WMGL CP (BPH-20070413AFJ)
MINOR MODIFICATION APPLICATION
ONE-STEP UPGRADE OF CONSTRUNCTION PERMIT
FROM 297C3 TO 297C2

I. WMGL application

This technical report has been developed in support of a minor change application for the WMGL construction permit on channel 297C3 (BPH20070413AFJ) to upgrade to 297C2 and change tower sites.

The application is mutually exclusive with the existing WMGL CP. The applicant understands that construction of the proposed facility will be conditioned on WNKT commencing program tests on 298C2 at Eastover, SC.

II. Application allocation analysis and use of Longley-Rice to establish 70 dBu

All terrain utilized in this report were obtained from the V-Soft NGDC thirty (30) second terrain database. Contours and allocation exhibits were developed using V-Soft FMCommander and Probe 3 software.

A tabulation of average terrain on the eight (8) equally spaced radials is included as Exhibit E3. The proposed WMGL 297C2 facility (32 kW/ 190 meters HAAT) is fully spaced to all facilities with the exception of the licensed WNKT application (see E1). The reduced ERP facility produces a maximum C3 60 dBu of 52.478 km (less if the actual 189.88 m HAAT is utilized) which rounds to 52 km.

The proposed facility will comply with Section 73.315 based on the use of Longley-Rice (see Exhibits E2A, B and C). The terrain on the 265 degree radial to the extent of the Longley-Rice 70 dBu contour has a *Delta h* of 6 meters (less than 20 meters), and the predicted Longley-Rice 70 dBu exceeds the FCC predicted 70 dBu by

more than 10% on all of the relevant azimuths qualifying the use of Longley-Rice in accordance with Commission policies (see exhibits E2B and E2C). It is noted that delta *h* at any distance from the western boundary of Ravenel to the extent of the Longley-Rice 70 dbu is 6 meters. Longley-Rice contour predictions were calculated using the V-Soft Probe 3 software and the very conservative "first occurrence". The study parameters are included on exhibit E2A. Probe 3 calculations have been routinely accepted by the Commission in the prediction of Longley-Rice contours.

Exhibit E2A demonstrates that the proposed Longley-Rice contour will encompass all of the population and area of Ravenel, SC. In the event the Commission calculation of the 70 dBu Longley-Rice contour area is less than 80% of the area, a waiver of 73.315 is requested based on population coverage of 80% or greater. The proposed facility is to be collocated at an existing tower at coordinates:

(NAD 27) N 32-47-44 W 79-50-27 (ASR #1059860).

III. Fully spaced allocation reference point

A fully spaced allocation reference point is provided for the WMGL 297C2 facility at:

(NAD 27) N 32-39-57 W 80-03-11.

A channel study is included as E4 demonstrating full 73.207 clearance to all facilities at the reference point. City grade 70 dBu coverage is demonstrated in E5 and a site map for the reference point is included as E6. This is the site of an existing 152 meter tower thus clearly qualifying as an acceptable allocation reference point.

IV. Blanketing

The 115 dBu blanketing contour is calculated to be 2.23 km. The applicant

accepts responsibility for correction of any objectionable interference or blanketing problems in accordance with Commission rules.

V. Antenna System and RF Calculations

WMGL will be mounted on an existing tower (ASR#1059860) at 188 meters AGL utilizing an ERI six bay, full wavelength spaced circularly polarized antenna. The maximum RF contribution for WMGL was calculated to be 4.22 microwatts/cm2 at 59.2 meters utilizing the Commission's FMMODEL program. This level is 2.1% of the general public maximum exposure level of 200 microwatts/cm2, and well below the 5% contribution requiring evaluation.

VI. Conclusion

It is concluded that the proposed WMGL modifications are in full compliance with Commission rules and policies.

Charles M. Anderson April 11, 2007
1519 Euclid Avenue
Bowling Green, KY 42103
270-782-0246

E1 WMGL 297C2 CHANNEL STUDY

REFERENCE
32 47 44.0 N.
79 50 27.0 W.

