46	197.31
25.0	378.96	398.15	205.0	196.99	207.30
30.0	455.92	478.92	210.0	205.30	216.01
35.0	541.24	568.47	215.0	212.77	223.84
40.0	632.09	663.83	220.0	220.17	231.59
45.0	724.58	760.94	225.0	228.46	240.28
50.0	814.01	854.82	230.0	238.36	250.66
55.0	895.18	940.04	235.0	250.02	262.89
60.0	962.95	1011.2	240.0	262.81	276.29
65.0	1012.7	1063.5	245.0	275.41	289.51
70.0	1041.1	1093.2	250.0	286.18	300.81
75.0	1046.1	1098.5	255.0	293.56	308.55
80.0	1027.6	1079.0	260.0	296.33	311.45
85.0	987.06	1036.5	265.0	293.83	308.83
90.0	927.69	974.17	270.0	286.00	300.61
95.0	853.66	896.45	275.0	273.35	287.35
100.0	769.81	808.42	280.0	256.83	270.02
105.0	681.09	715.28	285.0	237.69	249.95
110.0	592.08	621.84	290.0	217.28	228.56
115.0	506.68	532.19	295.0	196.92	207.23
120.0	427.87	449.48	300.0	177.71	187.10
125.0	357.70	375.84	305.0	160.44	169.03
130.0	297.30	312.47	310.0	145.58	153.48
135.0	247.05	259.78	315.0	133.26	140.60
140.0	206.76	217.54	320.0	123.41	130.31
145.0	175.82	185.13	325.0	115.87	122.44
150.0	153.40	161.66	330.0	110.56	116.91
155.0	138.54	146.13	335.0	107.58	113.80
160.0	130.27	137.48	340.0	107.28	113.49
165.0	127.60	134.69	345.0	110.27	116.60
170.0	129.58	136.76	350.0	117.42	124.06
175.0	135.29	142.72	355.0	129.80	136.99

Fields in mV/m @ 1 Kilometer

**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 55°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	195.62	205.77	180.0	189.96	199.83
5.0	221.98	233.40	185.0	195.80	205.95
10.0	255.22	268.26	190.0	202.83	213.32
15.0	295.80	310.83	195.0	210.45	221.31
20.0	343.88	361.28	200.0	218.17	229.40
25.0	399.16	419.29	205.0	225.66	237.26
30.0	460.78	483.97	210.0	232.82	244.77
35.0	527.24	553.73	215.0	239.75	252.03
40.0	596.37	626.31	220.0	246.69	259.31
45.0	665.44	698.81	225.0	253.95	266.92
50.0	731.21	767.87	230.0	261.71	275.06
55.0	790.30	829.91	235.0	269.90	283.66
60.0	839.39	881.45	240.0	278.14	292.30
65.0	875.58	919.44	245.0	285.72	300.26
70.0	896.69	941.60	250.0	291.80	306.64
75.0	901.49	946.64	255.0	295.52	310.53
80.0	889.84	934.41	260.0	296.16	311.21
85.0	862.66	905.87	265.0	293.32	308.23
90.0	821.84	863.02	270.0	286.90	301.49
95.0	770.03	808.62	275.0	277.13	291.25
100.0	710.30	745.91	280.0	264.56	278.06
105.0	645.90	678.31	285.0	249.93	262.70
110.0	579.96	609.08	290.0	234.07	246.07
115.0	515.24	541.14	295.0	217.86	229.08
120.0	454.01	476.87	300.0	202.11	212.56
125.0	397.98	418.05	305.0	187.47	197.22
130.0	348.27	365.89	310.0	174.46	183.58
135.0	305.50	321.01	315.0	163.44	172.04
140.0	269.86	283.61	320.0	154.64	162.83
145.0	241.18	253.53	325.0	148.25	156.13
150.0	219.09	230.37	330.0	144.42	152.12
155.0	203.04	213.54	335.0	143.38	151.04
160.0	192.40	202.39	340.0	145.47	153.23
165.0	186.49	196.19	345.0	151.13	159.15
170.0	184.59	194.20	350.0	160.92	169.41
175.0	185.99	195.67	355.0	175.51	184.69

