

WACG-FM CHANNEL 214 (90.7 MHz)  
CLASS C2 MINOR CHANGE IN  
LICENSED FACILITY APPLICATION  
*AUGUSTA, GEORGIA*  
(GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION)

KESSLER & GEHMAN ASSOCIATES, INC.  
TELECOMMUNICATIONS CONSULTING ENGINEERS

20110315

*Prepared by William T. Godfrey, Jr.*

*KG&A*

507 N.W. 60th Street, Suite C  
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*Kessler and Gehman Associates, Inc.*

Telecommunications Consulting Engineers

**ENGINEERING TECHNICAL STATEMENT PREPARED BY WILLIAM T. GODFREY, JR. OF THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS CONSULTING ENGINEERS IN CONNECTION WITH A MINOR CHANGE IN LICENSED FACILITY APPLICATION TO MAKE CHANGES TO THE GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION (“GPTC”) FM BROADCAST FACILITY, WACG-FM CHANNEL 214 C2 (BLED-20090903AAG).**

The firm Kessler and Gehman Associates, Inc., has been retained by Georgia Public Telecommunications Commission (“GPTC”), Atlanta, Georgia, in order to prepare engineering studies and the engineering portion of a minor change in licensed facility application for the licensed WACG-FM Channel 214 C2 FM broadcast facility (BLED- 20090903AAG) requesting authorization to make changes to the following: 1) transmitter site; 2) antenna system; 3) Effective Radiated Power (“ERP”); and 4) antenna height radiation center.

**Discussion**

GPTC is licensed to operate WACG-FM Channel 214 C2 (BLED- 20090903AAG) with an ERP of 5.6 kW (horizontal polarization) at an antenna height radiation center of 411.5 meters Above Ground Level (“AGL”) using a nondirectional, top-mounted batwing antenna which is also used by the WCES-DT Channel 6 facility. Prior to operating at the existing GPTC tower site, the WACG-FM facility was licensed to operate at the proposed site located approximately 44.3 km to the northeast. This site is owned by Media General and the tower supports a General Electric model TY-60-F batwing antenna that was previously shared (diplex) by the former WJBF-TV Channel 6 analog facility and the WACG-FM facility. Referring to Exhibit 20 (previous WACG-FM CP), it can be seen that WACG-FM was previously authorized (BPED- 20051014AAE) to operate at the proposed site using the proposed antenna at the proposed antenna height radiation center and at the proposed ERP. GPTC moved the WACG-FM facility to the existing site so that it would be collocated with the WCES-DT Channel 6 facility and so that it could diplex out of the same antenna. The thought was that GPTC would save the tax



payers money by eliminating the cost to lease space on the Media General tower and by maintaining two stations at one site rather than having the stations separated. Unfortunately, it was discovered that the move from the Media General site to the existing site resulted in major coverage issues to Augusta, GA which is the community of license. Accordingly, GPTC respectfully requests authorization to move back to the Media General site and operate using the same parameters as previously authorized in the BPED-20051014AAE construction permit. Therefore, the following changes are requested: 1) change from Latitude 33° 15' 33" N and Longitude 082° 17' 09" W to 33° 24' 18" N and Longitude 081° 50' 15" W; 2) change from a Dielectric model THB-03-3M/9H-1-R batwing antenna to a General Electric model TY-60-F batwing antenna; 3) change ERP from 5.6 kW (h-pol only) to 3.7 kW (h-pol only); and 4) change antenna height radiation center from 411.5 meters AGL to 379.7 meters AGL.

According to the Power and Antenna Height Requirements pursuant to §73.211 of the FCC rules, the proposed 3.7 kW ERP would classify the proposed WACG-FM facility as a Class A station; however, the proposed antenna height radiation center above average terrain is 420.8 meters. Therefore, in accordance with §73.210 of the FCC rules, the proposed WACG-FM station would be a Class C2 facility based on the fact that the distance to the reference contour in all azimuthal directions would be greater than 39 km and less than or equal to 52 km (Exhibit 19). Based on the proposed WACG-FM facility's ERP and antenna height above average terrain, the facility could not be classified using the maximum limits and minimum requirements in §73.211; therefore, the classification was determined using the procedures depicted in §73.210(b)(3).

### **Attached Figures**

The following list is an index of enclosed figures produced by calculations and engineering studies of the proposed WACG-FM Channel 214 C2 facility.

- 1) Proposed Engineering Specifications (Exhibit 1).
- 2) Antenna Data (Exhibit 2).



- 3) Support Structure Profile/Elevation View of Antenna System (Exhibit 3).
- 4) Antenna Vertical Pattern: 0° - 11° (Exhibit 4)
- 5) Antenna Vertical Pattern: 0° - 90° (Exhibit 5)
- 6) Antenna Vertical Pattern Tabulation (Exhibit 6)
- 7) USGS 7.5-minute topographic quadrangle map depicting the proposed transmitter location and coordinate lines (Exhibit 7).
- 8) 1mV/m (60 dBuV/m) Predicted Contour and Radials, Proposed Transmitter Location, & Principal Community Boundary Depiction (Exhibit 8).
- 9) FM-to-FM Interference Studies (Exhibit 9).
- 10) FM Allocation Study - WYFH-FM (Exhibit 10)
- 11) WACG-FM & WYFH-FM 3 Second Terrain Data (Exhibit 11)
- 12) FM Allocation Study – Gray Court, SC Application (Exhibit 12)
- 13) WACG-FM & Gray Court, SC Application 3 Second Terrain Data (Exhibit 13)
- 14) FM Allocation Study – Laurens, SC Application (Exhibit 14)
- 15) WACG-FM & Laurens, SC Application 3 Second Terrain Data (Exhibit 15)
- 16) TV Channel 6 Allocation Study (Exhibit 16)
- 17) TV Channel 6 Interference Area Population Report (Exhibit 17)
- 18) Area of Gain vs. Area of Loss (Exhibit 18)
- 19) Distance to Contour Calculations (Exhibit 19)
- 20) Previous Construction Permit (Exhibit 20)

### **Transmitter Location**

The licensed WACG-FM facility is currently operating on a 446.0 meter support structure (ASRN: 1018796) with an antenna height radiation center of 411.5 meters AGL. The proposed batwing antenna is top-mounted on the Media General support structure with an antenna height radiation center of 380.0 meters AGL (Exhibit 3). The tower is registered with the FCC and has a registration number of 1024410. The structure's address is 200 Pine Log Road, Beach Island, SC.



### **Principal Community**

The F(50,50) 60.0 dBuV/m protected service contour for the proposed WACG-FM facility is depicted in Exhibit 8. It can be seen that the proposed facility's F(50,50) 60.0 dBuV/m service contour would completely encompass the entire community of Augusta, GA which is the licensed principal community for the WACG-FM station.

### **Interference Study – Calculated Using 3 Arc Second Terrain Data**

Exhibit 13 is an FM-to-FM interference study which verifies that the proposed facility's F(50,10) interfering contours would not overlap any applicable station's F(50,50) 60.0 dBuV/m protected contours and that the proposed facility's F(50,50) 60.0 dBuV/m protected contour would not be overlapped by any applicable station's F(50,10) interfering contours. **The interference study was calculated using 3 arc second terrain; therefore, *GPTC respectfully requests that the Commission evaluate interference using 3 arc second terrain.* All 3 arc second terrain data used for this application has been provided as exhibits herein.**

### **Allocation Studies – Calculated Using 3 Arc Second Terrain Data**

Exhibit 10 is an allocation study map depicting the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected and F(50,10) 40.0 dBuV/m interfering contours and the WYFH-FM facility's F(50,50) 60.0 dBuV/m protected and F(50,10) 40.0 dBuV/m interfering contours. It can be seen that impermissible overlap would not exist between the two stations. The map was generated using 3 arc second terrain.

Exhibit 11 depicts the **3 arc second terrain data** used to calculate the WACG-FM and WYFH-FM F(50,50) 60.0 dBuV/m contours along pertinent arcs as well as the WACG-FM and WYFH-FM F(50,10) 40.0 dBuV/m contours along pertinent arcs.



Exhibit 12 is an allocation study map depicting the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected and F(50,10) 54.0 dBuV/m interfering contours and the pending Gray Court, SC application's F(50,50) 60.0 dBuV/m protected and F(50,10) 54.0 dBuV/m interfering contours. It can be seen that impermissible overlap would not exist between the two stations. The map was generated using 3 arc second terrain.

Exhibit 13 depicts the **3 arc second terrain data** used to calculate the WACG-FM and pending Gray Court, SC application's F(50,50) 60.0 dBuV/m contours along pertinent arcs as well as the WACG-FM and pending Gray Court, SC application's F(50,10) 54.0 dBuV/m contours along pertinent arcs.

Exhibit 14 is an allocation study map depicting the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected and F(50,10) 54.0 dBuV/m interfering contours and the pending Laurens, SC application's F(50,50) 60.0 dBuV/m protected and F(50,10) 54.0 dBuV/m interfering contours. It can be seen that impermissible overlap would not exist between the two stations. The map was generated using 3 arc second terrain.

Exhibit 15 depicts the **3 arc second terrain data** used to calculate the WACG-FM and pending Laurens, SC application's F(50,50) 60.0 dBuV/m contours along pertinent arcs as well as the WACG-FM and pending Laurens, SC application's F(50,10) 54.0 dBuV/m contours along pertinent arcs.

### **TV Channel 6 – Interference Acceptance**

Exhibit 16 is a contour map depicting the predicted interference area within the WCES-DT Channel 6 F(50,50) 47.0 dBuV/m protected contour from the proposed WACG-FM facility pursuant to §73.525 of the FCC Rules. Since GPTC is the licensee of WCES-DT Channel 6, **GPTC hereby accepts all interference from the proposed WACG-FM facility.**



Exhibit 17 is a TV Channel 6 population report calculated using US Census 2000 data based on the predicted people affected within the interference area depicted in Exhibit 15. GPTC accepts the interference.

### **Area and population Analysis**

The population served by the proposed 1 mV/m contour (60.0 dBuV/m) was determined using 2000 U.S. Census data. The area and population within the proposed WACG-FM 1 mV/m contour is 7,265.35 sq km and 472,937 persons respectively. The area and population within the licensed WACG-FM 1 mV/m contour is 8,611.46 sq km and 423,381 persons respectively. This represents an area loss of 1,346.11 sq km and a population gain of 49,556 persons (Exhibit 18). The percentage change in area is 15.6% and the percentage change in population is 11.7%. The most significant point is that the Augusta, GA community would be fully covered once again.

### **Intermediate Frequency Interference (53<sup>rd</sup> & 54<sup>th</sup> Adjacent Channels)**

The proposed WACG-FM site would meet all separation requirements pertaining to intermediate frequency (“IF”) interference. The station with the narrowest gap with respect to distance from the proposed WACG-FM transmitter site is  $(214 + 53 = \underline{267})$  &  $214 + 54 = \underline{268}$ ) the licensed WWDM-FM Channel 267 Class C facility located approximately 128.9 km from the proposed WACG-FM transmitter site in Sumter, SC at North Latitude 34° 03’ 04” and West Longitude 80° 40’ 55” where a separation of 34.5 km is required; therefore, the distance is easily met with a margin of 94.4 km.

### **FM Blanketing Interference**

Blanketing is defined as interference to the reception of other broadcast stations which is caused by the presence of an FM broadcast signal of 115 dBu (562 mV/m) or greater signal strength in the area adjacent to the antenna of the transmitting station. The 115 dBu contour is



referred to as the blanketing contour and the area within this contour is referred to as the blanketing area. The proposed WACG-FM Channel 214 blanketing contour extends 0.76 km from its transmitter and it is understood that the GPTC must assume full financial responsibility for remedying new complaints of blanketing interference for a period of one year to all broadcast stations within the WACG-FM blanketing contour, including to the collocated WLJK-FM facility.

### **Environmental Impact**

The proposed WACG-FM Channel 214 Class C2 facility would have no significant environmental impact as defined in §1.1307 of the FCC Rules. The FM transmitter, transmission line and antenna system would produce a maximum ERP of 3.7 kW (horizontal polarization). It was determined that the maximum lobe of radiation from the base of the tower will occur at approximately 836.26 feet from the base of the tower (1,495.47-foot radial distance from the antenna center). At approximately 836.26 feet from the base of the tower, the depression angle of the main lobe will be approximately 56° below the horizontal. At that point, the relative field will be 0.277 and the power density six feet above the ground will be 0.00005 mW/cm<sup>2</sup>. This equates to only 0.005% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and only 0.023% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed WACG-FM facility will not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the proposed facility is not considered a “significant contributor” to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this analysis. It is safe to conclude that the emissions would be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the licensee will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance





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workers are in danger from the electromagnetic radiation emanating from the antenna. It is also understood that additional antennas on the support structure could increase the overall RF exposure levels and it is the responsibility of each licensee to ensure that the total RF exposure resulting from the operation of all antennas on the support structure do not exceed the maximum permissible exposure level at any point on the ground.

### **Certification**

This technical statement was prepared by William T. Godfrey, Jr., Telecommunications Technical Consultant with Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1998. He graduated from the University of North Florida with a Bachelor of Arts degree in Criminal Justice and a minor in Mathematics in 1993. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.



KESSLER AND GEHMAN ASSOCIATES, INC.

A handwritten signature in blue ink that reads 'William T. Godfrey, Jr.' The signature is written over a horizontal line.

WILLIAM T. GODFREY, JR.