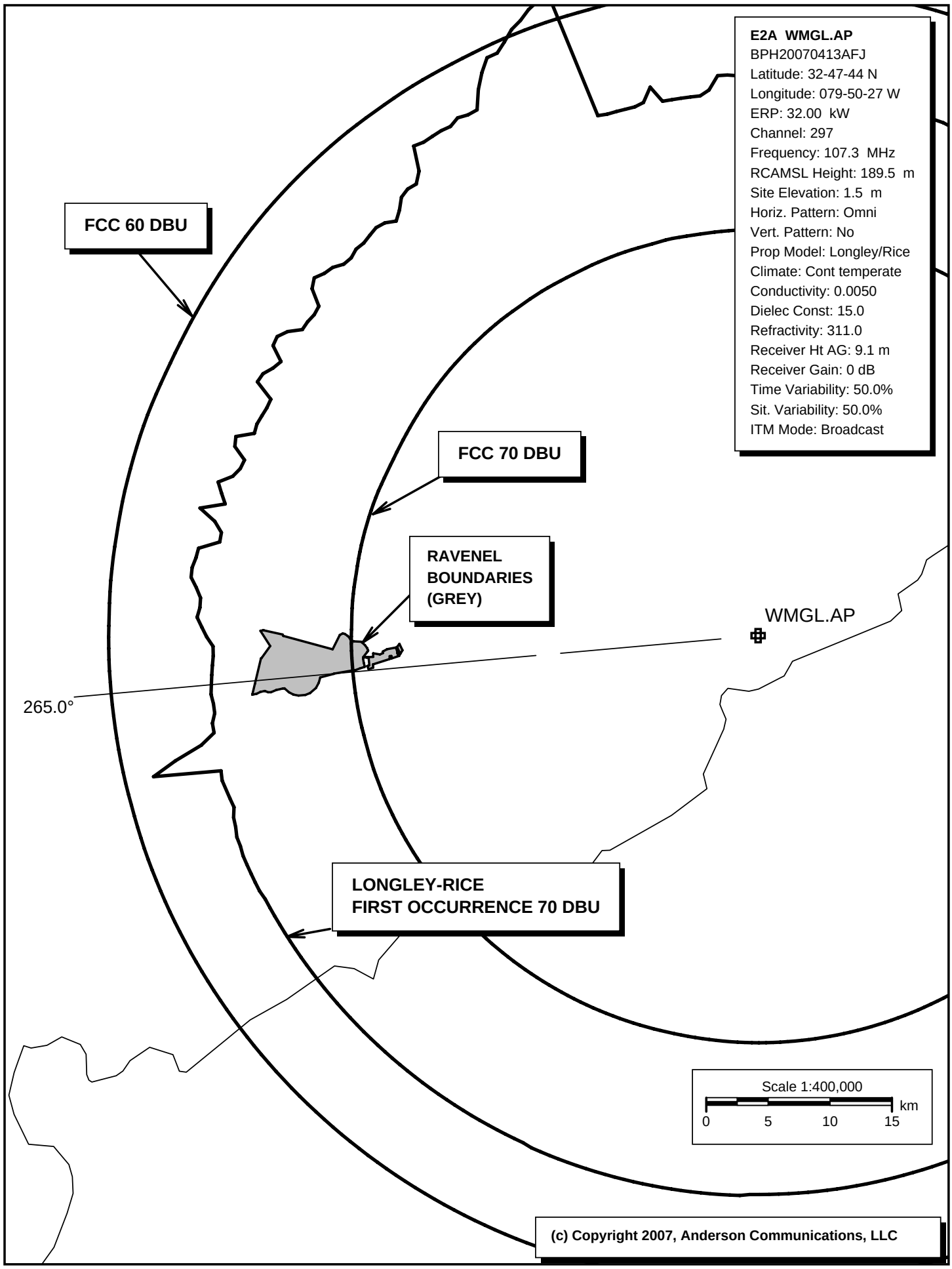
CLASS = C2
Current Spacings
Channel 297 - 107.3 MHz

DISPLAY DATES
DATA 07-11-07
SEARCH 07-11-07

Call		Channel	Location		Azi	Dist	FCC	Margin
WMGL	CP	297C3	Ravenel	SC	328.1	14.31	176.5	-162.19
WNKT	LIC	298C	St. George	SC	303.1	59.52	187.5	-127.98(1)

(1) See WNKT CP at Eastover below.

WNKT	CP -N	298C2	Eastover	SC	319.9	140.99	129.5	11.49
WQSD	LIC	296C2	Briarcliff Acres	SC	32.4	150.60	129.5	21.10
WMCD	LIC	297C3	Claxton	GA	250.7	205.89	176.5	29.39
WGZR	LIC-N	295C1	Bluffton	SC	236.5	113.74	78.5	35.24
WVSZ	LIC-N	297A	Chesterfield	SC	353.8	214.75	165.5	49.25
AL5064	RSV	300C2	Port Royal	SC	236.5	113.74	57.5	56.24
WLOW	LIC	300C2	Port Royal	SC	236.5	113.74	57.5	56.24
WGTR	LIC	300C2	Bucksport	SC	39.3	115.21	57.5	57.71
WJMZ-FM	CP -N	297C0	Anderson	SC	313.2	304.79	238.5	66.29
WTCB	LIC-D	294C1	Orangeburg	SC	317.8	148.53	78.5	70.03