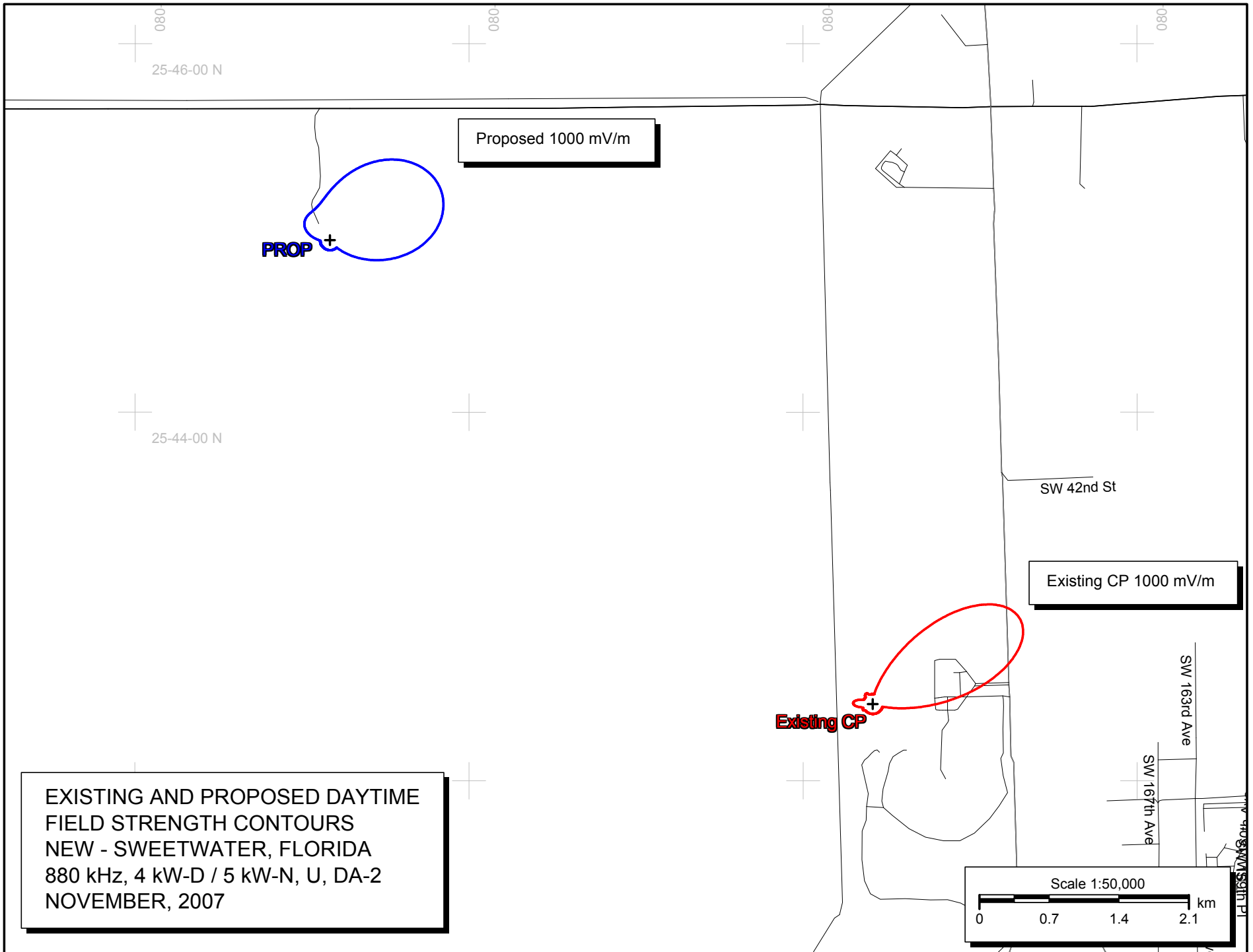
Fields in mV/m @ 1 Kilometer

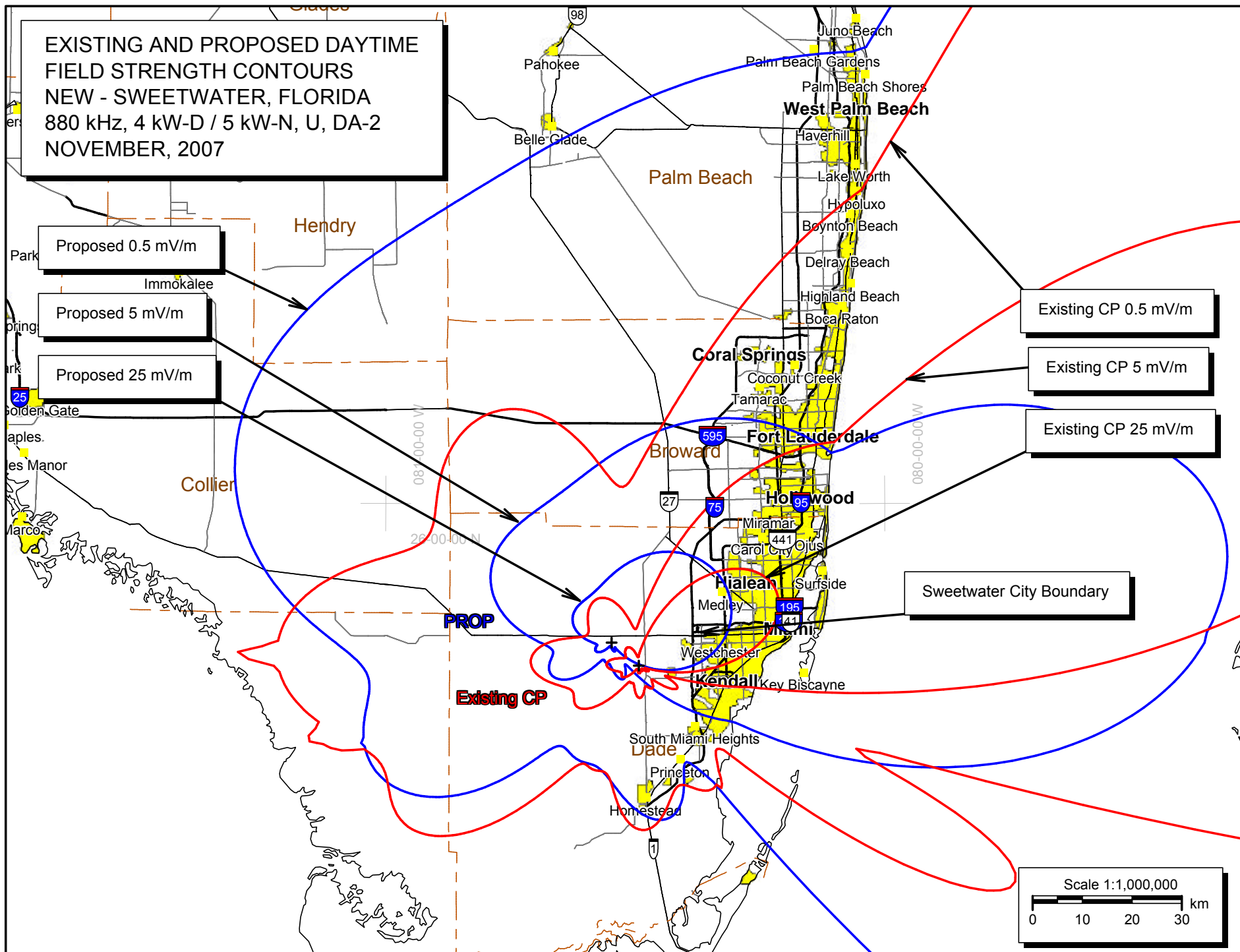
**TABULATION OF PROPOSED HORIZONTAL AND
VERTICAL PLANE STANDARD RADIATION PATTERN
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Vertical Angle = 60°

<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>	<u>Azimuth</u> <u>(deg)</u>	<u>Theoretical</u> <u>(mV/m)</u>	<u>Standard</u> <u>(mV/m)</u>
0.0	235.49	247.49	180.0	227.82	239.44
5.0	258.89	272.04	185.0	229.88	241.60
10.0	287.17	301.71	190.0	233.20	245.09
15.0	320.40	336.58	195.0	237.39	249.48
20.0	358.41	376.48	200.0	242.09	254.41
25.0	400.77	420.94	205.0	247.07	259.64
30.0	446.67	469.12	210.0	252.18	264.99
35.0	494.98	519.83	215.0	257.34	270.41
40.0	544.17	571.47	220.0	262.55	275.88
45.0	592.45	622.16	225.0	267.82	281.41
50.0	637.81	669.78	230.0	273.09	286.94
55.0	678.18	712.16	235.0	278.23	292.33
60.0	711.59	747.25	240.0	282.98	297.31
65.0	736.36	773.25	245.0	286.97	301.50
70.0	751.21	788.84	250.0	289.78	304.45
75.0	755.42	793.26	255.0	290.99	305.72
80.0	748.88	786.39	260.0	290.24	304.93
85.0	732.09	768.76	265.0	287.32	301.87
90.0	706.10	741.48	270.0	282.19	296.48
95.0	672.45	706.15	275.0	274.96	288.90
100.0	632.92	664.65	280.0	265.93	279.42
105.0	589.49	619.05	285.0	255.52	268.50
110.0	544.10	571.40	290.0	244.22	256.65
115.0	498.55	523.59	295.0	232.60	244.45
120.0	454.41	477.25	300.0	221.17	232.47
125.0	412.95	433.72	305.0	210.45	221.22
130.0	375.09	393.98	310.0	200.86	211.16
135.0	341.47	358.70	315.0	192.78	202.69
140.0	312.44	328.23	320.0	186.51	196.12
145.0	288.10	302.68	325.0	182.33	191.74
150.0	268.35	281.96	330.0	180.50	189.82
155.0	252.97	265.82	335.0	181.28	190.64
160.0	241.62	253.92	340.0	184.96	194.49
165.0	233.90	245.82	345.0	191.85	201.72
170.0	229.35	241.04	350.0	202.32	212.69
175.0	227.48	239.09	355.0	216.74	227.82