Telecommunications Technical Consultant

15 March, 2011

***AUGUSTA, GEORGIA***

### A. Transmitter Site

Location: **200 Pine Log Road, Beach Island, SC**

Mailing Address **260 14<sup>th</sup> Street N.W. Atlanta, Georgia 30318**

FM Channel	Number	214
	Frequency	91.1 MHz
	Class	C2

Height of Site Above Mean Sea Level (AMSL) .....	<b>118.9 M</b>
Overall Height of Structure Above Ground .....	<b>393.8 M</b>
(including all appurtenances)	
Overall Height of Structure Above Mean Sea Level .....	<b>512.7 M</b>
(including all appurtenances)	
Height of Site Above Average Terrain .....	<b>41.1 M</b>
Antenna Height Radiation Center (R/C) Above Ground .....	<b>379.7 M</b>
Antenna Height R/C Above Mean Sea Level .....	<b>498.6 M</b>
Antenna Height R/C Above Average Terrain .....	<b>420.8 M</b>
Average of All Non-Odd Radials .....	<b>77.8 M</b>

Transmitter Power Required	0.61 kW
Maximum Power Input to Antenna	0.47 kW
Transmission Line Loss	1.18 dB
Transmission Line Efficiency	76.2%
Peak Directional Gain	8.99 dB
Peak Directional Gain at Horizontal	8.99 dB
Maximum Effective Radiated Power	5.68 dBk
In Beam Maximum	3.7 kW
Maximum Effective Radiated Power	5.68 dBk
In Horizontal Plane	3.7 kW

# WACG-FM

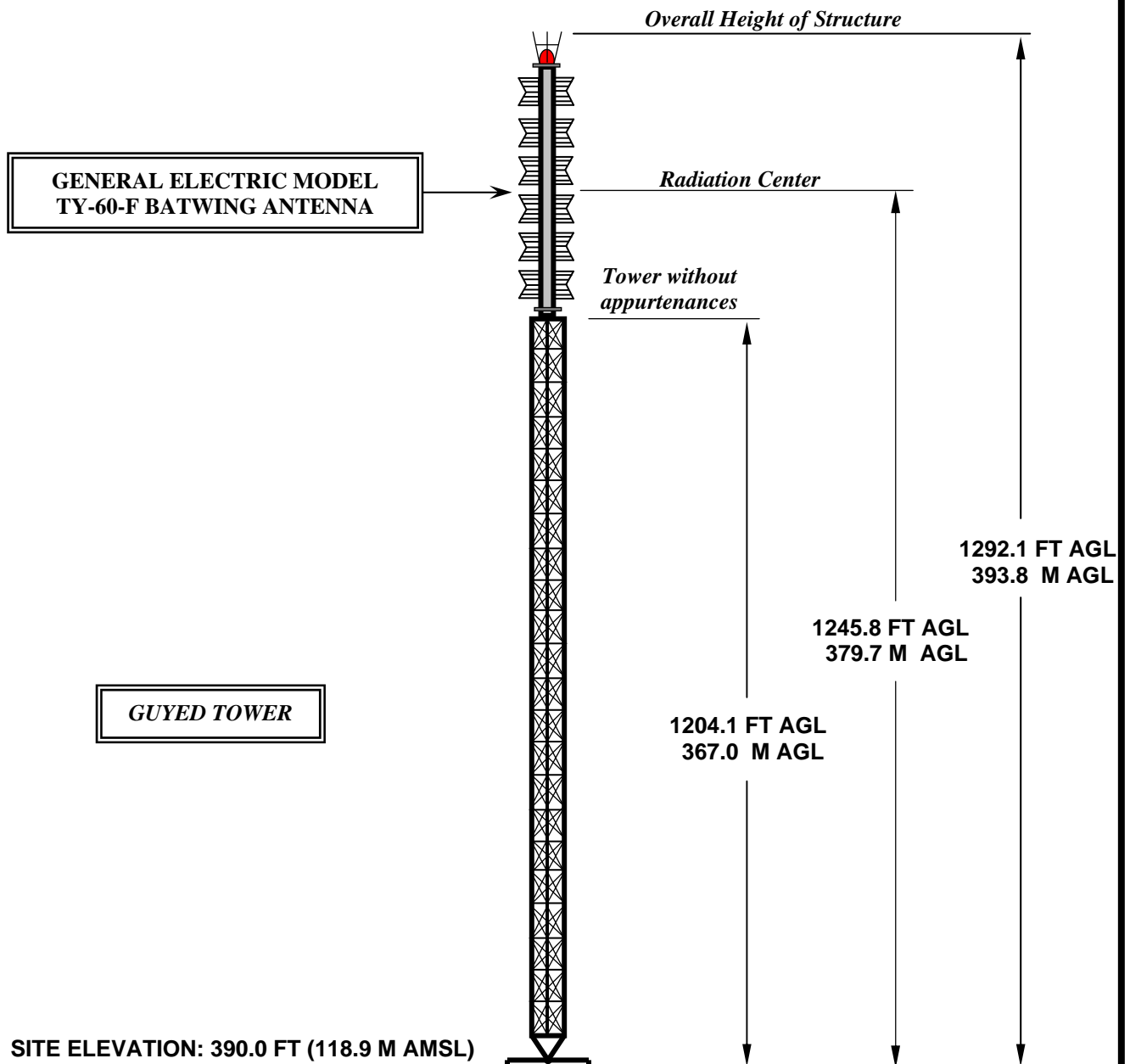
Augusta, Georgia

## DATA FOR PROPOSED NONDIRECTIONAL TRANSMITTING ANTENNA

- A. **Antenna:** General Electric Model TY-60-F Batwing Antenna.
- B. **Electrical Beam Tilt:** None
- C. **Mechanical Beam Tilt:** None
- D. 

<b><u>Maximum Power Gain</u></b>	<b><u>Horizontal Polarization</u></b>
Maximum:	7.92 (8.99 dB)
Horizontal:	7.92 (8.99 dB)
- E. **Length:** 83.0 feet (25.3 meters) – without lightning protector
- F. **Transmitter Power Output (TPO):** 0.61 kW
- G. **Transmission Line:** 3-1/8" 50-ohm Rigid
- H. **Transmission Line Efficiency:** 76.2%
- I. **Transmission Line Length:** 1,250 feet
- J. **Transmission Line Loss:** 0.094 dB/100 ft
- K. **Transmission Line Attenuation:** 1.18 dB

## ELEVATION VIEW



OVERALL HEIGHT AGL: 393.8 M  
OVERALL HEIGHT AMSL: 512.7 M  
RADIATION CENTER AGL: 379.7 M  
RADIATION CENTER AMSL: 498.6 M  
RADIATION CENTER HAAT: 420.8 M  
AVG OF ALL NON-ODD RADIALS: 77.8 M  
SITE HAAT: 41.1 M

### COORDINATES (NAD 27):

N. LATITUDE 33° 24' 18"

W. LONGITUDE 81° 50' 15"

Antenna Structure Registration Number:

1024410

**NOTE: NOT TO SCALE**

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507 N.W. 60th Street, Suite C  
Gainesville, Florida 32607

**WACG-FM CHANNEL 214C2**

AUGUSTA, GEORGIA

20110307

EXHIBIT 3



Proposal Number

Revision

Date

**07 Mar 2011**

Call Letters

**WACG**

Channel

**214**

Location

**Augusta, GA**

Customer

Antenna Type

**TY-60-F****ELEVATION PATTERN**

RMS Gain at Main Lobe

**6.6 (8.20 dB)**

Beam Tilt

**0.00 Degrees**

RMS Gain at Horizontal

**6.6 (8.20 dB)**

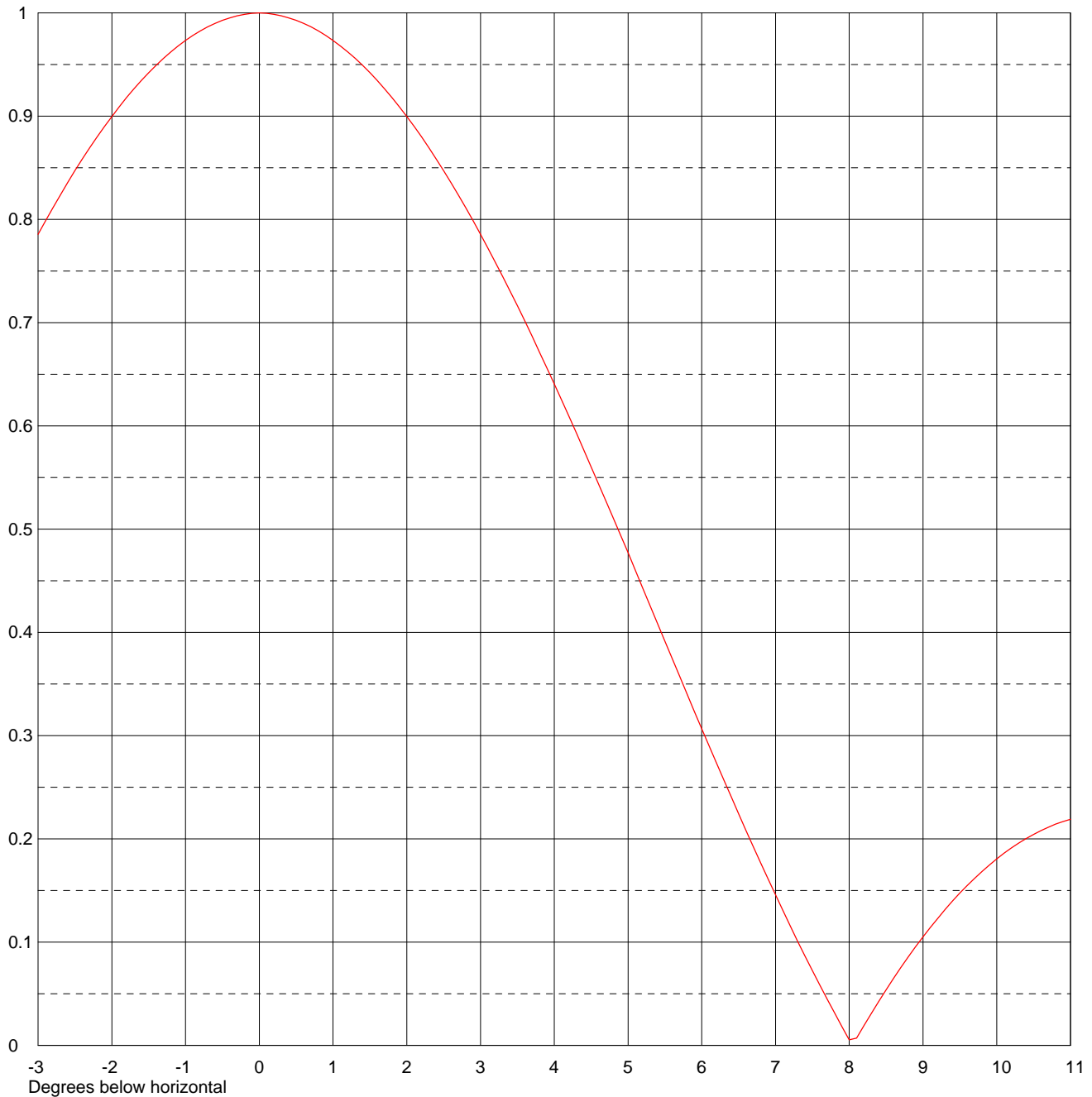
Frequency

**85.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**06S066000-0850**

Remarks:



Proposal Number

Revision

Date

**07 Mar 2011**

Call Letters

**WACG**

Channel

**214**

Location

**Augusta, GA**

Customer

Antenna Type

**TY-60-F****ELEVATION PATTERN**

RMS Gain at Main Lobe

**6.6 (8.20 dB)**

Beam Tilt

**0.00 Degrees**

RMS Gain at Horizontal

**6.6 (8.20 dB)**

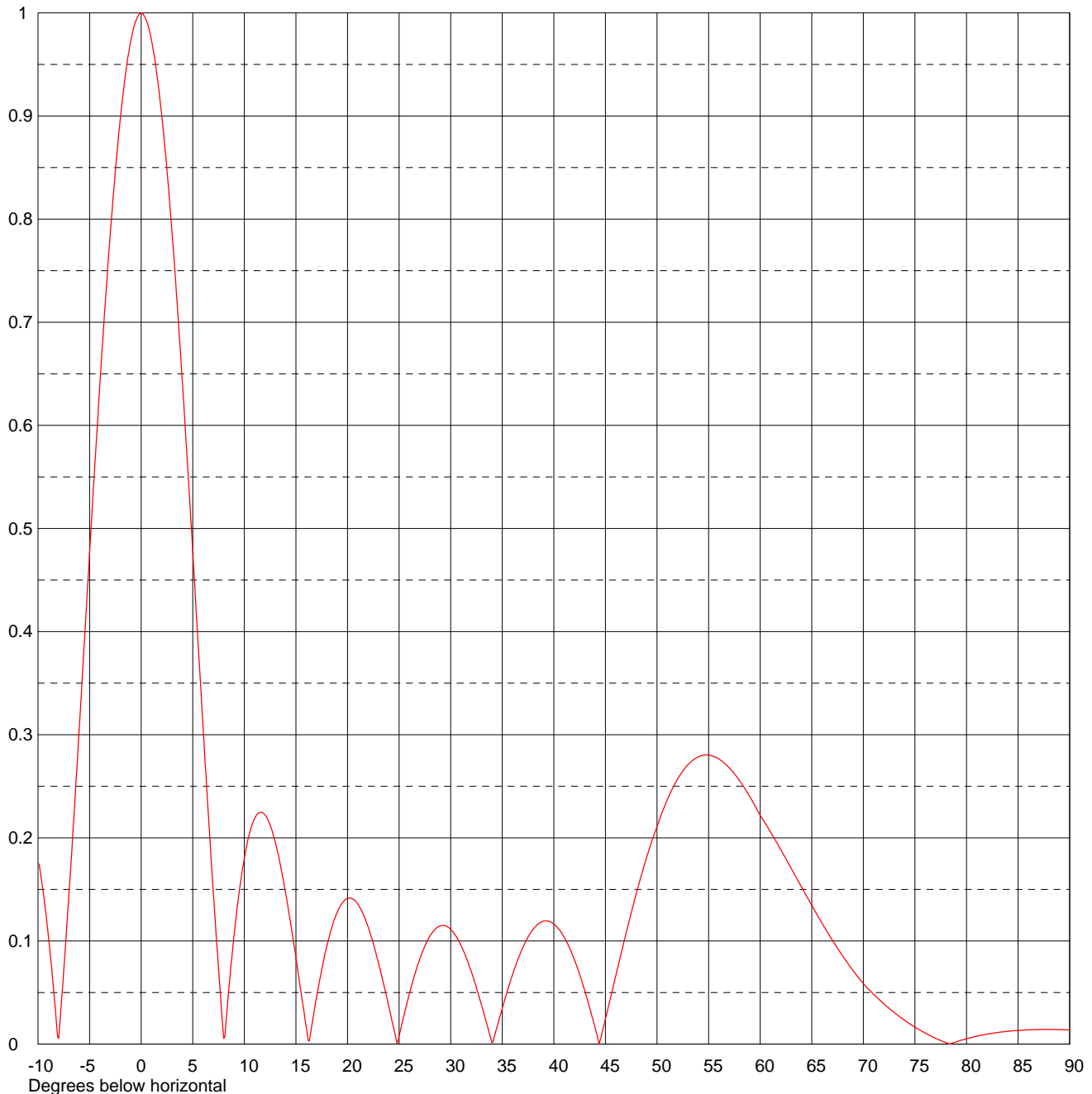
Frequency

**85.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**06S066000-0850-90**

Remarks:



Proposal Number

Revision

Date

**07 Mar 2011**

Call Letters

**WACG**

Channel

**214**

Location

**Augusta, GA**

Customer

Antenna Type

**TY-60-F**

## TABULATION OF ELEVATION PATTERN

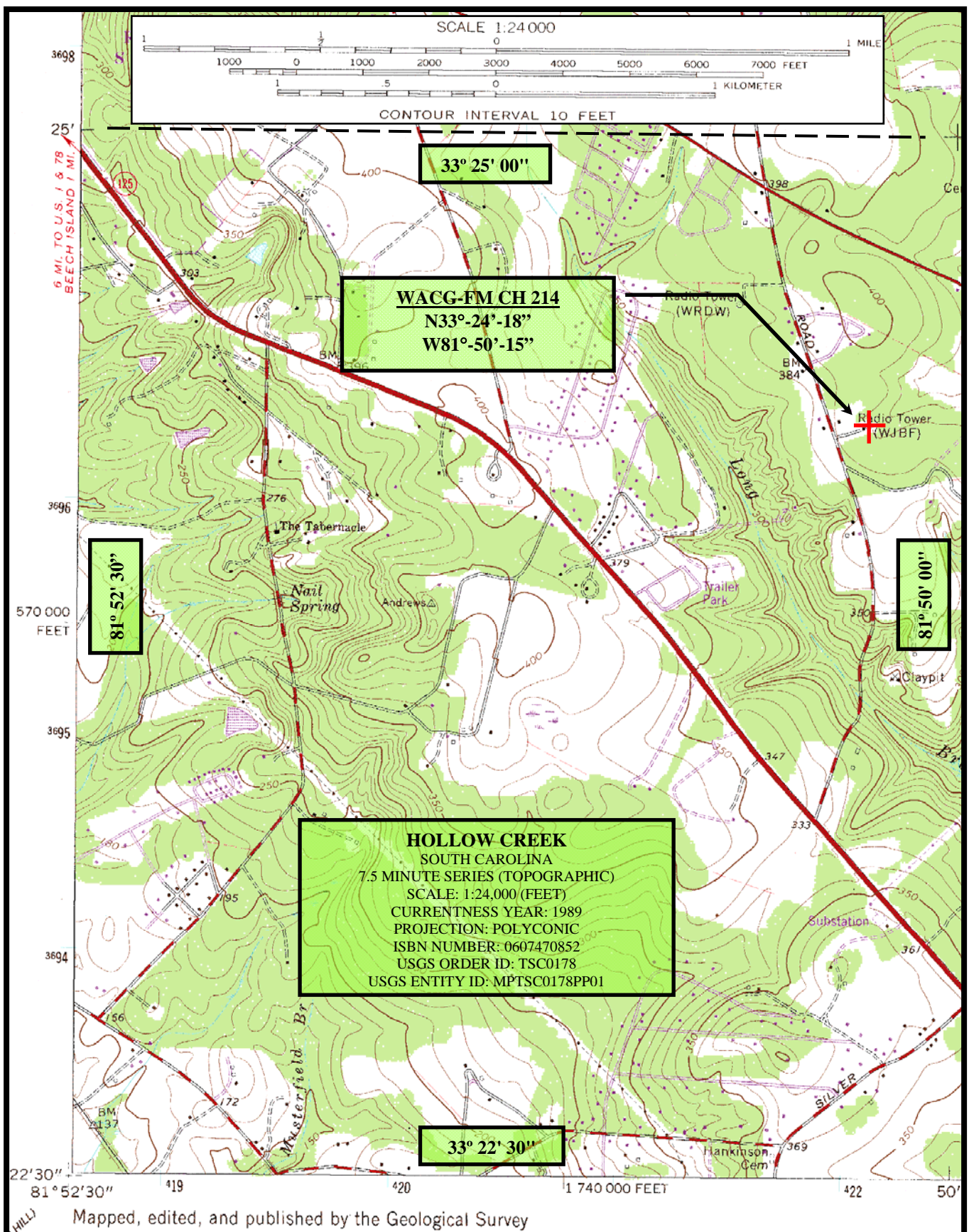
Elevation Pattern Drawing #

**06S066000-0850-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.181	2.4	0.858	10.6	0.208	30.5	0.105	51.0	0.237	71.5	0.044
-9.5	0.148	2.6	0.836	10.8	0.214	31.0	0.096	51.5	0.248	72.0	0.039
-9.0	0.105	2.8	0.811	11.0	0.219	31.5	0.084	52.0	0.257	72.5	0.035
-8.5	0.054	3.0	0.786	11.5	0.225	32.0	0.070	52.5	0.265	73.0	0.031
-8.0	0.006	3.2	0.759	12.0	0.222	32.5	0.055	53.0	0.271	73.5	0.027
-7.5	0.072	3.4	0.731	12.5	0.212	33.0	0.038	53.5	0.276	74.0	0.023
-7.0	0.146	3.6	0.702	13.0	0.196	33.5	0.020	54.0	0.279	74.5	0.020
-6.5	0.224	3.8	0.672	13.5	0.173	34.0	0.001	54.5	0.280	75.0	0.017
-6.0	0.307	4.0	0.641	14.0	0.147	34.5	0.017	55.0	0.280	75.5	0.014
-5.5	0.392	4.2	0.609	14.5	0.116	35.0	0.035	55.5	0.279	76.0	0.011
-5.0	0.477	4.4	0.577	15.0	0.084	35.5	0.052	56.0	0.277	76.5	0.008
-4.5	0.560	4.6	0.544	15.5	0.050	36.0	0.068	56.5	0.273	77.0	0.006
-4.0	0.641	4.8	0.511	16.0	0.016	36.5	0.082	57.0	0.268	77.5	0.004
-3.5	0.716	5.0	0.477	16.5	0.016	37.0	0.094	57.5	0.262	78.0	0.001
-3.0	0.786	5.2	0.443	17.0	0.046	37.5	0.104	58.0	0.256	78.5	0.001
-2.8	0.811	5.4	0.409	17.5	0.072	38.0	0.112	58.5	0.248	79.0	0.002
-2.6	0.836	5.6	0.374	18.0	0.095	38.5	0.117	59.0	0.240	79.5	0.004
-2.4	0.858	5.8	0.340	18.5	0.114	39.0	0.119	59.5	0.231	80.0	0.005
-2.2	0.880	6.0	0.307	19.0	0.128	39.5	0.119	60.0	0.222	80.5	0.007
-2.0	0.900	6.2	0.273	19.5	0.137	40.0	0.116	60.5	0.214	81.0	0.008
-1.8	0.918	6.4	0.241	20.0	0.141	40.5	0.111	61.0	0.206	81.5	0.009
-1.6	0.935	6.6	0.208	20.5	0.141	41.0	0.104	61.5	0.197	82.0	0.010
-1.4	0.949	6.8	0.177	21.0	0.136	41.5	0.094	62.0	0.189	82.5	0.011
-1.2	0.962	7.0	0.146	21.5	0.127	42.0	0.082	62.5	0.180	83.0	0.011
-1.0	0.973	7.2	0.116	22.0	0.114	42.5	0.068	63.0	0.171	83.5	0.012
-0.8	0.983	7.4	0.087	22.5	0.097	43.0	0.052	63.5	0.162	84.0	0.012
-0.6	0.990	7.6	0.058	23.0	0.079	43.5	0.034	64.0	0.152	84.5	0.013
-0.4	0.995	7.8	0.031	23.5	0.058	44.0	0.016	64.5	0.143	85.0	0.013
-0.2	0.999	8.0	0.006	24.0	0.037	44.5	0.004	65.0	0.135	85.5	0.014
0.0	1.000	8.2	0.019	24.5	0.014	45.0	0.024	65.5	0.126	86.0	0.014
0.2	0.999	8.4	0.043	25.0	0.008	45.5	0.045	66.0	0.117	86.5	0.014
0.4	0.995	8.6	0.065	25.5	0.029	46.0	0.066	66.5	0.109	87.0	0.014
0.6	0.990	8.8	0.086	26.0	0.049	46.5	0.087	67.0	0.101	87.5	0.014
0.8	0.983	9.0	0.105	26.5	0.067	47.0	0.107	67.5	0.093	88.0	0.014
1.0	0.973	9.2	0.123	27.0	0.082	47.5	0.127	68.0	0.086	88.5	0.014
1.2	0.962	9.4	0.140	27.5	0.095	48.0	0.146	68.5	0.078	89.0	0.014
1.4	0.949	9.6	0.155	28.0	0.105	48.5	0.164	69.0	0.071	89.5	0.014
1.6	0.935	9.8	0.169	28.5	0.112	49.0	0.181	69.5	0.065	90.0	0.014
1.8	0.918	10.0	0.181	29.0	0.115	49.5	0.197	70.0	0.059		
2.0	0.900	10.2	0.191	29.5	0.115	50.0	0.211	70.5	0.053		
2.2	0.880	10.4	0.200	30.0	0.111	50.5	0.225	71.0	0.048		

Remarks:





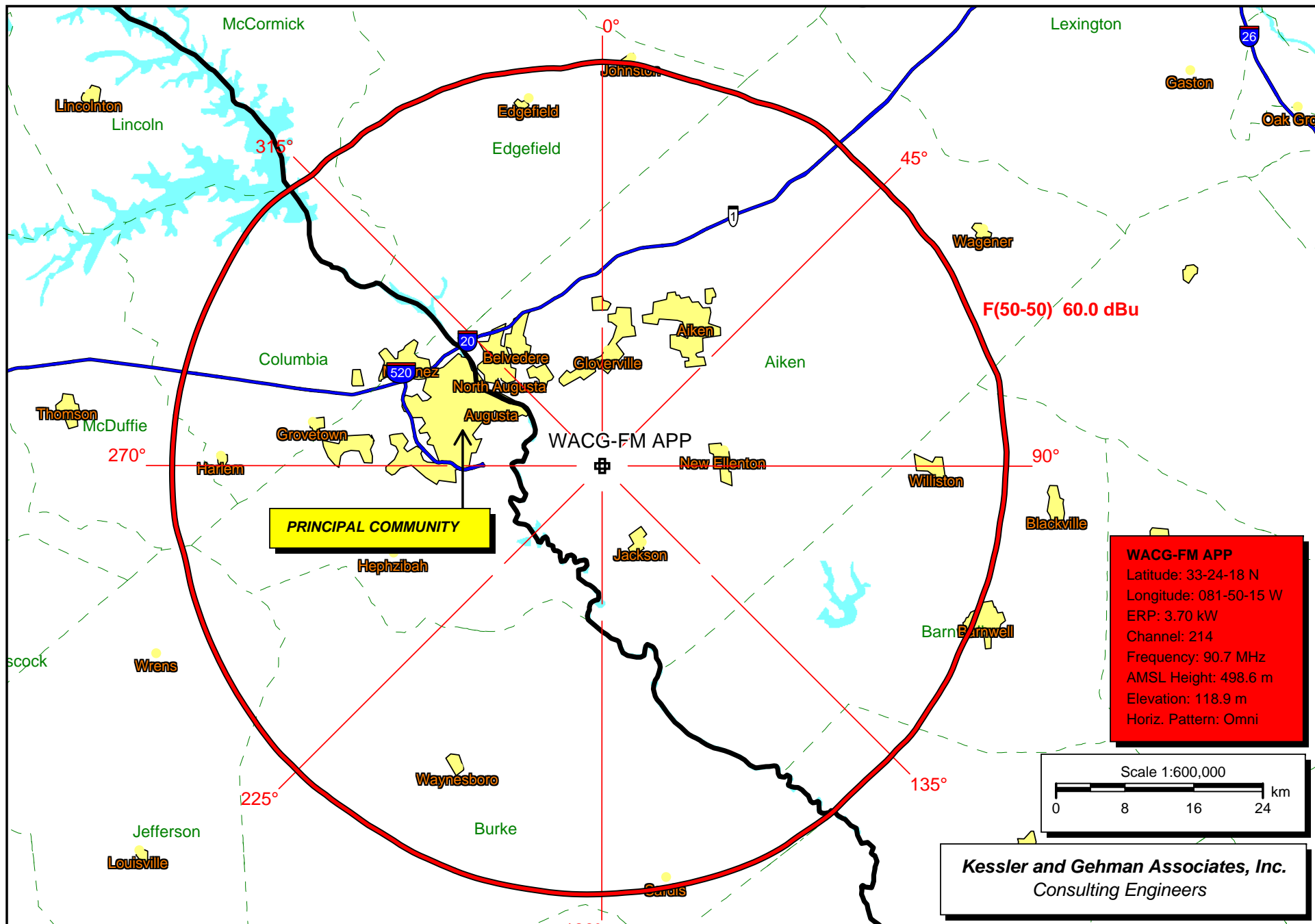
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507 N.W. 60th Street, Suite C  
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**WACG-FM CHANNEL 214**  
AUGUSTA, GEORGIA