E2A WMGL.AP
BPH20070413AFJ
Latitude: 32-47-44 N
Longitude: 079-50-27 W
ERP: 32.00 kW
Channel: 297
Frequency: 107.3 MHz
RCAMSL Height: 189.5 m
Site Elevation: 1.5 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 9.1 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
FCC 60 DBU
FCC 70 DBU
RAVENEL
BOUNDARIES
(GREY)
WMGL.AP
265.0°
LONGLEY-RICE
FIRST OCCURRENCE 70 DBU
Scale 1:400,000
km
0
5
10
15
(c) Copyright 2007, Anderson Communications, LLC

E2B FCC AND LONGLEY-RICE 70 DB
AT AZIMUTHS 262-272 DEGREES TRUE
ENCOMPASING RAVENEL, SC

Call Letters: WMGL.AP
Latitude: 32-47-44 N
Longitude: 079-50-27 W
ERP: 32.00 kW
Channel: 297
Frequency: 107.3 MHz
AMSL Height: 189.5 m
Elevation: 1.5 m

Longley-Rice Using the first occurance method at 70.0 dBu

Degrees T	FCC 70 dbu(km)	L-R 70 dBu(km)	% Increase	HAAT (m)
262.0	32.8	44.3	35.06	189.2
263.0	32.8	44.3	35.06	189.2
264.0	32.8	44.4	35.36	189.2
265.0	32.8	44.3	35.06	189.2
266.0	32.8	44.2	34.76	189.3
267.0	32.8	44.1	34.45	189.3
268.0	32.8	44.0	34.15	189.3
269.0	32.8	44.0	34.15	189.3
270.0	32.8	44.5	35.67	189.2
271.0	32.8	44.9	36.89	189.1
272.0	32.8	45.3	35.06	189.1

E2C DELTA *h* CALCULATION

Terrain Radial Table Using V-Soft Comm. NGDC 30 SEC

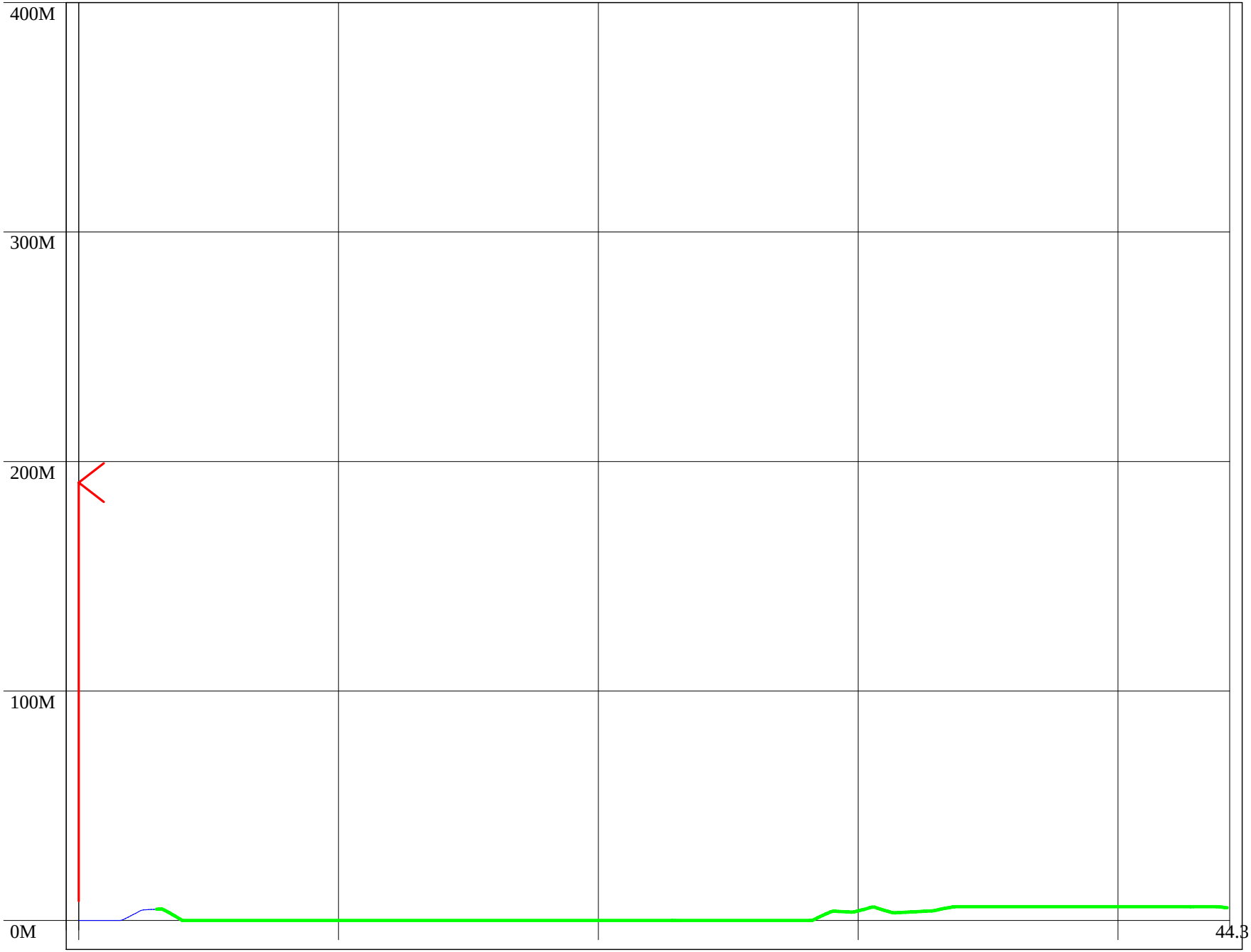
324744 N.
795027 W.