Fields in mV/m @ 1 Kilometer





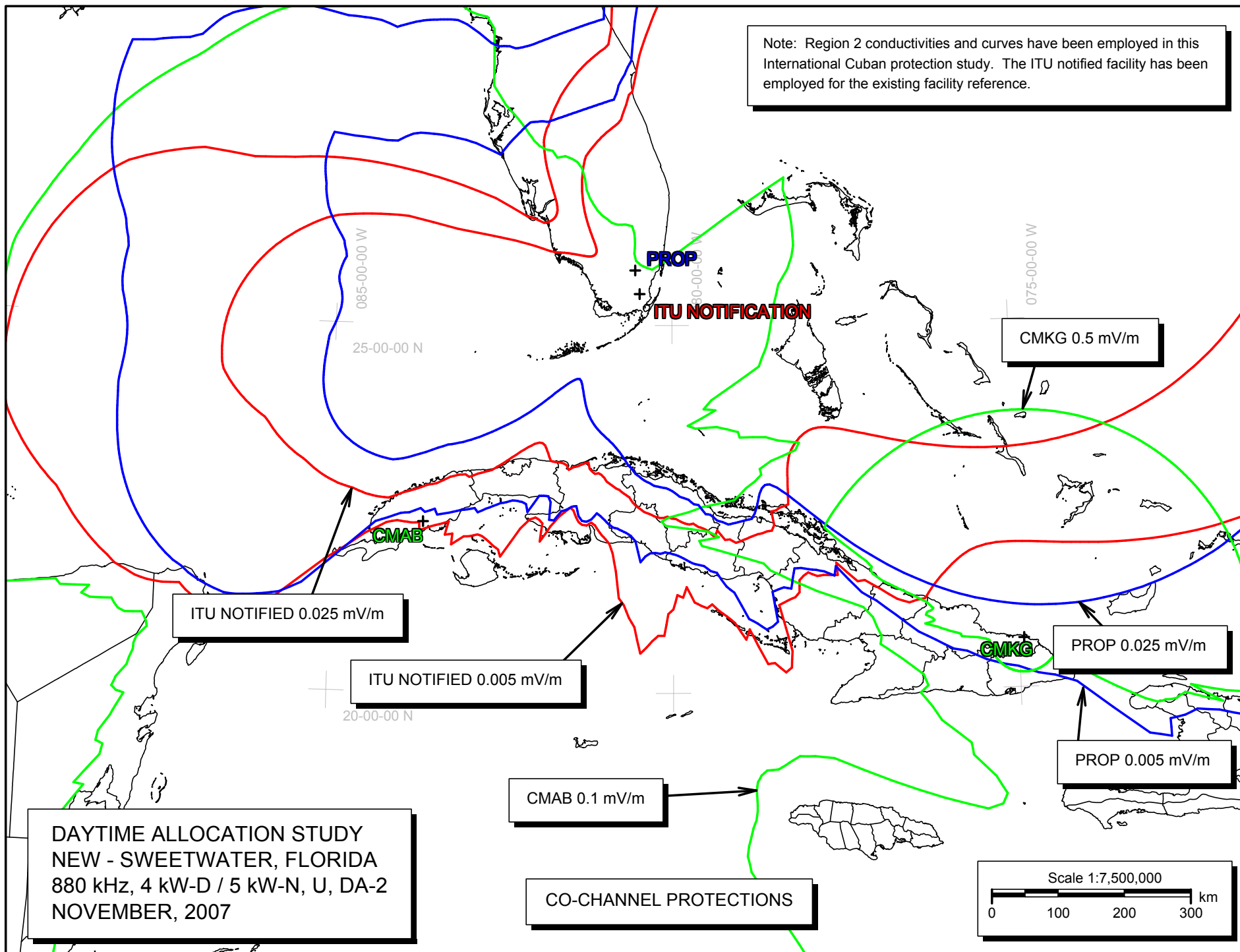
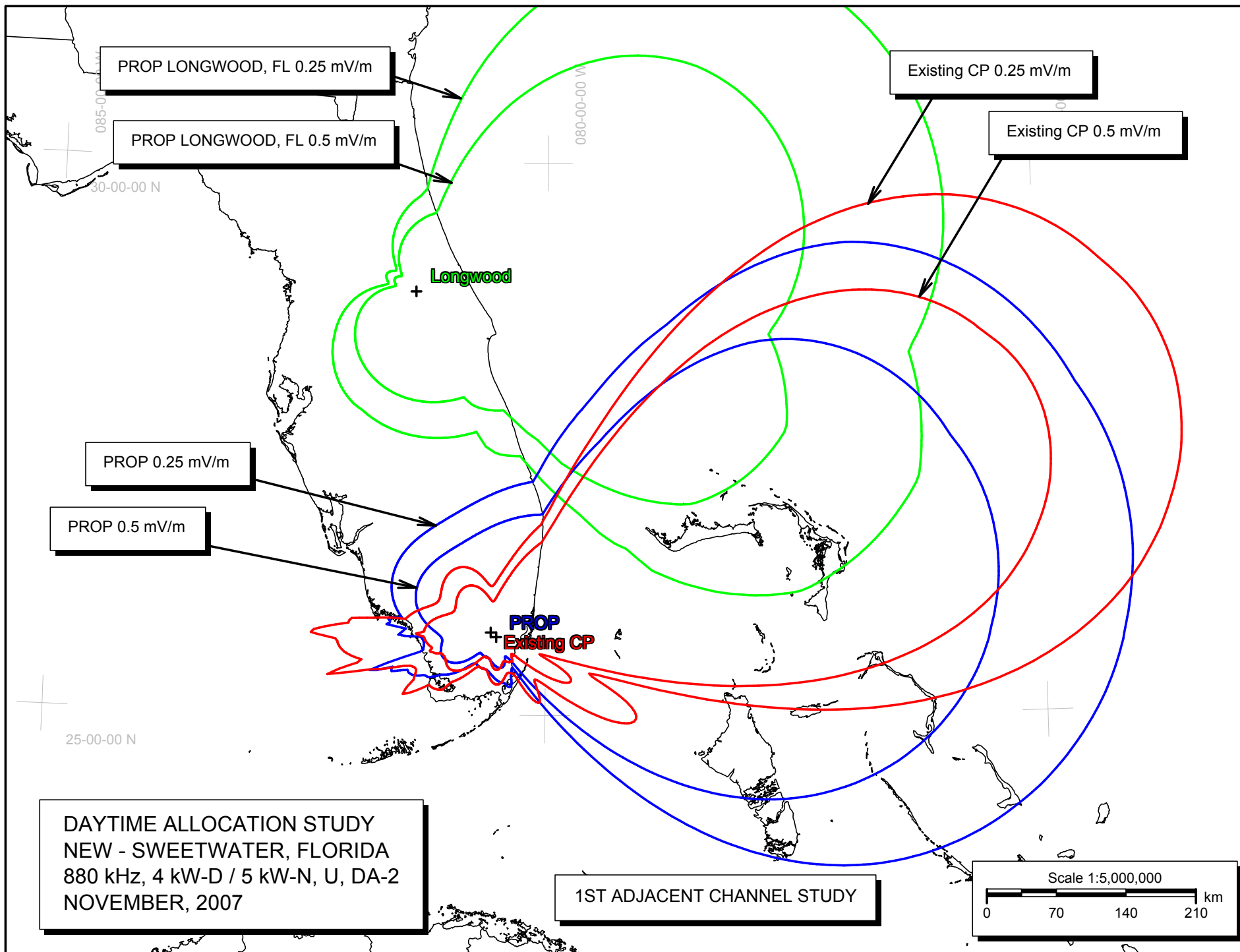