20110307

EXHIBIT 7





WACG-FM Channel 214 F(50,50) 60.0 dBuV/m Protected Service Contour

Kessler and Gehman Associates, Inc.  
Telecommunications Consulting Engineers

NCE-FM Interference Study

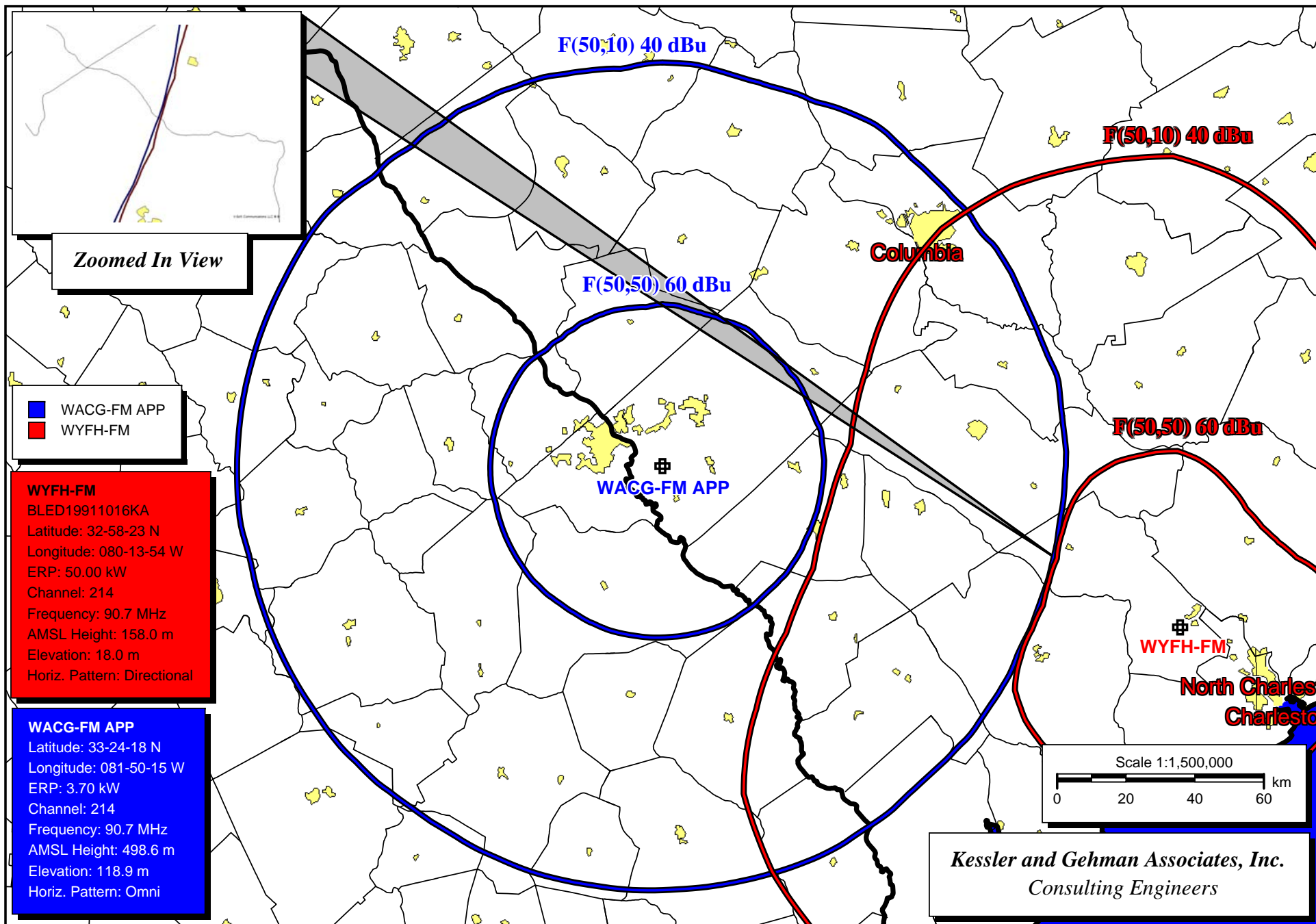
WACG-FM Channel 214

REFERENCE 33 24 18.0 N. CH# 214C2 - 90.7 MHz, Pwr= 3.7 kW, HAAT= 420.8 M, COR= 498.6 M  
81 50 15.0 W. Average Protected F(50-50)= 48.01 km  
Omni-directional

DISPLAY DATES  
DATA 03-08-11  
SEARCH 03-08-11

CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
214C2 WACG-FM Augusta		LIC _HX GA	248.9 68.6	44.8 BLED20090903AAG	33 15 33.0 82 17 09.0	5.600 429	126.4 544	51.8 Georgia Public Tel ecommuni	-131.4*	-130.1*
214C0 WACG-FM Augusta		CP DCX GA	248.9 68.6	44.8 BPED20091008ACH	33 15 33.0 82 17 09.0	57.000 455	171.5 570	75.9 Georgia Public Tel ecommuni	-176.5*	-154.1*
06 2E WCES-TV Wrens		LI _HN GA	248.9 68.6	44.8 BLEDT20090612ACF	33 15 33.0 82 17 09.0	7.900 429	29.6 544	85.7 Georgia Public Tel ecommuni	115.3R	-70.6M
214C2 WYFH North Charleston		LIC DCN SC	107.4 288.3	157.2 BLED19911016KA	32 58 23.0 80 13 54.0	50.000 150	107.7 158	40.2 Bible Broadcasting Network	2.8	0.4
213C2 1209375 Gray Court		APP DVX SC	352.6 172.5	102.6 BNPED20071022BHF	34 19 19.9 81 58 57.2	21.000 136	47.0 298	31.0 St. Joseph's Catholic Scho	9.1	1.6
213C2 1295398 Laurens		APP DEX SC	352.6 172.5	102.6 BNPED20071018AMP	34 19 20.0 81 58 57.0	40.000 105	45.9 264	29.8 Community Broadcast Servi c	10.2	2.7
213A WUSC-FM Columbia		LIC _CN SC	48.5 229.0	100.4 BLED19870817KD	34 00 02.0 81 01 19.0	2.500 77	33.0 148	22.2 University Of South Caroli	21.4	9.1
216C2 NEW McCormick		CP DVX SC	307.9 127.6	67.1 BNPED20071022BSL	33 46 28.0 82 24 36.0	28.000 107	4.7 228	44.1 Mediatr ix Sc, Inc.	13.3	19.2
212C2 WELG Tignall		CP DVX GA	300.8 120.4	73.7 BMPED20090610ACS	33 44 31.9 82 31 16.9	26.000 126	4.8 256	44.4 Toccoa Foundation, Inc.	19.6	25.5
214C0 WFAE Charlotte		LIC DCX NC	26.3 206.9	233.7 BLED20050223ACA	35 17 14.0 80 41 45.0	100.000 331	164.0 544	69.7 University Radi o Foundatio	23.4	48.3
211D W211BV Lexington		LIC _V_ SC	45.8 226.1	78.8 BLFT20060607ACE	33 53 52.0 81 13 30.0	0.010	0.2 215	5.5 Calvary Chapel Of Twin Fal	32.7	69.7
215A WNBK Whitmore		LIC DEX SC	12.3 192.4	124.1 BLED20090209AME	34 29 52.0 81 32 55.0	1.800 102	30.9 226	20.9 Richburg Educational Bdcst	47.3	34.1
214D W214BZ Savannah		LIC _C_ GA	156.5 336.9	162.9 BLFT20090527ACM	32 03 26.0 81 08 47.0	0.027	23.6 96	7.1 Edgewater Broadcasting Inc	90.2	34.2
212C1 WSSB-FM Orangeburg		LIC DEN SC	83.3 263.8	93.2 BLED19850212KW	33 29 55.0 80 50 30.0	80.000 66	3.5 128	34.4 South Carolina State Unive	42.8	55.1
217C1 WLTR Columbia		LIC _C_ SC	46.1 226.6	115.0 BMLED20041208AAT	34 07 07.0 80 56 12.0	100.000 232	9.1 331	67.5 South Carolina Educational	60.0	43.8
214C2 WMVV Gri ffin		LIC DCX GA	269.6 88.3	213.6 BLED20030321ABI	33 22 12.0 84 08 00.0	18.000 144	116.6 381	44.7 Life Radi o Mini str ies, Inc	47.2	45.6
215C1 WRAF Toccoa Falls		LIC DCX GA	313.7 132.9	193.6 BLED20090529AEI	34 35 57.0 83 21 55.0	100.000 172	98.4 513	66.9 Toccoa Falls College	47.3	54.5
213C2 WPWB Byron		LIC _CN GA	241.0 60.2	164.0 BLED19900319KA	32 40 55.0 83 22 10.0	16.500 138	61.0 260	40.7 Augusta Radi o Fel lowshi p I	53.1	48.0

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
< = Station meets FCC minimum distance spacing for its class.  
< = Contour Overlap



WYFH-FM Allocation Study

WACG-FM A

WYFH BLED19911016KA

Channel = 214C2  
 Max ERP = 3.7 kW  
 RCAMSL = 498.6 M  
 N. Lat. 33 24 18.0  
 W. Lng. 81 50 15.0  
 Protected  
 60 dBu

Channel = 214C2  
 Max ERP = 50 kW  
 RCAMSL = 158 M  
 N. Lat. 32 58 23.0  
 W. Lng. 80 13 54.0  
 Interfering  
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
047.0	003.7000	0379.5	045.9	304.8	017.5578	0146.2	140.5	34.82	
048.0	003.7000	0380.1	045.9	304.7	017.5236	0146.2	139.6	34.97	
049.0	003.7000	0382.2	046.0	304.7	017.4952	0146.2	138.8	35.12	
050.0	003.7000	0383.3	046.1	304.6	017.4510	0146.2	138.1	35.26	
051.0	003.7000	0383.1	046.0	304.5	017.3857	0146.2	137.3	35.39	
052.0	003.7000	0380.9	045.9	304.4	017.2892	0146.2	136.6	35.51	
053.0	003.7000	0379.3	045.9	304.2	017.1981	0146.2	135.8	35.63	
054.0	003.7000	0379.6	045.9	304.1	017.1262	0146.2	135.1	35.77	
055.0	003.7000	0381.7	046.0	304.0	017.0726	0146.3	134.3	35.91	
056.0	003.7000	0385.6	046.2	304.0	017.0390	0146.3	133.5	36.06	
057.0	003.7000	0387.4	046.3	303.9	016.9721	0146.3	132.7	36.19	
058.0	003.7000	0387.2	046.2	303.7	016.8762	0146.3	132.0	36.31	
059.0	003.7000	0387.3	046.3	303.6	016.7805	0146.3	131.3	36.43	
060.0	003.7000	0387.7	046.3	303.4	016.6830	0146.4	130.5	36.55	
061.0	003.7000	0387.9	046.3	303.3	016.5799	0146.4	129.8	36.66	
062.0	003.7000	0387.0	046.2	303.1	016.4583	0146.4	129.1	36.76	
063.0	003.7000	0386.0	046.2	302.9	016.3312	0146.5	128.5	36.86	
064.0	003.7000	0385.4	046.2	302.7	016.2045	0146.5	127.8	36.95	
065.0	003.7000	0384.7	046.1	302.5	016.0734	0146.5	127.1	37.04	
066.0	003.7000	0384.6	046.1	302.2	015.9459	0146.5	126.5	37.13	
067.0	003.7000	0384.9	046.1	302.0	015.8183	0146.5	125.8	37.22	
068.0	003.7000	0385.7	046.2	301.8	015.6918	0146.5	125.1	37.31	
069.0	003.7000	0386.7	046.2	301.6	015.5640	0146.5	124.5	37.40	
070.0	003.7000	0387.5	046.3	301.4	015.4300	0146.4	123.8	37.48	
071.0	003.7000	0388.3	046.3	301.2	015.2907	0146.4	123.2	37.56	
072.0	003.7000	0389.3	046.4	301.0	015.1503	0146.3	122.5	37.64	
073.0	003.7000	0390.7	046.4	300.7	015.0097	0146.3	121.9	37.72	
074.0	003.7000	0392.7	046.5	300.5	014.8715	0146.3	121.2	37.80	
075.0	003.7000	0395.6	046.7	300.3	014.7383	0146.3	120.6	37.88	
076.0	003.7000	0399.1	046.9	300.0	014.6058	0146.3	119.9	37.97	
077.0	003.7000	0402.4	047.0	299.8	014.5594	0146.3	119.2	38.09	
078.0	003.7000	0403.0	047.1	299.5	014.5283	0146.2	118.6	38.18	
079.0	003.7000	0401.6	047.0	299.2	014.4931	0146.2	118.1	38.26	
080.0	003.7000	0400.0	046.9	298.9	014.4568	0146.2	117.7	38.33	
081.0	003.7000	0398.8	046.8	298.5	014.4206	0146.3	117.3	38.41	
082.0	003.7000	0397.8	046.8	298.2	014.3843	0146.3	116.8	38.48	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
083.0	003.7000	0397.5	046.8	297.8	014.3482	0146.4	116.4	38.55
084.0	003.7000	0397.4	046.8	297.5	014.3120	0146.4	115.9	38.63
085.0	003.7000	0398.0	046.8	297.2	014.2761	0146.4	115.5	38.70
086.0	003.7000	0398.6	046.8	296.8	014.2394	0146.5	115.0	38.78
087.0	003.7000	0399.6	046.9	296.5	014.2028	0146.5	114.6	38.85
088.0	003.7000	0400.2	046.9	296.1	014.1648	0146.5	114.2	38.92
089.0	003.7000	0399.3	046.9	295.7	014.1245	0146.5	113.8	38.97
090.0	003.7000	0398.8	046.8	295.4	014.0842	0146.5	113.5	39.02
091.0	003.7000	0397.6	046.8	295.0	014.0426	0146.5	113.2	39.06
092.0	003.7000	0397.0	046.8	294.6	014.0014	0146.4	112.9	39.10
093.0	003.7000	0397.2	046.8	294.2	013.9605	0146.4	112.6	39.14
094.0	003.7000	0397.0	046.8	293.8	013.9188	0146.3	112.4	39.18
095.0	003.7000	0396.7	046.7	293.4	013.8767	0146.3	112.1	39.21
096.0	003.7000	0395.9	046.7	293.0	013.8339	0146.2	111.9	39.24
097.0	003.7000	0394.7	046.6	292.6	013.7906	0146.1	111.8	39.25
098.0	003.7000	0394.0	046.6	292.2	013.7474	0146.1	111.6	39.27
099.0	003.7000	0394.1	046.6	291.8	013.7046	0146.0	111.4	39.29
100.0	003.7000	0394.9	046.6	291.4	013.6619	0145.9	111.2	39.32
101.0	003.7000	0395.3	046.7	290.9	013.6188	0145.9	111.1	39.33
102.0	003.7000	0395.2	046.7	290.5	013.5752	0145.8	111.0	39.34
103.0	003.7000	0394.9	046.6	290.1	013.5314	0145.7	110.9	39.34
104.0	003.7000	0394.9	046.6	289.7	013.5200	0145.7	110.8	39.35
105.0	003.7000	0395.4	046.7	289.3	013.5200	0145.7	110.7	39.37
106.0	003.7000	0396.2	046.7	288.8	013.5200	0145.7	110.6	39.38
107.0	003.7000	0395.9	046.7	288.4	013.5200	0145.7	110.6	39.39
108.0	003.7000	0394.9	046.6	288.0	013.5200	0145.7	110.7	39.37
109.0	003.7000	0394.5	046.6	287.6	013.5200	0145.6	110.7	39.36
110.0	003.7000	0394.8	046.6	287.2	013.5200	0145.5	110.8	39.36
111.0	003.7000	0395.1	046.7	286.7	013.5200	0145.5	110.8	39.34
112.0	003.7000	0395.5	046.7	286.3	013.5200	0145.5	110.9	39.33
113.0	003.7000	0396.2	046.7	285.9	013.5200	0145.5	110.9	39.32
114.0	003.7000	0396.5	046.7	285.5	013.5200	0145.5	111.0	39.30
115.0	003.7000	0395.7	046.7	285.1	013.5200	0145.5	111.2	39.26
116.0	003.7000	0395.1	046.7	284.6	013.5200	0145.5	111.4	39.22
117.0	003.7000	0395.4	046.7	284.2	013.5200	0145.6	111.6	39.19
118.0	003.7000	0396.2	046.7	283.8	013.5200	0145.7	111.7	39.16
119.0	003.7000	0398.4	046.8	283.4	013.5200	0145.6	111.8	39.14
120.0	003.7000	0400.8	047.0	283.0	013.5200	0145.6	112.0	39.12
121.0	003.7000	0402.6	047.0	282.6	013.5200	0145.7	112.1	39.08
122.0	003.7000	0403.2	047.1	282.2	013.5200	0145.7	112.4	39.03
123.0	003.7000	0403.5	047.1	281.8	013.5200	0145.7	112.7	38.98
124.0	003.7000	0404.5	047.1	281.4	013.5200	0145.7	112.9	38.93
125.0	003.7000	0404.9	047.2	281.0	013.5200	0145.7	113.3	38.86
126.0	003.7000	0405.1	047.2	280.6	013.5200	0145.7	113.6	38.80
127.0	003.7000	0406.1	047.2	280.2	013.5200	0145.7	113.9	38.74
128.0	003.7000	0407.4	047.3	279.8	013.5886	0145.7	114.3	38.70
129.0	003.7000	0409.0	047.4	279.5	013.7481	0145.7	114.6	38.68
130.0	003.7000	0410.9	047.5	279.1	013.9092	0145.8	114.9	38.67
131.0	003.7000	0411.9	047.5	278.7	014.0632	0145.8	115.3	38.64
132.0	003.7000	0411.9	047.5	278.4	014.2095	0145.8	115.8	38.60
133.0	003.7000	0410.6	047.5	278.0	014.3450	0145.8	116.3	38.54