Delta h= 6.0M, Interval=.1, COR AMSL= 190 M
Attenuation= 1.7 dB
Radial length = 44.3 km (Delta h calculation begins at 10 km)

000.0	000.0	000.1	000.0	000.2	000.0	000.3	000.0	000.4	000.0	000.5	000.0				
000.6	000.0	000.7	000.0	000.8	000.0	000.9	000.0	001.0	000.0	001.1	000.0				
001.2	000.0	001.3	000.0	001.4	000.0	001.5	000.0	001.6	000.0	001.7	000.3				
001.8	000.8	001.9	001.4	002.0	002.0	002.1	002.5	002.2	003.1	002.3	003.8				
002.4	004.4	002.5	004.6	002.6	004.7	002.7	004.7	002.8	004.8	002.9	004.8				
003.0	004.9	003.1	005.0	003.2	005.0	003.3	004.5	003.4	003.9	003.5	003.3				
003.6	002.6	003.7	002.0	003.8	001.3	003.9	000.7	004.0	000.0	004.1	000.0				
004.2	000.0	004.3	000.0	004.4	000.0	004.5	000.0	004.6	000.0	004.7	000.0				
004.8	000.0	004.9	000.0	005.0	000.0	005.1	000.0	005.2	000.0	005.3	000.0				
005.4	000.0	005.5	000.0	005.6	000.0	005.7	000.0	005.8	000.0	005.9	000.0				
006.0	000.0	006.1	000.0	006.2	000.0	006.3	000.0	006.4	000.0	006.5	000.0				
006.6	000.0	006.7	000.0	006.8	000.0	006.9	000.0	007.0	000.0	007.1	000.0				
007.2	000.0	007.3	000.0	007.4	000.0	007.5	000.0	007.6	000.0	007.7	000.0				
007.8	000.0	007.9	000.0	008.0	000.0	008.1	000.0	008.2	000.0	008.3	000.0				
008.4	000.0	008.5	000.0	008.6	000.0	008.7	000.0	008.8	000.0	008.9	000.0				
009.0	000.0	009.1	000.0	009.2	000.0	009.3	000.0	009.4	000.0	009.5	000.0				
009.6	000.0	009.7	000.0	009.8	000.0	009.9	000.0	010.0	000.0	010.1	000.0				
010.2	000.0	010.3	000.0	010.4	000.0	010.5	000.0	010.6	000.0	010.7	000.0				
010.8	000.0	010.9	000.0	011.0	000.0	011.1	000.0	011.2	000.0	011.3	000.0				
011.4	000.0	011.5	000.0	011.6	000.0	011.7	000.0	011.8	000.0	011.9	000.0				
012.0	000.0	012.1	000.0	012.2	000.0	012.3	000.0	012.4	000.0	012.5	000.0				
012.6	000.0	012.7	000.0	012.8	000.0	012.9	000.0	013.0	000.0	013.1	000.0				
013.2	000.0	013.3	000.0	013.4	000.0	013.5	000.0	013.6	000.0	013.7	000.0				
013.8	000.0	013.9	000.0	014.0	000.0	014.1	000.0	014.2	000.0	014.3	000.0				
014.4	000.0	014.5	000.0	014.6	000.0	014.7	000.0	014.8	000.0	014.9	000.0				
015.0	000.0	015.1	000.0	015.2	000.0	015.3	000.0	015.4	000.0	015.5	000.0				
015.6	000.0	015.7	000.0	015.8	000.0	015.9	000.0	016.0	000.0	016.1	000.0				
016.2	000.0	016.3	000.0	016.4	000.0	016.5	000.0	016.6	000.0	016.7	000.0				
016.8	000.0	016.9	000.0	017.0	000.0	017.1	000.0	017.2	000.0	017.3	000.0				
017.4	000.0	017.5	000.0	017.6	000.0	017.7	000.0	017.8	000.0	017.9	000.0				
018.0	000.0	018.1	000.0	018.2	000.0	018.3	000.0	018.4	000.0	018.5	000.0				
018.6	000.0	018.7	000.0	018.8	000.0	018.9	000.0	019.0	000.0	019.1	000.0				
019.2	000.0	019.3	000.0	019.4	000.0	019.5	000.0	019.6	000.0	019.7	000.0				
019.8	000.0	019.9	000.0	020.0	000.0	020.1	000.0	020.2	000.0	020.3	000.0				
020.4	000.0	020.5	000.0	020.6	000.0	020.7	000.0	020.8	000.0	020.9	000.0				
021.0	000.0	021.1	000.0	021.2	000.0	021.3	000.0	021.4	000.0	021.5	000.0				