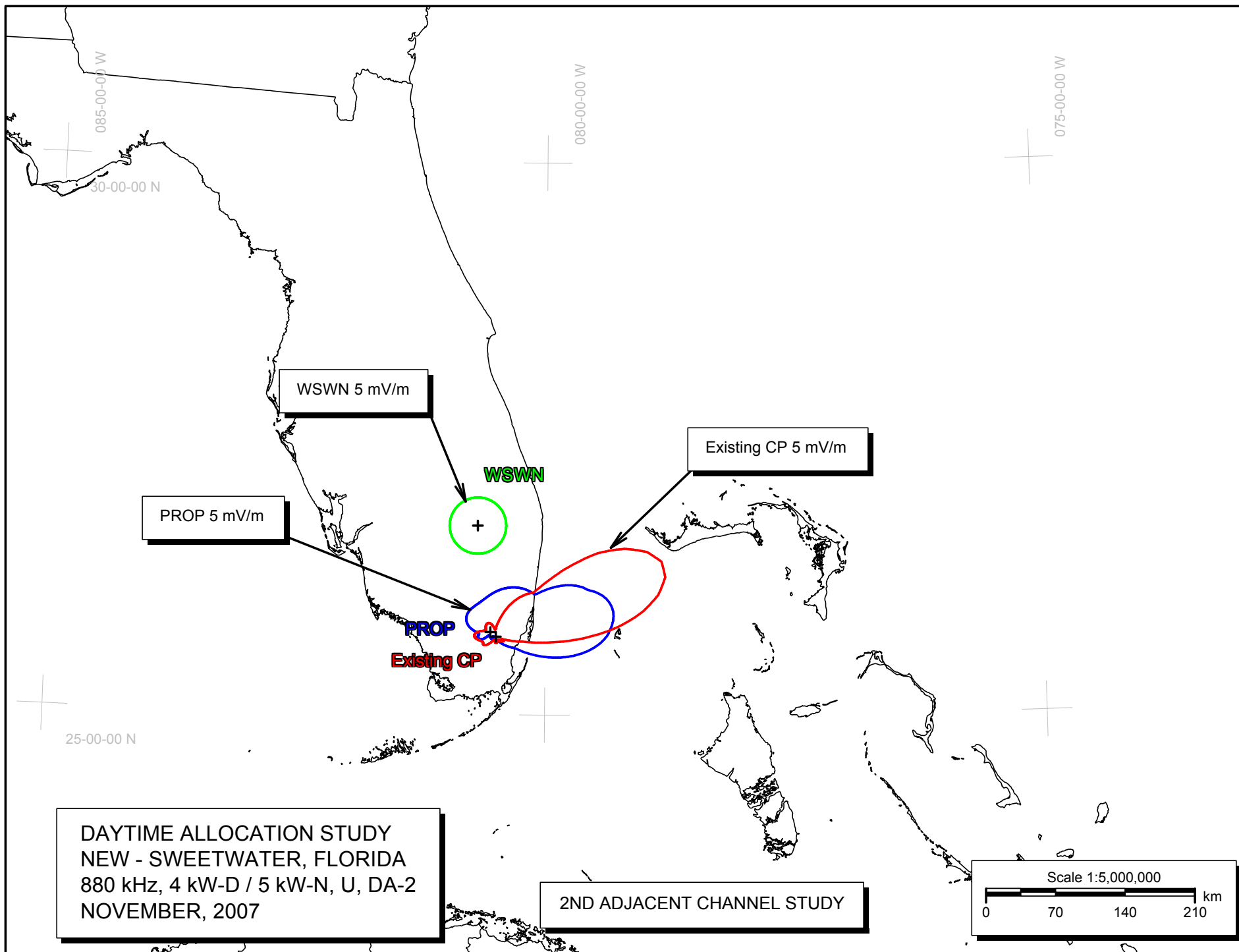
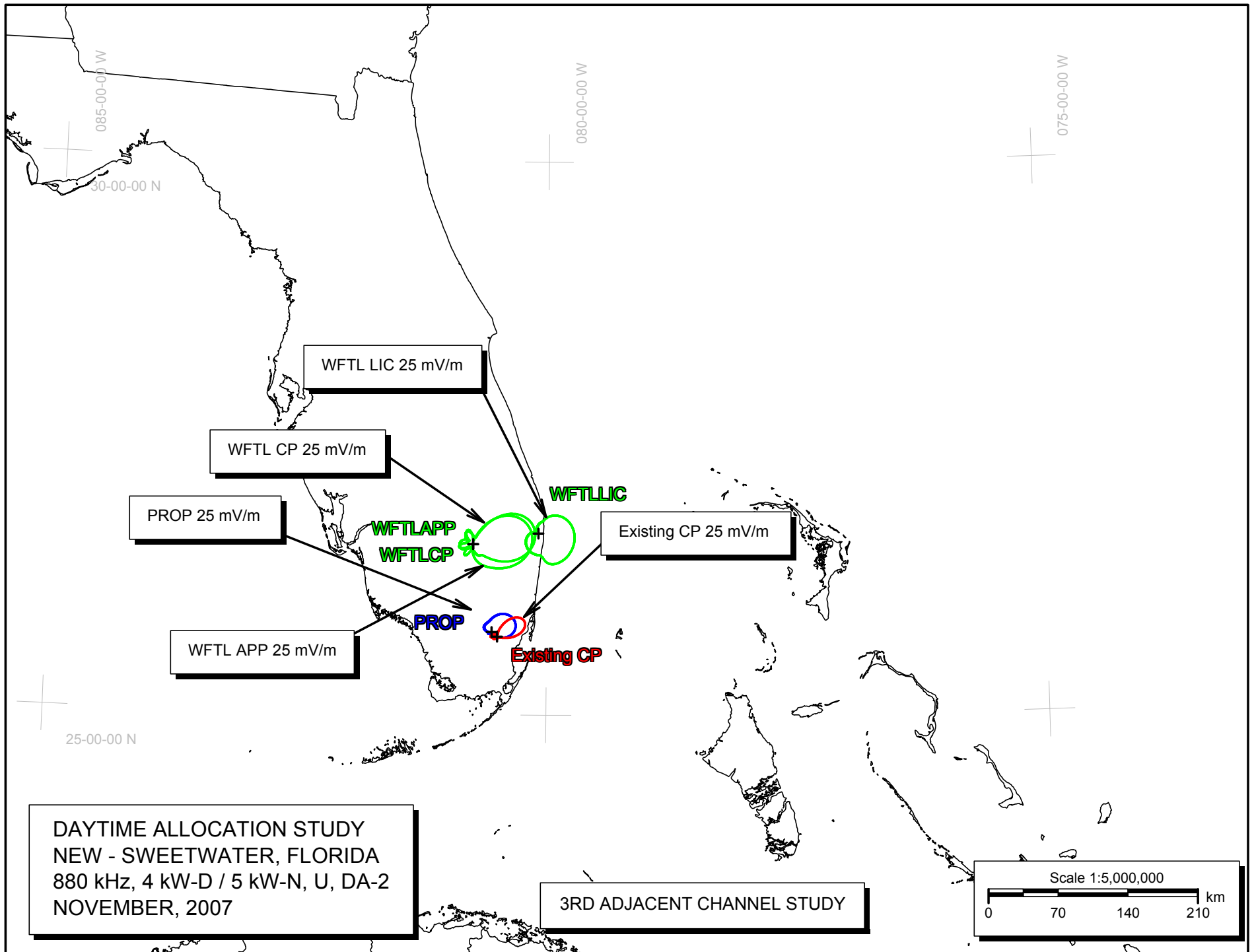