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
134.0	003.7000	0410.0	047.4	277.7	014.4828	0145.9	116.8	38.49
135.0	003.7000	0411.0	047.5	277.4	014.6291	0145.9	117.3	38.45
136.0	003.7000	0411.6	047.5	277.1	014.7698	0146.0	117.8	38.40
137.0	003.7000	0411.4	047.5	276.8	014.9025	0146.1	118.4	38.34
138.0	003.7000	0411.6	047.5	276.5	015.0359	0146.2	118.9	38.28
139.0	003.7000	0411.7	047.5	276.2	015.1660	0146.3	119.5	38.21
140.0	003.7000	0412.2	047.6	275.9	015.2962	0146.4	120.0	38.15
141.0	003.7000	0413.5	047.6	275.6	015.4301	0146.5	120.6	38.09
142.0	003.7000	0414.8	047.7	275.3	015.5613	0146.5	121.1	38.02
143.0	003.7000	0416.3	047.8	275.0	015.6918	0146.6	121.7	37.95
144.0	003.7000	0418.5	047.9	274.7	015.8267	0146.6	122.2	37.89
145.0	003.7000	0421.3	048.0	274.4	015.9630	0146.7	122.8	37.83
146.0	003.7000	0424.3	048.2	274.1	016.1000	0146.8	123.4	37.76
147.0	003.7000	0426.0	048.3	273.8	016.2223	0146.8	124.0	37.68
148.0	003.7000	0427.2	048.4	273.6	016.3362	0146.9	124.6	37.59
149.0	003.7000	0428.1	048.4	273.3	016.4454	0147.0	125.3	37.50
150.0	003.7000	0429.0	048.5	273.1	016.5506	0147.1	126.0	37.40
151.0	003.7000	0430.1	048.5	272.9	016.6551	0147.1	126.7	37.30
152.0	003.7000	0431.7	048.6	272.6	016.7607	0147.2	127.4	37.20
153.0	003.7000	0433.9	048.7	272.4	016.8693	0147.3	128.0	37.10
154.0	003.7000	0436.6	048.9	272.2	016.9799	0147.4	128.7	37.00
155.0	003.7000	0438.6	049.0	271.9	017.0797	0147.5	129.4	36.89
156.0	003.7000	0439.9	049.0	271.8	017.1698	0147.6	130.2	36.77
157.0	003.7000	0441.1	049.1	271.6	017.2557	0147.7	130.9	36.65
158.0	003.7000	0442.3	049.2	271.4	017.3377	0147.8	131.7	36.52
159.0	003.7000	0443.1	049.2	271.2	017.4114	0147.8	132.5	36.39
160.0	003.7000	0443.5	049.2	271.1	017.4790	0147.9	133.3	36.25
161.0	003.7000	0444.0	049.3	271.0	017.5430	0148.0	134.1	36.11
162.0	003.7000	0444.4	049.3	270.8	017.6035	0148.0	134.9	35.97
163.0	003.7000	0444.8	049.3	270.7	017.6596	0148.1	135.7	35.83
164.0	003.7000	0445.1	049.3	270.6	017.7120	0148.1	136.5	35.68
165.0	003.7000	0445.4	049.3	270.5	017.7601	0148.1	137.3	35.53
166.0	003.7000	0445.7	049.4	270.4	017.8052	0148.2	138.2	35.38

WYFH BLED19911016KA

WACG-FM A

Channel = 214C2  
 Max ERP = 50 kW  
 RCAMSL = 158 M  
 N. Lat. 32 58 23.0  
 W. Lng. 80 13 54.0  
 Protected  
 60 dBu

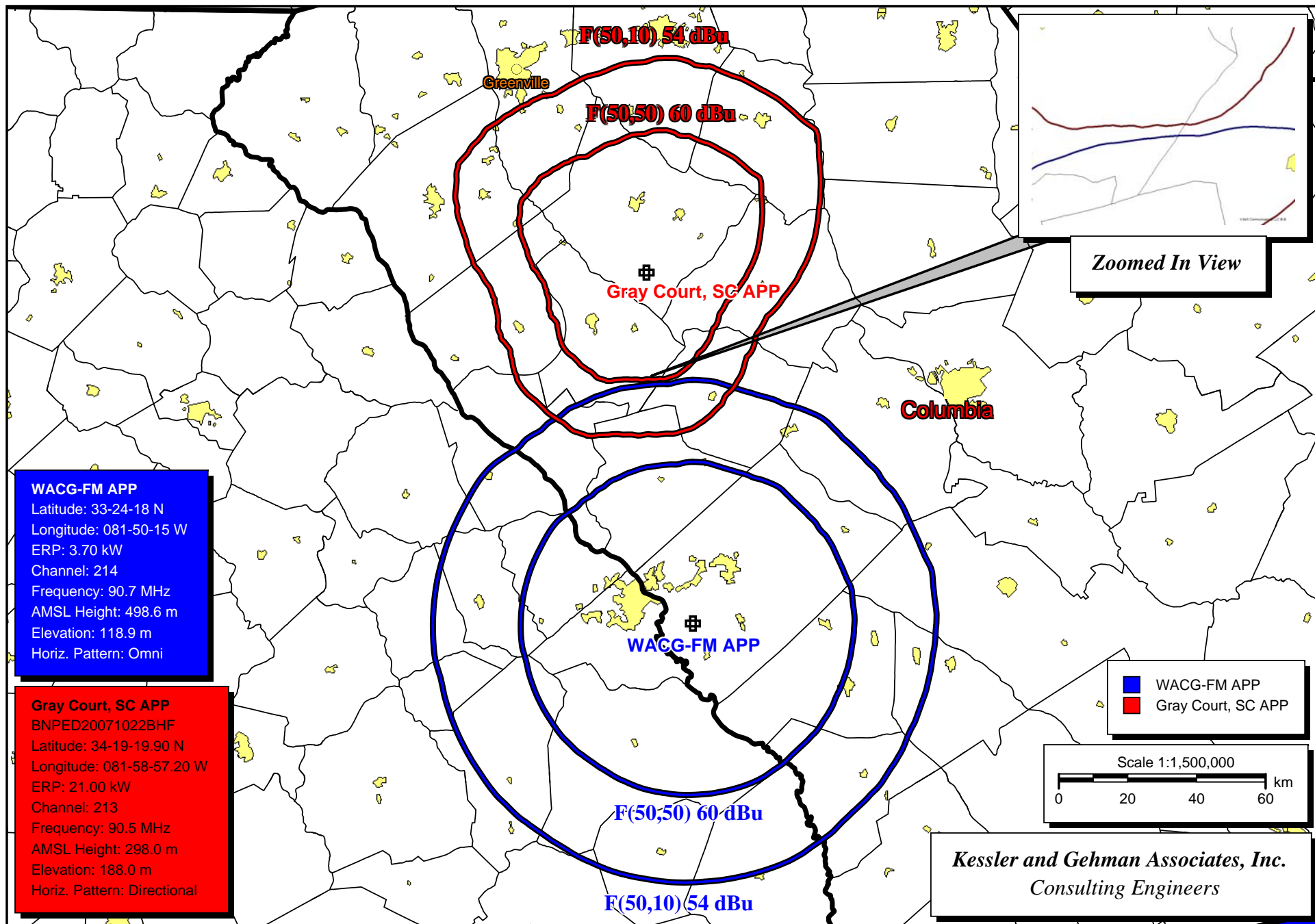
Channel = 214C2  
 Max ERP = 3.7 kW  
 RCAMSL = 498.6 M  
 N. Lat. 33 24 18.0  
 W. Lng. 81 50 15.0  
 Interfering  
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
228.0	050.0000	0151.3	052.4	126.6	003.7000	0405.6	138.6	34.72	
229.0	050.0000	0151.5	052.4	126.5	003.7000	0405.5	137.7	34.92	
230.0	050.0000	0151.5	052.4	126.4	003.7000	0405.4	136.9	35.14	
231.0	050.0000	0151.5	052.4	126.3	003.7000	0405.3	136.0	35.36	
232.0	050.0000	0151.3	052.4	126.2	003.7000	0405.3	135.1	35.58	
233.0	050.0000	0151.0	052.3	126.1	003.7000	0405.2	134.2	35.80	
234.0	050.0000	0151.0	052.3	126.0	003.7000	0405.1	133.3	36.02	
235.0	050.0000	0151.0	052.3	125.8	003.7000	0405.0	132.5	36.24	
236.0	050.0000	0151.0	052.3	125.7	003.7000	0404.9	131.6	36.46	
237.0	050.0000	0151.1	052.3	125.6	003.7000	0404.9	130.7	36.68	
238.0	050.0000	0151.1	052.3	125.4	003.7000	0404.8	129.9	36.89	
239.0	050.0000	0151.1	052.3	125.3	003.7000	0404.8	129.0	37.11	
240.0	050.0000	0151.0	052.3	125.1	003.7000	0404.8	128.2	37.32	
241.0	049.5013	0150.8	052.2	124.9	003.7000	0404.9	127.4	37.52	
242.0	049.0050	0150.5	052.1	124.7	003.7000	0404.8	126.7	37.71	
243.0	048.5113	0150.2	051.9	124.4	003.7000	0404.8	125.9	37.89	
244.0	048.0200	0150.0	051.8	124.2	003.7000	0404.6	125.2	38.08	
245.0	047.5313	0149.9	051.7	123.9	003.7000	0404.4	124.4	38.26	
246.0	047.0450	0149.9	051.6	123.7	003.7000	0404.2	123.7	38.43	
247.0	046.5612	0149.9	051.5	123.4	003.7000	0403.9	123.0	38.61	
248.0	046.0800	0149.9	051.4	123.1	003.7000	0403.6	122.3	38.78	
249.0	045.6012	0149.9	051.4	122.9	003.7000	0403.4	121.6	38.94	
250.0	045.1250	0149.9	051.3	122.6	003.7000	0403.3	120.9	39.11	
251.0	043.2915	0149.9	050.9	122.2	003.7000	0403.2	120.5	39.23	
252.0	041.4961	0149.9	050.5	121.8	003.7000	0403.2	120.0	39.34	
253.0	039.7386	0149.9	050.1	121.4	003.7000	0402.9	119.6	39.44	
254.0	038.0192	0149.9	049.7	120.9	003.7000	0402.5	119.2	39.53	
255.0	036.3378	0149.9	049.3	120.5	003.7000	0401.9	118.9	39.60	
256.0	034.6945	0149.9	048.9	120.1	003.7000	0401.0	118.5	39.66	
257.0	033.0891	0149.9	048.5	119.6	003.7000	0400.0	118.3	39.70	
258.0	031.5218	0149.9	048.0	119.2	003.7000	0398.9	118.0	39.73	
259.0	029.9925	0149.9	047.6	118.7	003.7000	0397.8	117.8	39.75	
260.0	028.5012	0149.8	047.1	118.3	003.7000	0396.8	117.6	39.77	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
261.0	027.3430	0149.8	046.8	117.9	003.7000	0396.0	117.4	39.80
262.0	026.2088	0149.7	046.4	117.4	003.7000	0395.6	117.2	39.83
263.0	025.0986	0149.5	046.0	117.0	003.7000	0395.4	117.1	39.86
264.0	024.0125	0149.3	045.6	116.6	003.7000	0395.2	117.0	39.88
265.0	022.9503	0149.1	045.1	116.1	003.7000	0395.1	116.9	39.90
266.0	021.9122	0149.0	044.7	115.7	003.7000	0395.1	116.9	39.91
267.0	020.8981	0148.9	044.3	115.2	003.7000	0395.5	116.9	39.92
268.0	019.9081	0148.8	043.9	114.8	003.7000	0395.9	116.9	39.93
269.0	018.9420	0148.7	043.4	114.4	003.7000	0396.3	116.9	39.93
270.0	018.0000	0148.4	043.0	113.9	003.7000	0396.5	117.1	39.91
271.0	017.5232	0147.9	042.7	113.6	003.7000	0396.5	117.0	39.92
272.0	017.0528	0147.5	042.4	113.2	003.7000	0396.3	117.0	39.92
273.0	016.5888	0147.1	042.1	112.8	003.7000	0396.0	117.0	39.91
274.0	016.1312	0146.8	041.8	112.4	003.7000	0395.6	117.0	39.90
275.0	015.6800	0146.6	041.6	112.0	003.7000	0395.5	117.0	39.88
276.0	015.2352	0146.4	041.3	111.6	003.7000	0395.3	117.1	39.87
277.0	014.7968	0146.0	041.0	111.3	003.7000	0395.2	117.2	39.84
278.0	014.3648	0145.8	040.7	110.9	003.7000	0395.0	117.2	39.82
279.0	013.9392	0145.8	040.5	110.5	003.7000	0394.9	117.3	39.79
280.0	013.5200	0145.7	040.2	110.2	003.7000	0394.9	117.5	39.76
281.0	013.5200	0145.7	040.2	109.8	003.7000	0394.7	117.3	39.79
282.0	013.5200	0145.7	040.2	109.5	003.7000	0394.6	117.2	39.81
283.0	013.5200	0145.6	040.2	109.1	003.7000	0394.5	117.1	39.83
284.0	013.5200	0145.6	040.2	108.8	003.7000	0394.5	117.1	39.85
285.0	013.5200	0145.5	040.2	108.4	003.7000	0394.7	117.0	39.86
286.0	013.5200	0145.5	040.2	108.1	003.7000	0394.9	117.0	39.88
287.0	013.5200	0145.5	040.2	107.8	003.7000	0395.1	117.0	39.89
288.0	013.5200	0145.7	040.2	107.4	003.7000	0395.4	116.9	39.91
289.0	013.5200	0145.7	040.2	107.1	003.7000	0395.8	116.9	39.92
290.0	013.5200	0145.7	040.2	106.7	003.7000	0396.1	116.9	39.92
291.0	013.6242	0145.9	040.3	106.4	003.7000	0396.2	116.9	39.94
292.0	013.7288	0146.0	040.4	106.0	003.7000	0396.2	116.9	39.94
293.0	013.8338	0146.2	040.5	105.7	003.7000	0396.0	116.9	39.94
294.0	013.9392	0146.3	040.5	105.3	003.7000	0395.7	116.9	39.93
295.0	014.0450	0146.5	040.6	105.0	003.7000	0395.4	116.9	39.91
296.0	014.1512	0146.5	040.7	104.6	003.7000	0395.2	117.0	39.89
297.0	014.2578	0146.5	040.8	104.3	003.7000	0395.0	117.1	39.87
298.0	014.3648	0146.4	040.8	103.9	003.7000	0394.9	117.2	39.83
299.0	014.4722	0146.2	040.8	103.6	003.7000	0394.8	117.3	39.80
300.0	014.5800	0146.3	040.9	103.2	003.7000	0394.8	117.4	39.77
301.0	015.1800	0146.4	041.3	102.9	003.7000	0394.9	117.3	39.80
302.0	015.7922	0146.5	041.6	102.5	003.7000	0395.1	117.2	39.83
303.0	016.4165	0146.4	041.9	102.1	003.7000	0395.2	117.1	39.85
304.0	017.0528	0146.3	042.2	101.7	003.7000	0395.3	117.1	39.86
305.0	017.7013	0146.2	042.5	101.3	003.7000	0395.4	117.1	39.86
306.0	018.3618	0146.1	042.8	100.9	003.7000	0395.3	117.1	39.85
307.0	019.0344	0146.0	043.1	100.5	003.7000	0395.2	117.2	39.83
308.0	019.7192	0146.0	043.4	100.1	003.7000	0395.0	117.3	39.81
309.0	020.4160	0145.9	043.7	099.7	003.7000	0394.7	117.4	39.78
310.0	021.1250	0145.7	044.0	099.3	003.7000	0394.3	117.5	39.73
311.0	022.1112	0145.6	044.3	098.9	003.7000	0394.0	117.6	39.70



Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
312.0	023.1200	0145.5	044.7	098.5	003.7000	0393.9	117.7	39.67
313.0	024.1512	0145.5	045.1	098.1	003.7000	0394.0	117.8	39.65
314.0	025.2050	0145.5	045.5	097.6	003.7000	0394.1	117.9	39.61
315.0	026.2813	0145.6	045.8	097.2	003.7000	0394.4	118.1	39.58
316.0	027.3800	0145.6	046.2	096.8	003.7000	0394.9	118.3	39.54
317.0	028.5012	0145.6	046.6	096.4	003.7000	0395.4	118.5	39.49
318.0	029.6450	0145.7	046.9	096.0	003.7000	0395.9	118.8	39.44
319.0	030.8113	0145.9	047.3	095.6	003.7000	0396.3	119.1	39.38
320.0	032.0000	0146.2	047.7	095.1	003.7000	0396.6	119.4	39.32
321.0	033.2112	0146.3	048.0	094.7	003.7000	0396.8	119.7	39.23
322.0	034.4450	0146.3	048.3	094.4	003.7000	0396.9	120.1	39.14
323.0	035.7013	0146.2	048.7	094.0	003.7000	0397.0	120.5	39.04
324.0	036.9800	0146.1	049.0	093.6	003.7000	0397.1	121.0	38.93
325.0	038.2813	0145.7	049.2	093.2	003.7000	0397.2	121.4	38.81
326.0	039.6050	0145.3	049.5	092.9	003.7000	0397.2	122.0	38.67
327.0	040.9512	0144.7	049.7	092.6	003.7000	0397.1	122.5	38.53
328.0	042.3200	0144.4	049.9	092.2	003.7000	0397.1	123.1	38.38
329.0	043.7113	0144.3	050.2	091.9	003.7000	0397.0	123.7	38.24
330.0	045.1250	0144.2	050.5	091.6	003.7000	0397.2	124.2	38.10
331.0	045.6012	0144.2	050.6	091.3	003.7000	0397.3	124.9	37.92
332.0	046.0800	0144.4	050.7	091.1	003.7000	0397.5	125.6	37.75
333.0	046.5612	0144.5	050.8	090.8	003.7000	0397.8	126.4	37.58
334.0	047.0450	0144.4	050.9	090.6	003.7000	0398.1	127.1	37.40
335.0	047.5313	0144.2	051.0	090.4	003.7000	0398.4	127.9	37.21
336.0	048.0200	0144.2	051.0	090.2	003.7000	0398.6	128.6	37.03
337.0	048.5113	0144.3	051.2	090.0	003.7000	0398.8	129.4	36.84
338.0	049.0050	0144.4	051.3	089.8	003.7000	0399.0	130.2	36.64
339.0	049.5013	0144.4	051.3	089.6	003.7000	0399.1	131.0	36.44
340.0	050.0000	0144.2	051.4	089.4	003.7000	0399.1	131.8	36.24
341.0	050.0000	0144.0	051.4	089.3	003.7000	0399.2	132.7	36.02
342.0	050.0000	0143.6	051.3	089.2	003.7000	0399.2	133.5	35.80
343.0	050.0000	0143.4	051.3	089.1	003.7000	0399.3	134.4	35.59
344.0	050.0000	0143.2	051.3	089.0	003.7000	0399.3	135.2	35.37
345.0	050.0000	0142.9	051.2	088.9	003.7000	0399.3	136.1	35.15
346.0	050.0000	0142.6	051.2	088.9	003.7000	0399.4	137.0	34.93
347.0	050.0000	0142.3	051.2	088.8	003.7000	0399.4	137.9	34.72



Gray Court, SC Application Allocation Study

WACG-FM A

1209375 BNPED20071022BHF

Channel = 214C2  
 Max ERP = 3.7 kW  
 RCAMSL = 498.6 M  
 N. Lat. 33 24 18.0  
 W. Lng. 81 50 15.0  
 Protected  
 60 dBu

Channel = 213C2  
 Max ERP = 21 kW  
 RCAMSL = 298 M  
 N. Lat. 34 19 19.9  
 W. Lng. 81 58 57.2  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
293.0	003.7000	0446.1	049.4	201.2	005.3132	0152.2	088.4	41.24	
294.0	003.7000	0445.5	049.3	201.2	005.3132	0152.2	087.6	41.49	
295.0	003.7000	0445.0	049.3	201.2	005.3132	0152.2	086.7	41.75	
296.0	003.7000	0444.7	049.3	201.1	005.3132	0152.2	085.9	42.00	
297.0	003.7000	0444.4	049.3	201.0	005.3132	0152.2	085.0	42.26	
298.0	003.7000	0444.5	049.3	201.0	005.3132	0152.2	084.2	42.51	
299.0	003.7000	0444.5	049.3	200.9	005.3132	0152.2	083.3	42.77	
300.0	003.7000	0444.6	049.3	200.8	005.3132	0152.2	082.5	43.03	
301.0	003.7000	0444.8	049.3	200.7	005.3132	0152.3	081.6	43.29	
302.0	003.7000	0444.9	049.3	200.6	005.3132	0152.3	080.8	43.55	
303.0	003.7000	0444.9	049.3	200.5	005.3132	0152.4	079.9	43.81	
304.0	003.7000	0444.7	049.3	200.3	005.3132	0152.5	079.1	44.07	
305.0	003.7000	0444.1	049.3	200.1	005.3132	0152.5	078.3	44.33	
306.0	003.7000	0443.2	049.2	199.9	005.3061	0152.6	077.4	44.58	
307.0	003.7000	0441.8	049.1	199.7	005.2786	0152.7	076.6	44.81	
308.0	003.7000	0439.5	049.0	199.4	005.2452	0152.8	075.9	45.03	
309.0	003.7000	0436.6	048.9	199.1	005.2073	0152.8	075.1	45.24	
310.0	003.7000	0433.1	048.7	198.7	005.1655	0152.7	074.4	45.43	
311.0	003.7000	0428.9	048.4	198.3	005.1189	0152.6	073.7	45.61	
312.0	003.7000	0425.5	048.3	197.9	005.0738	0152.3	073.0	45.78	
313.0	003.7000	0421.6	048.1	197.5	005.0254	0151.8	072.3	45.93	
314.0	003.7000	0417.1	047.8	197.0	004.9727	0151.1	071.7	46.06	
315.0	003.7000	0413.8	047.6	196.6	004.9237	0150.6	071.0	46.20	
316.0	003.7000	0413.5	047.6	196.2	004.8859	0150.3	070.3	46.38	
317.0	003.7000	0415.5	047.7	196.0	004.8560	0150.3	069.5	46.60	
318.0	003.7000	0416.0	047.8	195.6	004.8177	0150.3	068.8	46.81	
319.0	003.7000	0414.4	047.7	195.2	004.7692	0150.3	068.1	46.97	
320.0	003.7000	0411.7	047.5	194.7	004.7146	0150.1	067.5	47.11	
321.0	003.7000	0408.6	047.4	194.2	004.6572	0150.2	067.0	47.25	
322.0	003.7000	0406.6	047.3	193.7	004.6024	0150.4	066.4	47.40	
323.0	003.7000	0408.8	047.4	193.3	004.5620	0150.4	065.7	47.60	
324.0	003.7000	0411.5	047.5	192.9	004.5218	0150.5	064.9	47.80	
325.0	003.7000	0411.6	047.5	192.4	004.4698	0150.5	064.3	47.96	
326.0	003.7000	0409.5	047.4	191.8	004.4083	0150.2	063.8	48.06	
327.0	003.7000	0407.7	047.3	191.3	004.3464	0150.5	063.3	48.19	
328.0	003.7000	0409.4	047.4	190.8	004.2951	0150.9	062.6	48.38	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
329.0	003.7000	0411.5	047.5	190.3	004.2433	0151.2	062.0	48.56
330.0	003.7000	0413.7	047.6	189.8	004.2148	0151.5	061.4	48.77
331.0	003.7000	0413.2	047.6	189.1	004.2148	0151.4	060.9	48.94
332.0	003.7000	0411.3	047.5	188.5	004.2148	0151.0	060.5	49.07
333.0	003.7000	0409.8	047.4	187.8	004.2148	0150.6	060.0	49.20
334.0	003.7000	0409.0	047.4	187.1	004.2148	0149.8	059.6	49.31
335.0	003.7000	0408.9	047.4	186.4	004.2148	0149.2	059.2	49.44
336.0	003.7000	0409.9	047.4	185.8	004.2148	0148.7	058.7	49.58
337.0	003.7000	0410.3	047.4	185.1	004.2148	0148.4	058.3	49.72
338.0	003.7000	0408.8	047.4	184.3	004.2148	0148.6	058.0	49.84
339.0	003.7000	0407.6	047.3	183.5	004.2148	0149.4	057.7	50.00
340.0	003.7000	0407.7	047.3	182.8	004.2148	0149.6	057.3	50.13
341.0	003.7000	0407.2	047.3	182.0	004.2148	0149.1	057.1	50.21
342.0	003.7000	0406.7	047.3	181.2	004.2148	0147.9	056.8	50.25
343.0	003.7000	0406.3	047.2	180.4	004.2148	0146.8	056.6	50.28
344.0	003.7000	0404.4	047.1	179.6	004.2148	0146.0	056.4	50.29
345.0	003.7000	0401.9	047.0	178.8	004.2148	0146.2	056.3	50.33
346.0	003.7000	0399.8	046.9	177.9	004.2148	0147.1	056.3	50.40
347.0	003.7000	0398.8	046.8	177.1	004.2148	0147.5	056.2	50.47
348.0	003.7000	0397.6	046.8	176.3	004.2148	0147.7	056.1	50.50
349.0	003.7000	0396.2	046.7	175.4	004.2148	0147.8	056.1	50.52
350.0	003.7000	0395.2	046.7	174.6	004.2148	0147.6	056.0	50.52
351.0	003.7000	0394.1	046.6	173.8	004.2148	0147.2	056.0	50.50
352.0	003.7000	0393.2	046.6	172.9	004.2148	0147.1	056.1	50.48
353.0	003.7000	0391.3	046.5	172.1	004.2148	0148.0	056.2	50.49
354.0	003.7000	0388.9	046.3	171.3	004.2148	0149.2	056.3	50.50
355.0	003.7000	0390.1	046.4	170.5	004.2148	0149.8	056.3	50.54
356.0	003.7000	0392.9	046.5	169.6	004.2148	0149.8	056.2	50.56
357.0	003.7000	0395.4	046.7	168.8	004.2148	0149.3	056.2	50.54
358.0	003.7000	0397.1	046.8	168.0	004.2148	0148.5	056.2	50.49
359.0	003.7000	0398.4	046.8	167.1	004.2148	0148.0	056.3	50.42
000.0	003.7000	0399.1	046.9	166.3	004.2148	0147.8	056.5	50.36
001.0	003.7000	0398.4	046.8	165.5	004.2148	0147.4	056.7	50.25
002.0	003.7000	0397.8	046.8	164.7	004.2148	0147.3	057.0	50.15
003.0	003.7000	0397.5	046.8	164.0	004.2148	0147.1	057.3	50.04
004.0	003.7000	0397.4	046.8	163.2	004.2148	0146.4	057.5	49.89
005.0	003.7000	0396.0	046.7	162.5	004.2148	0145.3	057.9	49.70
006.0	003.7000	0393.8	046.6	161.8	004.2148	0144.2	058.3	49.48
007.0	003.7000	0390.9	046.4	161.1	004.2148	0142.9	058.8	49.23
008.0	003.7000	0388.1	046.3	160.5	004.2148	0141.7	059.3	48.99
009.0	003.7000	0385.8	046.2	159.9	004.2148	0141.1	059.8	48.78
010.0	003.7000	0383.6	046.1	159.2	004.2148	0140.3	060.3	48.55
011.0	003.7000	0381.9	046.0	158.6	004.2148	0139.2	060.8	48.32
012.0	003.7000	0380.4	045.9	158.0	004.2148	0138.0	061.3	48.07
013.0	003.7000	0379.3	045.9	157.5	004.2148	0136.8	061.8	47.83
014.0	003.7000	0379.4	045.9	156.9	004.2148	0135.8	062.3	47.61
015.0	003.7000	0378.3	045.8	156.3	004.2148	0134.9	062.8	47.38
016.0	003.7000	0377.8	045.8	155.8	004.2148	0134.0	063.3	47.15
017.0	003.7000	0378.3	045.8	155.2	004.2148	0132.8	063.8	46.92
018.0	003.7000	0378.6	045.8	154.7	004.2148	0131.4	064.4	46.67
019.0	003.7000	0379.6	045.9	154.1	004.2148	0130.2	064.9	46.43