021.6	000.0	021.7	000.0	021.8	000.0	021.9	000.0	022.0	000.0	022.1	000.0				
022.2	000.0	022.3	000.0	022.4	000.0	022.5	000.0	022.6	000.0	022.7	000.0				
022.8	000.0	022.9	000.0	023.0	000.0	023.1	000.0	023.2	000.0	023.3	000.0				
023.4	000.0	023.5	000.0	023.6	000.0	023.7	000.0	023.8	000.0	023.9	000.0				
024.0	000.0	024.1	000.0	024.2	000.0	024.3	000.0	024.4	000.0	024.5	000.0				
024.6	000.0	024.7	000.0	024.8	000.0	024.9	000.0	025.0	000.0	025.1	000.0				
025.2	000.0	025.3	000.0	025.4	000.0	025.5	000.0	025.6	000.0	025.7	000.0				
025.8	000.0	025.9	000.0	026.0	000.0	026.1	000.0	026.2	000.0	026.3	000.0				
026.4	000.0	026.5	000.0	026.6	000.0	026.7	000.0	026.8	000.0	026.9	000.0				
027.0	000.0	027.1	000.0	027.2	000.0	027.3	000.0	027.4	000.0	027.5	000.0				
027.6	000.0	027.7	000.0	027.8	000.0	027.9	000.0	028.0	000.0	028.1	000.0				
028.2	000.0	028.3	000.0	028.4	000.6	028.5	001.2	028.6	001.7	028.7	002.2				
028.8	002.7	028.9	003.2	029.0	003.7	029.1	004.1	029.2	004.0	029.3	003.9				
029.4	003.9	029.5	003.8	029.6	003.8	029.7	003.7	029.8	003.6	029.9	003.7				
030.0	004.0	030.1	004.2	030.2	004.5	030.3	004.8	030.4	005.2	030.5	005.5				
030.6	005.8	030.7	005.8	030.8	005.4	030.9	005.0	031.0	004.7	031.1	004.3				
031.2	004.0	031.3	003.7	031.4	003.4	031.5	003.3	031.6	003.4	031.7	003.5				
031.8	003.5	031.9	003.6	032.0	003.6	032.1	003.7	032.2	003.8	032.3	003.8				
032.4	003.9	032.5	003.9	032.6	004.0	032.7	004.1	032.8	004.1	032.9	004.2				
033.0	004.2	033.1	004.5	033.2	004.8	033.3	005.0	033.4	005.3	033.5	005.5				
033.6	005.7	033.7	005.9	033.8	006.0	033.9	006.0	034.0	006.0	034.1	006.0				

034.2	006.0	034.3	006.0	034.4	006.0	034.5	006.0	034.6	006.0	034.7	006.0
034.8	006.0	034.9	006.0	035.0	006.0	035.1	006.0	035.2	006.0	035.3	006.0
035.4	006.0	035.5	006.0	035.6	006.0	035.7	006.0	035.8	006.0	035.9	006.0
036.0	006.0	036.1	006.0	036.2	006.0	036.3	006.0	036.4	006.0	036.5	006.0
036.6	006.0	036.7	006.0	036.8	006.0	036.9	006.0	037.0	006.0	037.1	006.0
037.2	006.0	037.3	006.0	037.4	006.0	037.5	006.0	037.6	006.0	037.7	006.0
037.8	006.0	037.9	006.0	038.0	006.0	038.1	006.0	038.2	006.0	038.3	006.0
038.4	006.0	038.5	006.0	038.6	006.0	038.7	006.0	038.8	006.0	038.9	006.0
039.0	006.0	039.1	006.0	039.2	006.0	039.3	006.0	039.4	006.0	039.5	006.0
039.6	006.0	039.7	006.0	039.8	006.0	039.9	006.0	040.0	006.0	040.1	006.0
040.2	006.0	040.3	006.0	040.4	006.0	040.5	006.0	040.6	006.0	040.7	006.0
040.8	006.0	040.9	006.0	041.0	006.0	041.1	006.0	041.2	006.0	041.3	006.0
041.4	006.0	041.5	006.0	041.6	006.0	041.7	006.0	041.8	006.0	041.9	006.0
042.0	006.0	042.1	006.0	042.2	006.0	042.3	006.0	042.4	006.0	042.5	006.0
042.6	006.0	042.7	006.0	042.8	006.0	042.9	006.0	043.0	006.0	043.1	006.0
043.2	006.0	043.3	006.0	043.4	006.0	043.5	006.0	043.6	006.0	043.7	006.0
043.8	006.0	043.9	006.0	044.0	006.0	044.1	005.8	044.2	005.7	044.3	005.5