Figure 10
Sheet 1 of 4







**TABULATION OF STATIONS CONSIDERED IN
DAYTIME ALLOCATION STUDY
NEW – SWEETWATER, FLORIDA
880 kHz, 4 kW-D / 5 kW-N, U, DA-2**

Proposed
NEW, Sweetwater, Florida
880 kHz, 4 kW-D / 5 kW-N, U, DA-2

Site Coordinates: 25° 44' 56" North Latitude 80° 32' 50" West Longitude

Day THEO RMS: 565.6 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3, Domestic Considerations
Region II, International Considerations

FCC Authorized
BNP-20001023ADQ
NEW, Sweetwater, Florida
880 kHz, 4 kW-D, 1.5 kW-N, U, DA-2

Site Coordinates: 25° 42' 25" North Latitude 80° 29' 35" West Longitude

Day THEO RMS: 572.7 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3, Domestic Considerations

ITU Notified
NEW, Florida City, Florida
880 kHz, 1.8 kW-D / 0.45 kW-N, U, DA-2

Day Site Coordinates: 25° 25' 40" North Latitude 80° 28' 43" West Longitude

Day THEO RMS: 377.8 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
Region II, International Considerations

CMAB, Pinar Del Ri, CUBA
880 kHz, 30 kW-D, 30 kW-N, U, ND

Site Coordinates: 22° 19' 00" North Latitude 83° 39' 00" West Longitude

Day THEO RMS: 333.9 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
Region II

CMKG, Moa, CUBA
880 kHz, 1 kW-D, 1 kW-N, U, ND

Site Coordinates: 20° 40' 00" North Latitude 74° 56' 00" West Longitude

Day THEO RMS: 317.8 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
Region II

Proposed Longwood, Florida
BP-19860331AU
890 kHz, 50 kW-D, 0.5 kW-N, U, DA-2

Site Coordinates: 28° 49' 40" North Latitude 81° 20' 56" West Longitude

Day THEO RMS: 2189.7 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3

WSWN, Belle Glade, Florida
900 kHz, 1 kW-D, 0.022 kW-N, U

Site Coordinates: 26° 42' 43" North Latitude 80° 40' 59" West Longitude

Day THEO RMS: 305.8 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3

WFTL (lic), West Palm Beach, Florida
850 kHz, 5 kW-D, 1 kW-N, U, DA-2

Site Coordinates: 26° 38' 28" North Latitude 80° 05' 08" West Longitude

Day THEO RMS: 660.8 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3

WFTL (CP), West Palm Beach, Florida
BP-19990521AI
850 kHz, 50 kW-D, 24 kW-N, U, DA-2

Site Coordinates: 26° 32' 30" North Latitude 80° 44' 30" West Longitude

Day THEO RMS: 2200.0 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3

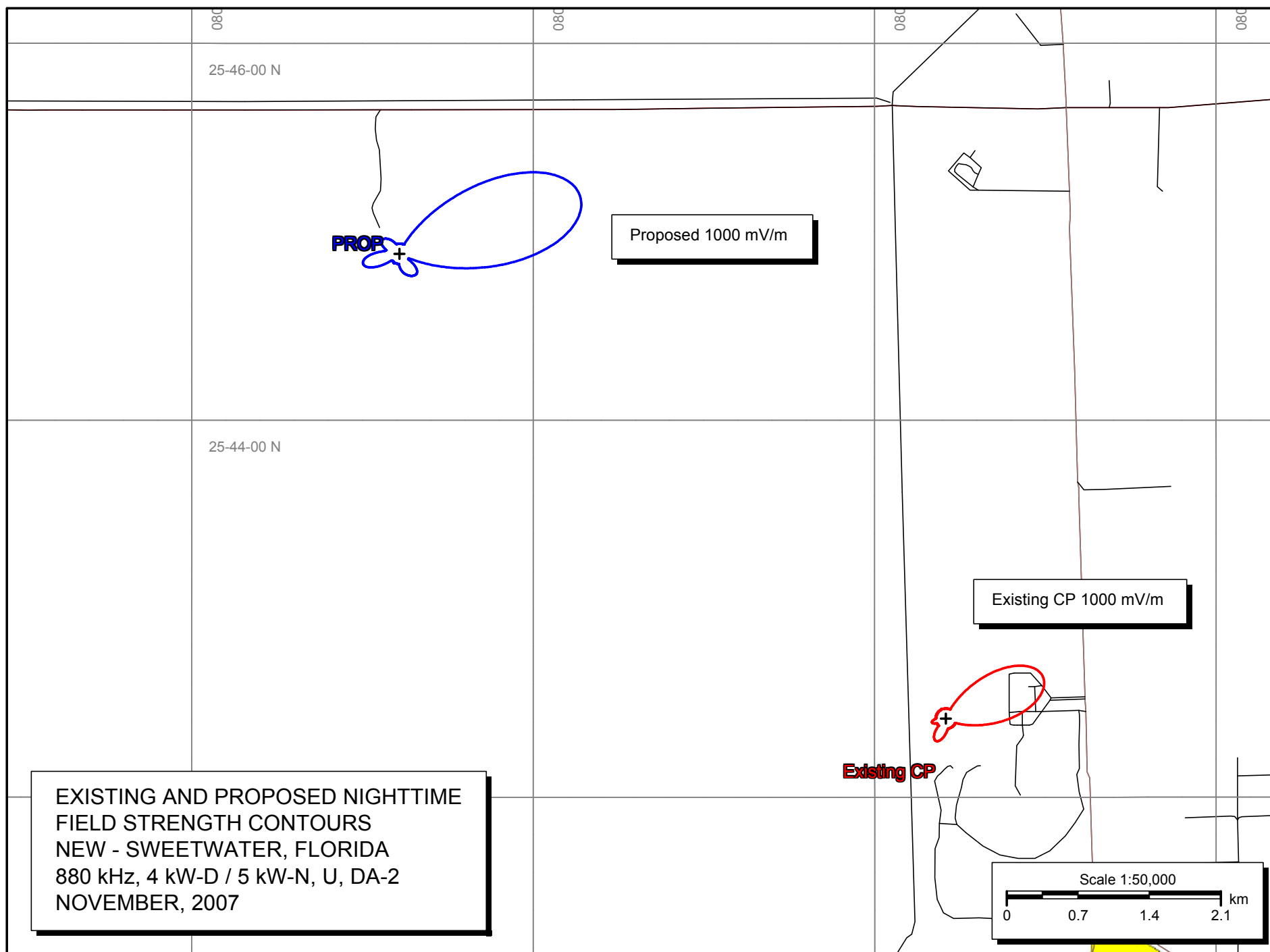
WFTL (APP), West Palm Beach, Florida
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850 kHz, 50 kW-D, 24 kW-N, U, DA-2