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
020.0	003.7000	0380.4	045.9	153.6	004.2148	0129.1	065.4	46.20
021.0	003.7000	0380.0	045.9	153.2	004.2148	0128.2	066.0	45.96
022.0	003.7000	0378.6	045.8	152.7	004.2148	0127.5	066.7	45.71
023.0	003.7000	0379.3	045.9	152.3	004.2148	0126.6	067.3	45.48
024.0	003.7000	0382.1	046.0	151.8	004.2148	0125.8	067.8	45.26
025.0	003.7000	0385.2	046.1	151.2	004.2148	0125.1	068.3	45.05
026.0	003.7000	0387.6	046.3	150.8	004.2148	0124.5	068.9	44.84
027.0	003.7000	0389.3	046.4	150.3	004.2148	0124.0	069.6	44.62
028.0	003.7000	0391.0	046.4	149.9	004.1996	0123.4	070.2	44.38
029.0	003.7000	0392.8	046.5	149.5	004.1283	0122.8	070.8	44.07
030.0	003.7000	0394.6	046.6	149.1	004.0609	0122.2	071.5	43.77
031.0	003.7000	0396.2	046.7	148.7	003.9978	0121.7	072.2	43.47
032.0	003.7000	0396.9	046.7	148.4	003.9437	0121.3	072.9	43.17
033.0	003.7000	0396.0	046.7	148.2	003.9017	0121.1	073.6	42.89
034.0	003.7000	0394.9	046.6	148.0	003.8645	0121.1	074.4	42.62
035.0	003.7000	0391.8	046.5	147.8	003.8411	0121.1	075.2	42.35
036.0	003.7000	0389.1	046.3	147.7	003.8183	0121.2	076.0	42.09
037.0	003.7000	0387.4	046.3	147.5	003.7921	0121.2	076.8	41.83
038.0	003.7000	0384.7	046.1	147.4	003.7735	0121.3	077.6	41.57
039.0	003.7000	0382.1	046.0	147.3	003.7570	0121.3	078.4	41.32
040.0	003.7000	0381.6	046.0	147.1	003.7299	0121.5	079.2	41.07
041.0	003.7000	0381.5	046.0	147.0	003.7035	0121.7	080.0	40.83
042.0	003.7000	0380.9	045.9	146.9	003.6816	0121.9	080.7	40.58
043.0	003.7000	0380.0	045.9	146.7	003.6630	0122.1	081.5	40.34
044.0	003.7000	0379.8	045.9	146.6	003.6432	0122.3	082.3	40.10
045.0	003.7000	0380.1	045.9	146.5	003.6225	0122.7	083.1	39.86
046.0	003.7000	0380.4	045.9	146.4	003.6036	0123.0	083.9	39.63
047.0	003.7000	0379.5	045.9	146.3	003.5933	0123.2	084.7	39.40
048.0	003.7000	0380.1	045.9	146.2	003.5762	0123.5	085.4	39.16
049.0	003.7000	0382.2	046.0	146.1	003.5537	0123.9	086.2	38.93
050.0	003.7000	0383.3	046.1	146.0	003.5377	0124.2	087.0	38.70
051.0	003.7000	0383.1	046.0	145.9	003.5303	0124.3	087.8	38.47
052.0	003.7000	0380.9	045.9	145.9	003.5353	0124.3	088.6	38.24

03-08-2011      Terrain Data

1209375    BNPED20071022BHF

WACG-FM A

Channel = 213C2  
Max ERP = 21 kW  
RCAMSL = 298 M  
N. Lat. 34 19 19.9  
W. Lng. 81 58 57.2  
Protected  
60 dBu

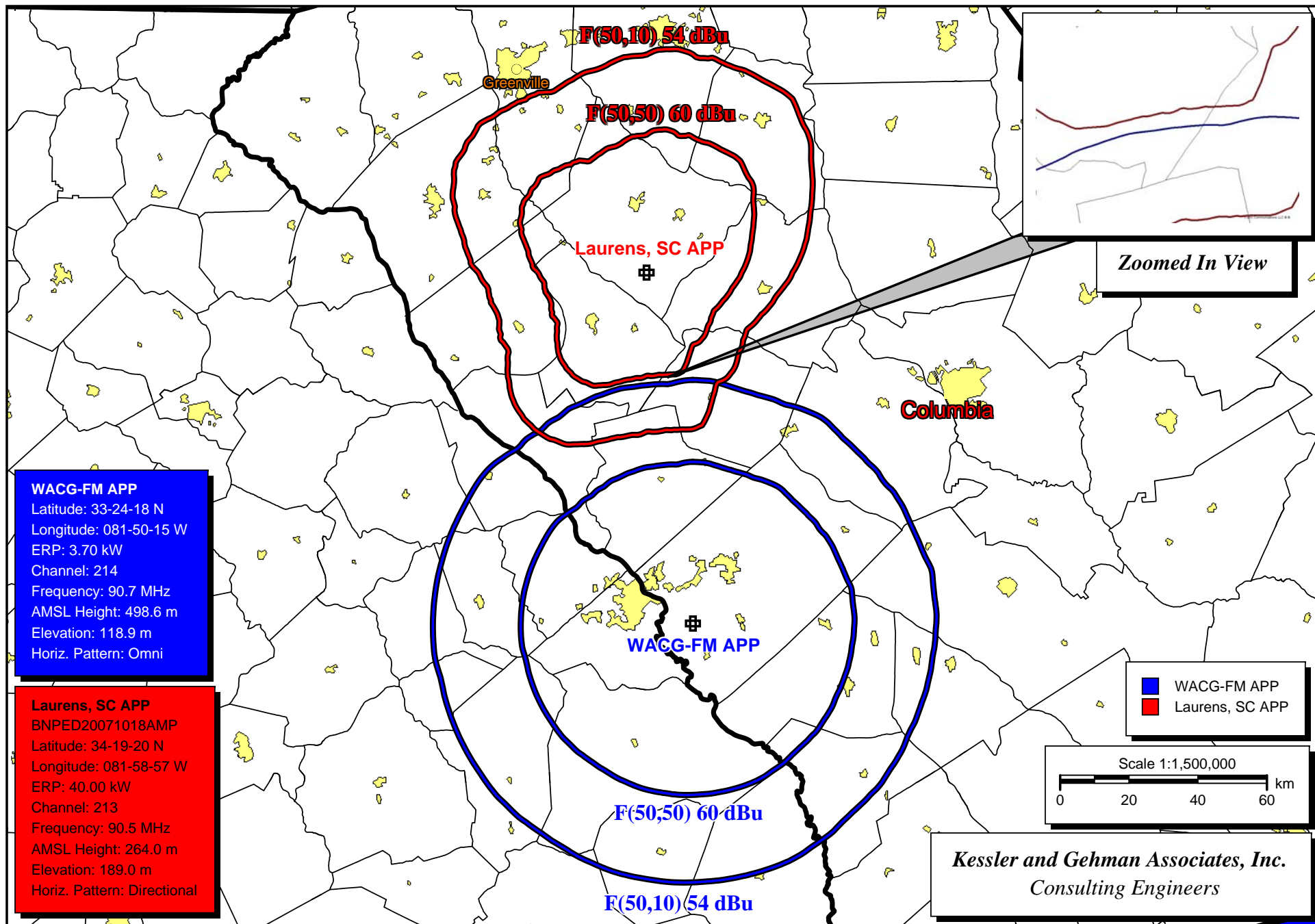
Channel = 214C2  
Max ERP = 3.7 kW  
RCAMSL = 498.6 M  
N. Lat. 33 24 18.0  
W. Lng. 81 50 15.0  
Interfering  
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
112.0	001.3336	0157.4	024.6	005.8	003.7000	0394.4	093.0	46.37	
113.0	001.3336	0156.9	024.6	005.7	003.7000	0394.7	092.6	46.50	
114.0	001.3336	0156.7	024.6	005.6	003.7000	0394.9	092.2	46.64	
115.0	001.3336	0156.2	024.6	005.5	003.7000	0395.1	091.8	46.77	
116.0	001.3336	0155.7	024.5	005.4	003.7000	0395.3	091.4	46.90	
117.0	001.3336	0154.6	024.4	005.2	003.7000	0395.6	091.0	47.03	
118.0	001.3336	0153.8	024.4	005.1	003.7000	0395.9	090.6	47.15	
119.0	001.3336	0152.8	024.3	004.9	003.7000	0396.2	090.3	47.28	
120.0	001.3336	0153.3	024.3	004.8	003.7000	0396.3	089.9	47.41	
121.0	001.3655	0153.8	024.5	004.8	003.7000	0396.4	089.4	47.56	
122.0	001.3978	0154.3	024.7	004.8	003.7000	0396.4	089.0	47.72	
123.0	001.4305	0154.8	024.8	004.8	003.7000	0396.5	088.5	47.87	
124.0	001.4636	0154.9	025.0	004.7	003.7000	0396.6	088.1	48.02	
125.0	001.4971	0154.8	025.1	004.6	003.7000	0396.7	087.6	48.17	
126.0	001.5309	0154.3	025.2	004.5	003.7000	0396.9	087.2	48.31	
127.0	001.5651	0153.4	025.2	004.4	003.7000	0397.1	086.8	48.45	
128.0	001.5997	0151.9	025.2	004.2	003.7000	0397.2	086.4	48.58	
129.0	001.6347	0149.9	025.2	004.1	003.7000	0397.4	086.1	48.70	
130.0	001.6700	0147.5	025.2	003.9	003.7000	0397.4	085.8	48.82	
131.0	001.7576	0146.0	025.3	003.8	003.7000	0397.4	085.3	48.97	
132.0	001.8474	0144.9	025.5	003.7	003.7000	0397.5	084.8	49.13	
133.0	001.9395	0144.4	025.8	003.6	003.7000	0397.5	084.3	49.30	
134.0	002.0338	0144.0	026.0	003.6	003.7000	0397.5	083.8	49.47	
135.0	002.1303	0143.4	026.2	003.5	003.7000	0397.5	083.3	49.64	
136.0	002.2291	0142.8	026.4	003.4	003.7000	0397.5	082.9	49.80	
137.0	002.3301	0141.9	026.6	003.3	003.7000	0397.6	082.4	49.96	
138.0	002.4333	0140.8	026.8	003.1	003.7000	0397.6	081.9	50.11	
139.0	002.5388	0139.3	026.9	002.9	003.7000	0397.6	081.5	50.25	
140.0	002.6465	0137.5	027.0	002.8	003.7000	0397.6	081.1	50.39	
141.0	002.7870	0135.8	027.2	002.6	003.7000	0397.6	080.7	50.54	
142.0	002.9311	0134.1	027.4	002.4	003.7000	0397.6	080.2	50.69	
143.0	003.0789	0132.1	027.5	002.2	003.7000	0397.7	079.9	50.82	
144.0	003.2302	0129.7	027.6	002.0	003.7000	0397.9	079.5	50.95	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
145.0	003.3852	0127.1	027.6	001.7	003.7000	0398.0	079.1	51.07
146.0	003.5439	0124.1	027.6	001.5	003.7000	0398.1	078.8	51.18
147.0	003.7062	0121.7	027.7	001.2	003.7000	0398.3	078.5	51.29
148.0	003.8721	0121.1	027.9	001.0	003.7000	0398.5	078.1	51.45
149.0	004.0416	0122.1	028.3	000.8	003.7000	0398.6	077.5	51.64
150.0	004.2148	0123.6	028.7	000.7	003.7000	0398.7	076.9	51.85
151.0	004.2148	0124.8	028.8	000.4	003.7000	0399.0	076.6	51.98
152.0	004.2148	0126.1	028.9	000.1	003.7000	0399.1	076.2	52.10
153.0	004.2148	0128.0	029.1	359.8	003.7000	0399.1	075.8	52.23
154.0	004.2148	0129.9	029.3	359.5	003.7000	0398.8	075.4	52.36
155.0	004.2148	0132.2	029.5	359.3	003.7000	0398.6	075.0	52.49
156.0	004.2148	0134.4	029.7	359.0	003.7000	0398.4	074.6	52.62
157.0	004.2148	0136.0	029.9	358.6	003.7000	0398.0	074.3	52.72
158.0	004.2148	0137.9	030.0	358.3	003.7000	0397.6	073.9	52.83
159.0	004.2148	0139.9	030.2	358.0	003.7000	0397.1	073.5	52.94
160.0	004.2148	0141.3	030.4	357.6	003.7000	0396.6	073.2	53.03
161.0	004.2148	0142.6	030.5	357.3	003.7000	0396.0	073.0	53.11
162.0	004.2148	0144.6	030.7	356.9	003.7000	0395.2	072.6	53.20
163.0	004.2148	0146.1	030.9	356.5	003.7000	0394.4	072.3	53.27
164.0	004.2148	0147.2	031.0	356.1	003.7000	0393.3	072.1	53.32
165.0	004.2148	0147.4	031.0	355.7	003.7000	0392.2	072.0	53.32
166.0	004.2148	0147.7	031.0	355.3	003.7000	0390.9	071.9	53.33
167.0	004.2148	0147.9	031.1	354.9	003.7000	0389.8	071.8	53.34
168.0	004.2148	0148.6	031.1	354.5	003.7000	0389.0	071.6	53.36
169.0	004.2148	0149.4	031.2	354.0	003.7000	0388.9	071.5	53.40
170.0	004.2148	0149.9	031.3	353.6	003.7000	0389.7	071.4	53.46
171.0	004.2148	0149.5	031.2	353.2	003.7000	0390.9	071.4	53.49
172.0	004.2148	0148.1	031.1	352.7	003.7000	0391.9	071.5	53.47
173.0	004.2148	0147.1	031.0	352.3	003.7000	0392.7	071.7	53.46
174.0	004.2148	0147.3	031.0	351.9	003.7000	0393.3	071.6	53.48
175.0	004.2148	0147.6	031.0	351.4	003.7000	0393.5	071.6	53.49
176.0	004.2148	0147.8	031.0	351.0	003.7000	0394.1	071.7	53.49
177.0	004.2148	0147.5	031.0	350.6	003.7000	0394.6	071.7	53.48
178.0	004.2148	0147.0	031.0	350.2	003.7000	0395.1	071.9	53.46
179.0	004.2148	0146.0	030.9	349.8	003.7000	0395.3	072.0	53.40
180.0	004.2148	0146.2	030.9	349.3	003.7000	0395.7	072.1	53.39
181.0	004.2148	0147.6	031.0	348.9	003.7000	0396.3	072.1	53.42
182.0	004.2148	0149.1	031.2	348.5	003.7000	0397.0	072.1	53.44
183.0	004.2148	0149.6	031.2	348.0	003.7000	0397.5	072.1	53.43
184.0	004.2148	0148.9	031.1	347.6	003.7000	0398.1	072.4	53.37
185.0	004.2148	0148.4	031.1	347.2	003.7000	0398.6	072.6	53.32
186.0	004.2148	0148.9	031.1	346.8	003.7000	0399.0	072.7	53.28
187.0	004.2148	0149.7	031.2	346.4	003.7000	0399.3	072.8	53.26
188.0	004.2148	0150.7	031.3	346.0	003.7000	0399.9	072.9	53.24
189.0	004.2148	0151.3	031.4	345.6	003.7000	0400.7	073.1	53.21
190.0	004.2148	0151.4	031.4	345.2	003.7000	0401.5	073.3	53.16
191.0	004.3189	0150.8	031.5	344.8	003.7000	0402.4	073.4	53.14
192.0	004.4243	0150.2	031.7	344.3	003.7000	0403.5	073.5	53.13
193.0	004.5310	0150.5	031.9	343.9	003.7000	0404.7	073.6	53.14
194.0	004.6389	0150.3	032.0	343.4	003.7000	0405.8	073.8	53.12
195.0	004.7481	0150.2	032.2	343.0	003.7000	0406.3	073.9	53.09