Radial Profile NGDC 30 SEC Digital Terrain (V-Soft Comm.) E2C1



N. Lat. 324744 W. Lng. 795027 Azimuth = 265° Xmit COR 190 M Mtrs AMSL

E3 HAAT AND CONTOUR TABULATION

N. Lat. = 324744 W. Lng. = 795027
HAAT and Distance to Contour - FCC Method - NGDC 30 SEC

Azi.	AV EL	HAAT	ERP kW	dBk	Field	70-F5	60-F5
000	0.7	189.3	32.0000	15.05	1.000	32.84	52.42
045	0.0	190.0	32.0000	15.05	1.000	32.90	52.48
090	0.0	190.0	32.0000	15.05	1.000	32.90	52.48
135	0.0	190.0	32.0000	15.05	1.000	32.90	52.48
180	0.0	190.0	32.0000	15.05	1.000	32.90	52.48
225	0.0	190.0	32.0000	15.05	1.000	32.90	52.48
270	0.3	189.7	32.0000	15.05	1.000	32.87	52.45
315	0.0	190.0	32.0000	15.05	1.000	32.90	52.48

Ave El= 0.12 M HAAT= 189.88 M AMSL= 190 M

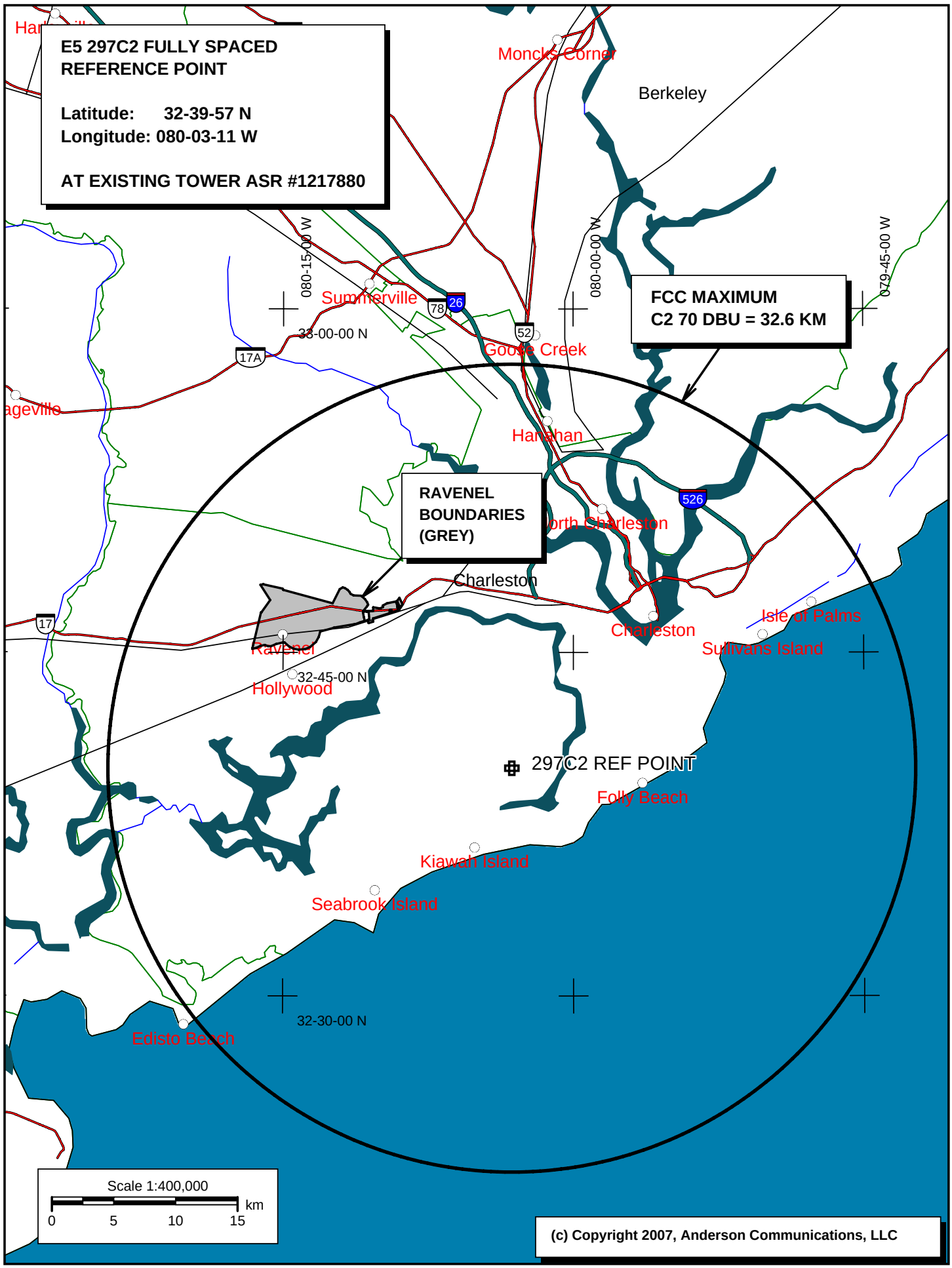
E4 WMGL 297C2 ALLOCATION POINT CHANNEL STUDY