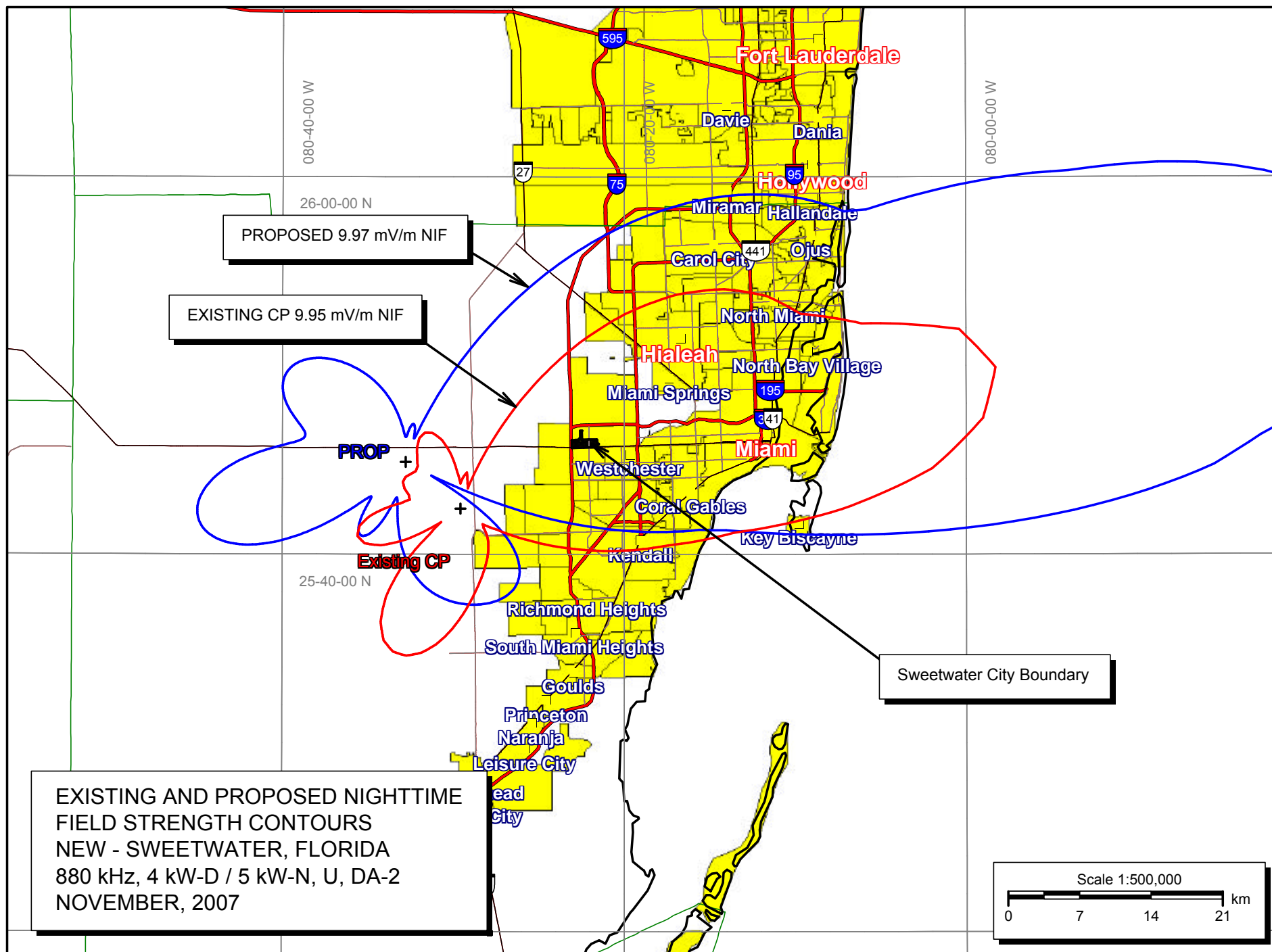
Site Coordinates: 26° 32' 30" North Latitude 80° 44' 30" West Longitude

Day THEO RMS: 2146.0 mV/m at one kilometer

Radial
(deg. T)
All

Conductivity Data
Source
FCC Figure M-3





NIGHTTIME ALLOCATION STUDY
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D, 5 kW-N, U, DA-2

SUMMARY OF LIMITS TO PROP - SWEETWATER, FLORIDA
25° 44' 56" North Latitude 80° 32' 50" West Longitude

Call	City	St Co	Latitude (D- M- S)	Longitude (D- M- S)	Az (Deg)	Dist (km)	Min/Max (Deg) (Deg)	E(Hor) (mV/m)	E(Vert) (mV/m)	E(Sky) (mV/m)	Limit (mV/m)	RSS (mV/m)	Code ¹ 123456
CMAB	PINAR DEL RI	CU	N 22-19-00	W 083-39-00	38.92	494.9	15.10/24.65	1694.98	1575.53	.1343119	42.3225		0 7
WCBS	NEW YORK	NY US	N 40-51-35	W 073-47-09	202.45	1792.4	.55/ 3.55	3015.67	3014.94	.0165366	9.9714	9.971	L0
HCRP1	QUITO	EC	S 0-11-00	W 078-28-00	355.72	2892.2	.00/ .00	3094.60	3094.60	.0124067	7.6787		0 5
HRGY	TEGUCIGALPA	HO	N 14-07-00	W 087-14-00	27.31	1469.4	2.28/ 5.92	978.60	977.46	.0325230	6.3580		0 5
CMKG	MDA	CU	N 20-40-00	W 074-56-00	315.64	805.1	8.32/14.71	360.40	354.54	.0729221	5.1708		0 7
+ CMHB	CAMAGUEY 3	CU	N 21-23-00	W 077-59-00	332.21	551.2	13.39/22.19	1694.98	1599.29	.1186351	3.7946		0 7
50% Exclusion													
YVMP	BARQUISIMETO	VE	N 10-05-00	W 069-19-00	327.28	2105.8	.00/ 1.72	978.60	978.60	.0189722	3.7132	10.640	0
FLCITY	FLORIDA CITY	FL US	N 25-31-22	W 080-27-54	341.87	26.5	79.52/83.62	55.20	39.96	.4640163	3.7084	11.268	CP
HJGE	BUCARAMANGA	CO	N 7-06-00	W 073-07-00	340.04	2218.4	.00/ 1.14	978.60	978.60	.0179997	3.5229		0 5
OBZ4N	UNION	PE	S 12-13-00	W 076-59-00	354.80	4239.2	.00/ .00	2188.21	2188.21	.0070079	3.0670	11.678	0
ZYL-275	BELO HORIZON	BR	S 19-55-00	W 043-55-00	320.62	6436.7	.00/ .00	4392.00	4392.00	.0033652	2.9560	12.046	0
25% Exclusion													
TGJ	NUEVOMUNDO	GT	N 14-39-00	W 090-29-00	38.42	1610.3	1.48/ 4.81	489.30	489.06	.0280908	2.7476	12.356	0

- indicates lower adjacent frequency
+ indicates upper adjacent frequency

NIGHTTIME ALLOCATION STUDY
NEW - SWEETWATER, FLORIDA
880 kHz, 4 kW-D, 5 kW-N, U, DA-2

SUMMARY OF LIMITS TO CMKG - MOA, CUBA
25° 44' 53" North Latitude 80° 32' 47" West Longitude