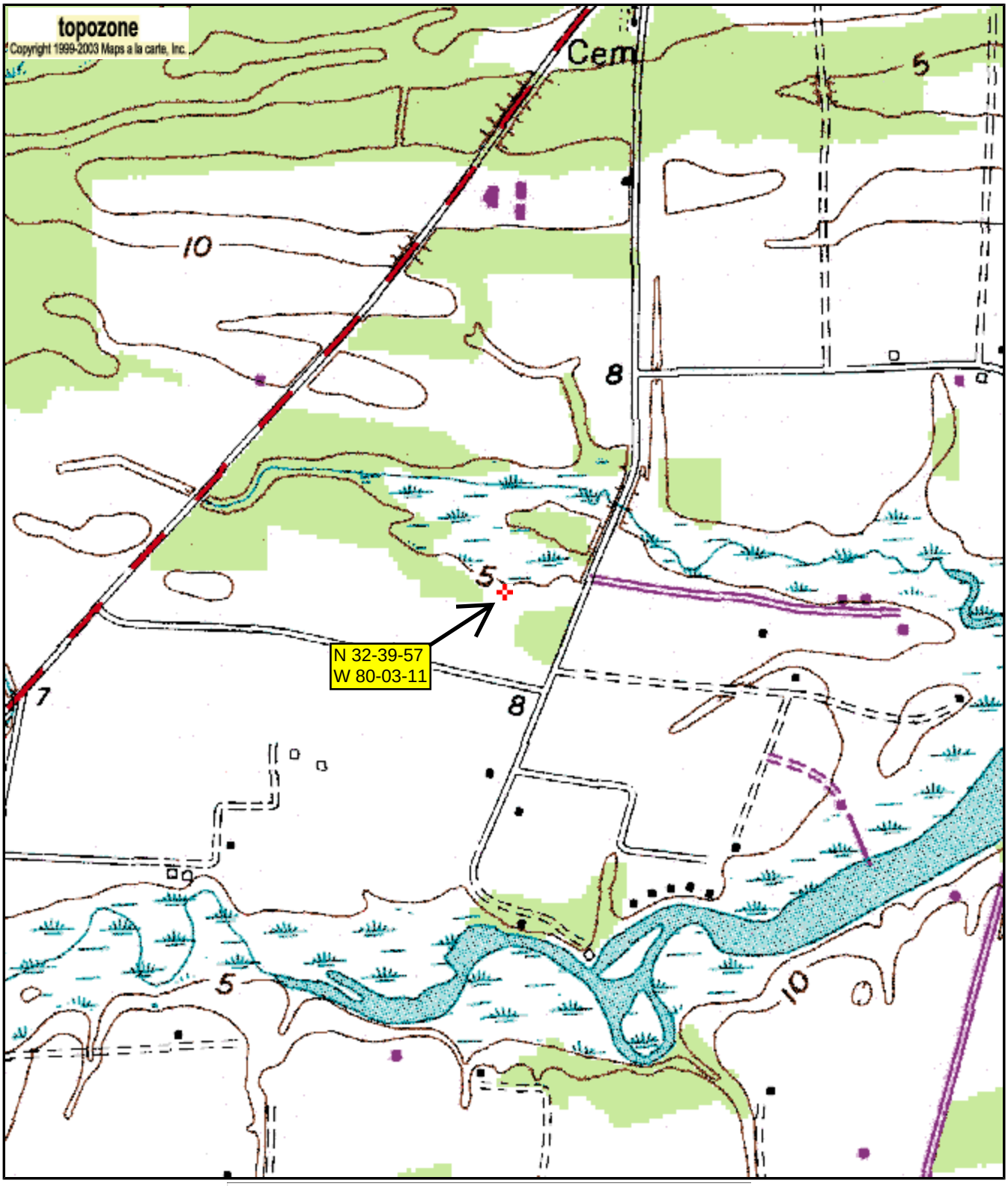
REFERENCE
32 39 57.0 N.
80 03 11.0 W.

CLASS = C2
Current Spacings
Channel 297 - 107.3 MHz

DISPLAY DATES
DATA 07-11-07
SEARCH 07-11-07

Call		Channel	Location		Azi	Dist	FCC	Margin
WMGL	CP	297C3	Ravenel	SC	24.7	29.22	176.5	-147.28
WNKT	LIC	298C	St. George	SC	327.3	55.56	187.5	-131.94(1)
	(1) See WNKT CP at Eastover below.							
WMCD	LIC	297C3	Claxton	GA	252.8	182.50	176.5	6.00
WGZR	LIC-N	295C1	Bluffton	SC	237.0	89.22	78.5	10.72
WNKT	CP -N	298C2	Eastover	SC	329.8	141.25	129.5	11.75
AL5064	RSV	300C2	Port Royal	SC	237.0	89.22	57.5	31.72
WLOW	LIC	300C2	Port Royal	SC	237.0	89.22	57.5	31.72
WQSD	LIC	296C2	Briarcliff Acres	SC	35.3	173.65	129.5	44.15
WVSZ	LIC-N	297A	Chesterfield	SC	359.0	227.86	165.5	62.36
WJMZ-FM	CP -N	297C0	Anderson	SC	317.6	301.00	238.5	62.50
WTCB	LIC-D	294C1	Orangeburg	SC	327.2	147.77	78.5	69.27
WYFA	LIC-Z	296C3	Waynesboro	GA	288.0	189.88	116.5	73.38


E5 297C2 FULLY SPACED
REFERENCE POINT
Latitude: 32-39-57 N
Longitude: 080-03-11 W
AT EXISTING TOWER ASR #1217880
FCC MAXIMUM
C2 70 DBU = 32.6 KM
RAVENEL
BOUNDARIES
(GREY)
297C2 REF POINT
Moncks Corner
Berkeley
Summerville
Goose Creek
Hanahan
North Charleston
Charleston
Isle of Palms
Sullivans Island
Ravenel
Hollywood
Folly Beach
Kiawah Island
Seabrook Island
Edisto Beach
080-15-00 W
080-00-00 W
079-45-00 W
33-00-00 N
32-45-00 N
32-30-00 N
Scale 1:400,000
0 5 10 15 km
(c) Copyright 2007, Anderson Communications, LLC



32° 39' 57"N, 80° 03' 11"W (NAD27)
Elevation 15.5 ft / 4.7 m (USGS NED)
WYBB-FM (Folly Beach), USGS Legareville (SC) Quadrangle
Projection is UTM Zone 17 NAD83 Datum

Registration 1059860

Reference Copy Map Registration

Registration Detail

Reg Number	1059860	Status	Constructed
File Number	A0392093	Constructed	06/01/1959
FAA Study	85-ASO-258-OE	EMI	No
FAA Issue Date		NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long	32-47-45.0 N 079-50-26.0 W	RIFLE RANGE ROAD
City, State	MOUNT PLEASANT , SC	
Center of AM Array		

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
1.5	318.2
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
319.7	317.3

Painting and Lighting Specifications

FCC Paragraphs 1, 3, 7, 16, 21

Owner & Contact Information

FRN	0006154249	Licensee ID	L00167959
Assignor FRN	0001887744	Assignor ID	L00009687

Owner

Richland Towers
Attention To: Tony Flores
4890 W. Kennedy Blvd Suite 920
Tampa , FL 33609

P: (813)286-4140
E: tsamp@rtowers.com

Contact

Samp , Tim
4890 W. Kennedy Blvd Suite 920
Tampa , FL 33609

P: (813)286-4140
E: tsamp@rtowers.com

Last Action Status

Status	Constructed	Received	08/20/2004
Purpose	Change Owner	Entered	08/20/2004
Mode	Interactive		

Related Applications

08/20/2004	A0392093 - Change Owner (OC)
03/21/2000	A0117801 - Notification (NT)
01/21/1999	A0070257 - New (NE)