Call	City	St Co	Latitude (D- M- S)	Longitude (D- M- S)	Az (Deg)	Dist (km)	Min/Max (Deg) (Deg)	E(Hor) (mV/m)	E(Vert) (mV/m)	E(Sky) (mV/m)	Limit (mV/m)	RSS (mV/m)	Code ¹ 123456
CMAB	PINAR DEL RI	CU	N 22-19-00	W 083-39-00	99.88	920.2	9.68/ 9.68	1694.98	1644.70	.0289589	9.5258		0 7
YVMP	BARQUISIMETO	VE	N 10-05-00	W 069-19-00	333.60	1321.5	5.27/ 5.27	978.60	972.55	.0147273	2.8646	2.865	0
HRGY	TEGUCIGALPA	HO	N 14-07-00	W 087-14-00	59.10	1493.6	3.94/ 3.94	978.60	975.21	.0106239	2.0721		0 5
HJGE	BUCARAMANGA	CO	N 7-06-00	W 073-07-00	352.80	1521.2	3.75/ 3.75	978.60	975.72	.0100793	1.9669		0 5
4VGS	GONAIVES	HA	N 19-26-00	W 072-41-00	300.65	272.1	34.53/34.53	169.50	129.44	.0735380	1.9037	3.439	0
WCBS	NEW YORK	NY US	N 40-51-35	W 073-47-09	183.11	2248.0	.00/ .00	3015.67	3015.67	.0029881	1.8022	3.883	L0
50% Exclusion													
FLCITY	FLORIDA CITY	FL US	N 25-31-22	W 080-27-54	132.54	781.9	12.00/12.00	237.74	240.26	.0352516	1.6939	4.236	CP
HCRP1	QUITO	EC	S 0-11-00	W 078-28-00	9.20	2350.0	.00/ .00	3094.60	3094.60	.0026683	1.6515		0 5
	MONTSEERRAT	MH	N 16-42-06	W 062-13-02	290.19	1409.5	4.56/ 4.56	646.34	644.00	.0124763	1.6069	4.531	0
HIOR	VALVERDE MAO	DR	N 19-33-00	W 071-05-00	287.82	420.7	23.53/23.53	154.70	136.63	.0552857	1.5107	4.776	0
NEWN8G	SWEETWATER	US	N 25-44-53	W 080-32-47	133.43	805.9	11.57/11.57	239.23	211.80	.0341751	1.4477	4.991	
25% Exclusion													
WYKO	SABANA GRANDE	PR US	N 18-04-21	W 066-57-06	290.31	885.4	10.21/10.21	199.69	196.03	.0305681	1.1985	5.133	L0
YNRE	RADIO EXITO	NU	N 12-08-00	W 086-14-00	50.30	1532.8	3.67/ 3.67	360.40	359.27	.0098574	.7083		0 5

- indicates lower adjacent frequency
+ indicates upper adjacent frequency

1. Database Record Code

Column 1 - Domestic Status

- | | |
|---------------------------|--------------------------------------------|
| (C) - Construction Permit | (D) - Deleted |
| (L) - License | (M) - Petition for Expanded Band |
| (A) - Application | (P) - Planned Expanded Band |
| (T) - Test | (S) - Petition for Expanded Band w/ Stereo |

Column 2 - IFRB Notified Status

- | | |
|-------------------|---------------------------|
| (O) - Operating | (A) - Negotiated Priority |
| (P) - Proposed | (T) - Informal Proposal |
| (U) - Un-notified | (Z) - Test Record |

Column 3 - FCC Bad Record Code

- | | |
|------------------------------------------------------|---------------------------------------|
| (B) - Some data known to be bad | (V) - Bad vertical antenna parameters |
| (1) - Bad coordinates | |
| (2) - Bad horizontal antenna parameters | |
| (3) - Bad horizontal and vertical antenna parameters | |

Column 4 - FCC Dummy Data Code

- | | |
|----------------------------------------------------------|-------------------------------|
| (B) - Some data assumed | (V) - Bad vertical parameters |
| (1) - Vertical and horizontal antenna parameters assumed | |
| (2) - Coordinates are assumed | |

Column 5 - Not Included in RSS Calculation because:

- (0) - Construction Permit / License
- (1) - Deleted Domestically
- (2) - Application
- (3) - Petition for Expanded Band
- (4) - Objection
- (5) - B-List
- (6) - Class 2S or Class 3S
- (7) - Cuban Operation
- (8) - Multiple Entry
- (9) - Test Record

Column 6 - Corresponding expanded band domestic status (if this is a lower band station)

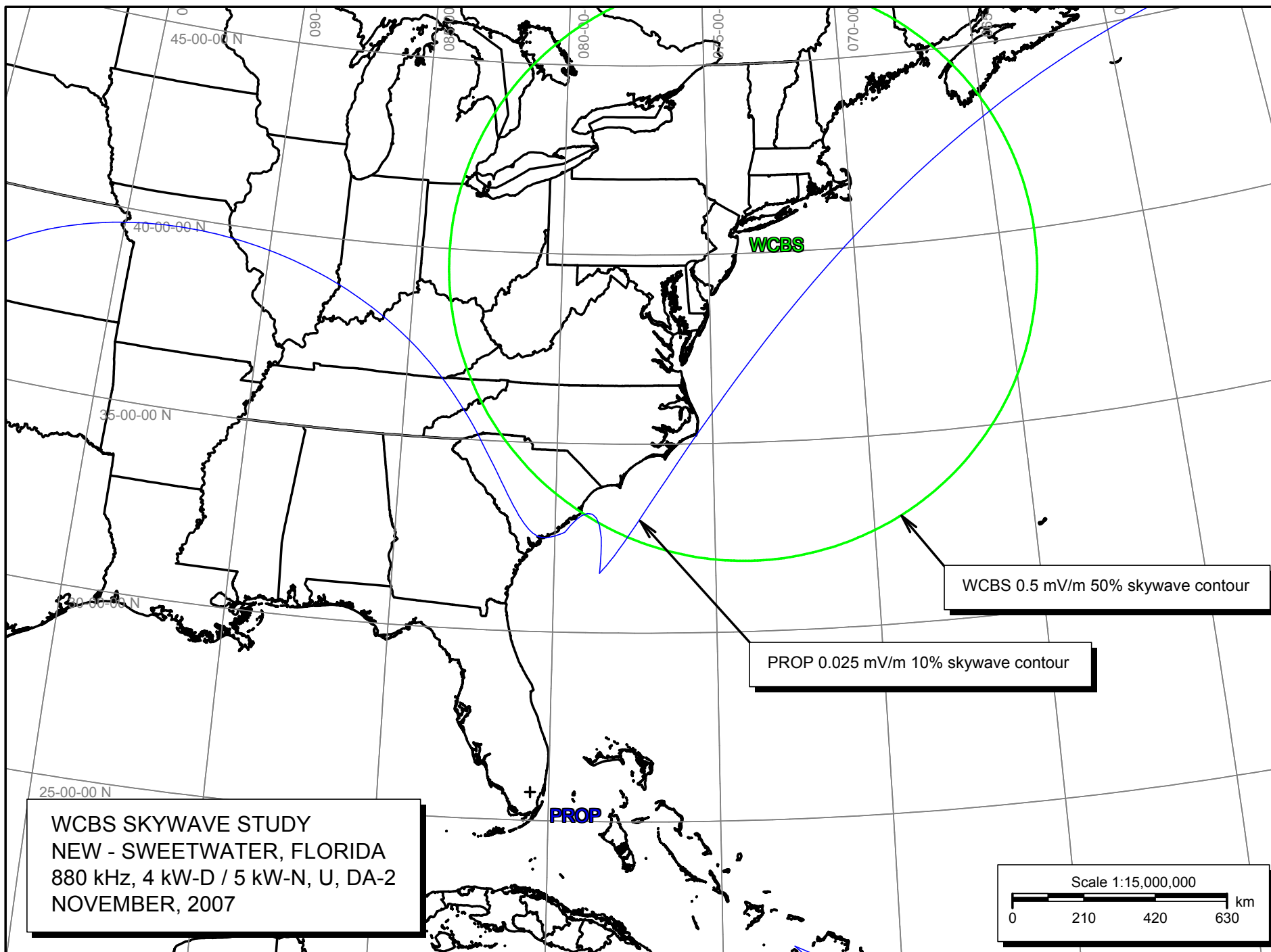


Figure 14

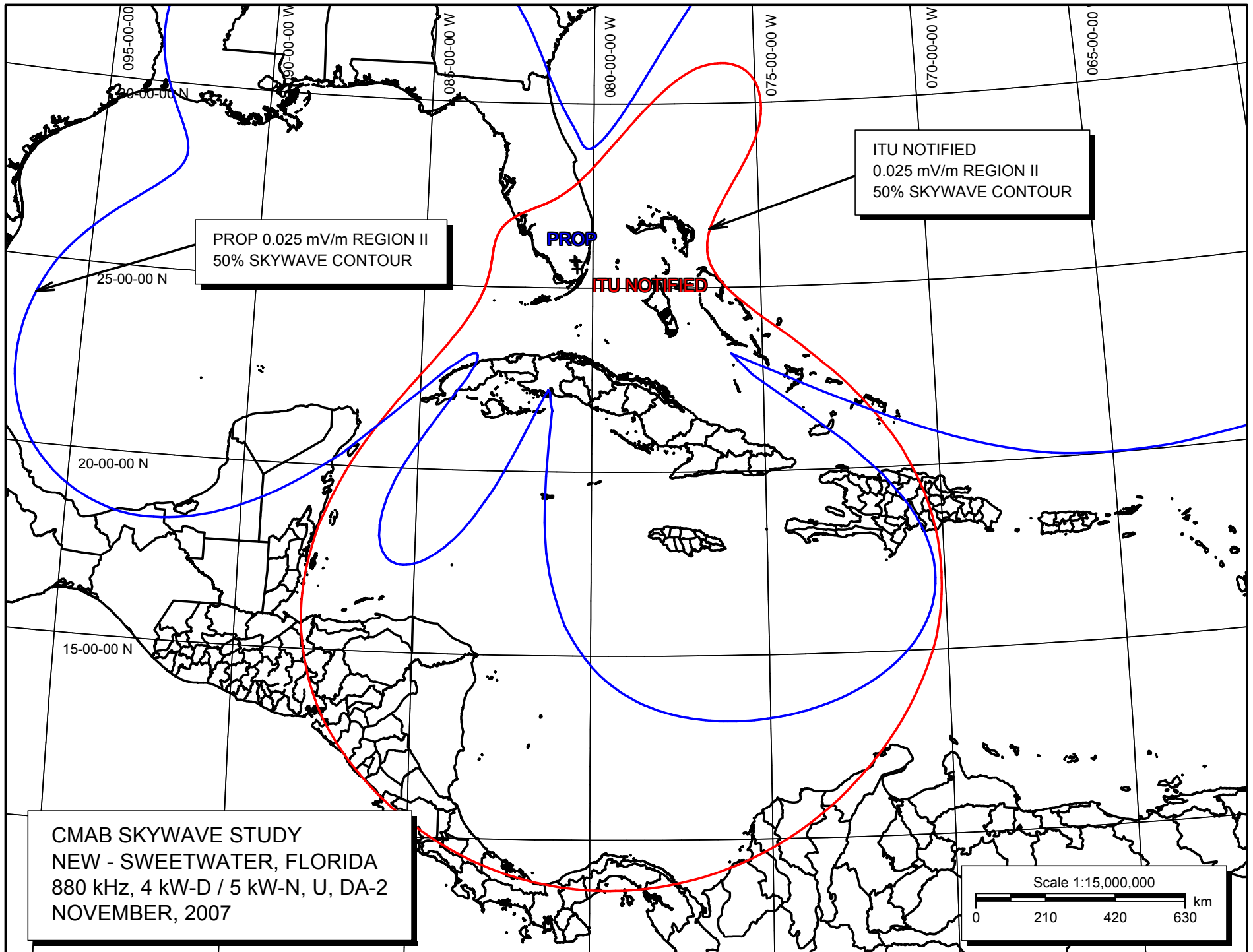


Figure 15

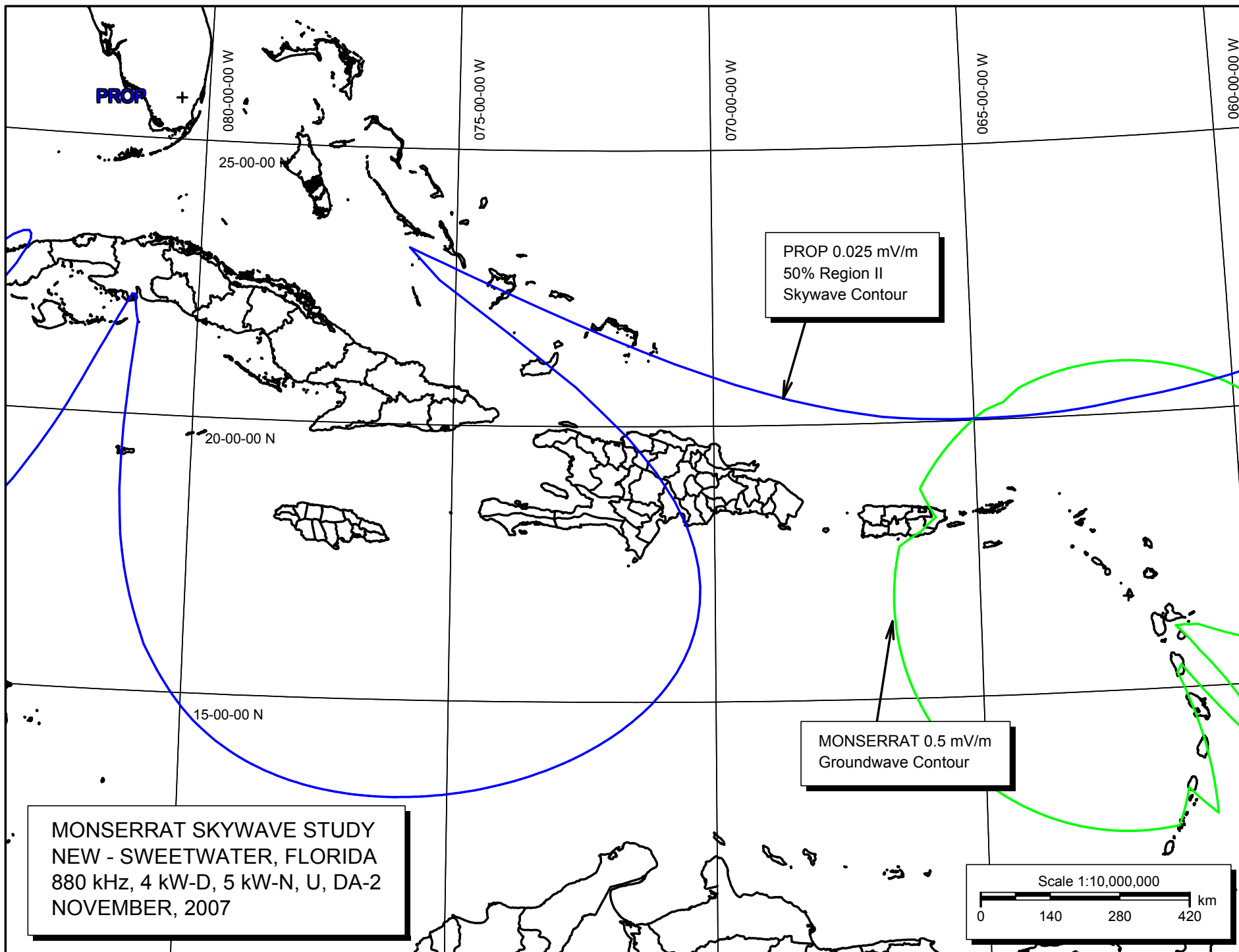


Figure 16