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
196.0	004.8586	0150.3	032.4	342.6	003.7000	0406.5	074.0	53.05
197.0	004.9703	0151.1	032.7	342.1	003.7000	0406.7	074.1	53.02
198.0	005.0833	0152.4	033.0	341.6	003.7000	0407.0	074.2	53.01
199.0	005.1976	0152.8	033.2	341.1	003.7000	0407.1	074.4	52.95
200.0	005.3132	0152.6	033.4	340.7	003.7000	0407.3	074.6	52.88
201.0	005.3132	0152.2	033.4	340.4	003.7000	0407.6	075.0	52.75
202.0	005.3132	0152.7	033.4	340.0	003.7000	0407.7	075.4	52.64
203.0	005.3132	0153.1	033.4	339.7	003.7000	0407.8	075.7	52.52
204.0	005.3132	0154.2	033.6	339.3	003.7000	0407.8	076.1	52.41
205.0	005.3132	0154.5	033.6	339.0	003.7000	0407.6	076.5	52.27
206.0	005.3132	0153.1	033.4	338.8	003.7000	0407.6	077.0	52.10
207.0	005.3132	0151.3	033.2	338.6	003.7000	0407.8	077.5	51.91
208.0	005.3132	0149.8	033.1	338.4	003.7000	0408.0	078.1	51.73
209.0	005.3132	0148.6	032.9	338.2	003.7000	0408.3	078.6	51.56
210.0	005.3132	0148.7	033.0	337.9	003.7000	0408.9	079.1	51.43
211.0	005.3132	0149.0	033.0	337.7	003.7000	0409.4	079.5	51.30
212.0	005.3132	0148.8	033.0	337.5	003.7000	0409.8	080.0	51.15
213.0	005.3132	0148.7	033.0	337.2	003.7000	0410.1	080.5	51.00
214.0	005.3132	0148.6	032.9	337.0	003.7000	0410.2	081.0	50.84
215.0	005.3132	0148.5	032.9	336.8	003.7000	0410.4	081.4	50.68
216.0	005.3132	0147.7	032.8	336.7	003.7000	0410.4	082.0	50.50
217.0	005.3132	0146.0	032.7	336.6	003.7000	0410.4	082.6	50.30
218.0	005.3132	0145.4	032.6	336.4	003.7000	0410.3	083.1	50.12
219.0	005.3132	0144.8	032.5	336.3	003.7000	0410.2	083.6	49.94
220.0	005.3132	0144.2	032.5	336.2	003.7000	0410.1	084.2	49.75
221.0	005.3132	0143.8	032.4	336.0	003.7000	0409.9	084.7	49.57
222.0	005.3132	0144.4	032.5	335.8	003.7000	0409.6	085.2	49.40
223.0	005.3132	0145.1	032.5	335.6	003.7000	0409.3	085.7	49.22
224.0	005.3132	0145.4	032.6	335.5	003.7000	0409.1	086.2	49.04
225.0	005.3132	0145.5	032.6	335.3	003.7000	0409.0	086.7	48.86
226.0	005.3132	0144.9	032.5	335.3	003.7000	0409.0	087.3	48.68
227.0	005.3132	0144.9	032.5	335.1	003.7000	0408.9	087.8	48.50
228.0	005.3132	0144.0	032.4	335.1	003.7000	0408.9	088.4	48.31
229.0	005.3132	0142.8	032.3	335.1	003.7000	0408.9	089.0	48.12
230.0	005.3132	0141.8	032.2	335.0	003.7000	0408.9	089.6	47.93
231.0	005.1976	0140.4	031.8	335.2	003.7000	0408.9	090.2	47.73





Laurens, SC Application Allocation Study

WACG-FM A

1295398 BNPED20071018AMP

Channel = 214C2  
 Max ERP = 3.7 kW  
 RCAMSL = 498.6 M  
 N. Lat. 33 24 18.0  
 W. Lng. 81 50 15.0  
 Protected  
 60 dBu

Channel = 213C2  
 Max ERP = 40 kW  
 RCAMSL = 264 M  
 N. Lat. 34 19 20.0  
 W. Lng. 81 58 57.0  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
293.0	003.7000	0446.1	049.4	201.2	010.6202	0118.2	088.4	42.81	
294.0	003.7000	0445.5	049.3	201.2	010.6147	0118.2	087.6	43.04	
295.0	003.7000	0445.0	049.3	201.2	010.5967	0118.2	086.7	43.28	
296.0	003.7000	0444.7	049.3	201.1	010.5769	0118.2	085.9	43.51	
297.0	003.7000	0444.4	049.3	201.0	010.5553	0118.2	085.0	43.75	
298.0	003.7000	0444.5	049.3	201.0	010.5328	0118.2	084.2	43.98	
299.0	003.7000	0444.5	049.3	200.9	010.5058	0118.2	083.3	44.22	
300.0	003.7000	0444.6	049.3	200.8	010.4756	0118.2	082.5	44.45	
301.0	003.7000	0444.8	049.3	200.7	010.4436	0118.3	081.6	44.68	
302.0	003.7000	0444.9	049.3	200.6	010.4051	0118.3	080.8	44.92	
303.0	003.7000	0444.9	049.3	200.5	010.3623	0118.4	079.9	45.14	
304.0	003.7000	0444.7	049.3	200.3	010.3103	0118.4	079.1	45.37	
305.0	003.7000	0444.1	049.3	200.1	010.2501	0118.5	078.3	45.59	
306.0	003.7000	0443.2	049.2	199.9	010.1803	0118.6	077.5	45.80	
307.0	003.7000	0441.8	049.1	199.7	010.0963	0118.7	076.7	46.00	
308.0	003.7000	0439.5	049.0	199.4	009.9946	0118.8	075.9	46.19	
309.0	003.7000	0436.6	048.9	199.1	009.8791	0118.7	075.1	46.36	
310.0	003.7000	0433.1	048.7	198.7	009.7522	0118.7	074.4	46.52	
311.0	003.7000	0428.9	048.4	198.3	009.6110	0118.6	073.7	46.66	
312.0	003.7000	0425.5	048.3	197.9	009.4748	0118.3	073.0	46.80	
313.0	003.7000	0421.6	048.1	197.5	009.3287	0117.7	072.3	46.90	
314.0	003.7000	0417.1	047.8	197.0	009.1706	0117.1	071.7	46.99	
315.0	003.7000	0413.8	047.6	196.6	009.0240	0116.6	071.0	47.09	
316.0	003.7000	0413.5	047.6	196.2	008.9112	0116.3	070.3	47.24	
317.0	003.7000	0415.5	047.7	196.0	008.8220	0116.2	069.5	47.43	
318.0	003.7000	0416.0	047.8	195.6	008.7081	0116.3	068.8	47.60	
319.0	003.7000	0414.4	047.7	195.2	008.5644	0116.3	068.2	47.73	
320.0	003.7000	0411.7	047.5	194.7	008.4033	0116.1	067.5	47.82	
321.0	003.7000	0408.6	047.4	194.2	008.2343	0116.2	067.0	47.92	
322.0	003.7000	0406.6	047.3	193.7	008.0739	0116.4	066.4	48.03	
323.0	003.7000	0408.8	047.4	193.3	007.9558	0116.4	065.7	48.19	
324.0	003.7000	0411.5	047.5	192.9	007.8387	0116.5	064.9	48.36	
325.0	003.7000	0411.6	047.5	192.4	007.6881	0116.4	064.3	48.47	
326.0	003.7000	0409.5	047.4	191.9	007.5101	0116.2	063.8	48.53	
327.0	003.7000	0407.7	047.3	191.3	007.3323	0116.5	063.3	48.61	
328.0	003.7000	0409.4	047.4	190.8	007.1855	0116.9	062.6	48.76	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
329.0	003.7000	0411.5	047.5	190.3	007.0379	0117.2	062.0	48.90
330.0	003.7000	0413.7	047.6	189.8	006.9339	0117.5	061.4	49.07
331.0	003.7000	0413.2	047.6	189.1	006.8762	0117.3	060.9	49.20
332.0	003.7000	0411.3	047.5	188.5	006.8128	0117.0	060.5	49.29
333.0	003.7000	0409.8	047.4	187.8	006.7500	0116.5	060.0	49.38
334.0	003.7000	0409.0	047.4	187.1	006.6877	0115.8	059.6	49.45
335.0	003.7000	0408.9	047.4	186.4	006.6259	0115.1	059.2	49.53
336.0	003.7000	0409.9	047.4	185.8	006.5653	0114.6	058.7	49.63
337.0	003.7000	0410.3	047.4	185.1	006.5021	0114.3	058.3	49.73
338.0	003.7000	0408.8	047.4	184.3	006.4336	0114.5	058.0	49.81
339.0	003.7000	0407.6	047.3	183.5	006.3653	0115.4	057.7	49.93
340.0	003.7000	0407.7	047.3	182.8	006.2984	0115.6	057.3	50.02
341.0	003.7000	0407.2	047.3	182.0	006.2296	0115.0	057.1	50.04
342.0	003.7000	0406.7	047.3	181.2	006.1603	0113.9	056.8	50.02
343.0	003.7000	0406.3	047.2	180.4	006.0904	0112.7	056.6	50.00
344.0	003.7000	0404.4	047.1	179.6	006.0429	0111.9	056.4	49.97
345.0	003.7000	0401.9	047.0	178.8	006.0221	0112.2	056.3	50.00
346.0	003.7000	0399.8	046.9	177.9	006.0013	0113.1	056.3	50.07
347.0	003.7000	0398.8	046.8	177.1	005.9808	0113.5	056.2	50.12
348.0	003.7000	0397.6	046.8	176.3	005.9603	0113.7	056.1	50.14
349.0	003.7000	0396.2	046.7	175.4	005.9397	0113.8	056.1	50.14
350.0	003.7000	0395.2	046.7	174.6	005.9192	0113.5	056.0	50.12
351.0	003.7000	0394.1	046.6	173.8	005.8987	0113.2	056.0	50.08
352.0	003.7000	0393.2	046.6	172.9	005.8783	0113.1	056.1	50.06
353.0	003.7000	0391.3	046.5	172.1	005.8580	0114.0	056.2	50.06
354.0	003.7000	0388.9	046.3	171.3	005.8379	0115.2	056.3	50.06
355.0	003.7000	0390.1	046.4	170.5	005.8178	0115.8	056.3	50.09
356.0	003.7000	0392.9	046.5	169.6	005.8528	0115.8	056.2	50.14
357.0	003.7000	0395.4	046.7	168.8	005.9583	0115.3	056.2	50.19
358.0	003.7000	0397.1	046.8	168.0	006.0642	0114.5	056.3	50.20
359.0	003.7000	0398.4	046.8	167.1	006.1705	0113.9	056.3	50.21
000.0	003.7000	0399.1	046.9	166.3	006.2762	0113.8	056.5	50.22
001.0	003.7000	0398.4	046.8	165.5	006.3793	0113.4	056.7	50.18
002.0	003.7000	0397.8	046.8	164.7	006.4820	0113.3	057.0	50.14
003.0	003.7000	0397.5	046.8	164.0	006.5845	0113.1	057.3	50.10
004.0	003.7000	0397.4	046.8	163.2	006.6864	0112.3	057.5	50.01
005.0	003.7000	0396.0	046.7	162.5	006.7842	0111.2	057.9	49.87
006.0	003.7000	0393.8	046.6	161.8	006.8780	0110.2	058.3	49.70
007.0	003.7000	0390.9	046.4	161.1	006.9676	0108.8	058.8	49.50
008.0	003.7000	0388.1	046.3	160.5	007.0556	0107.7	059.3	49.31
009.0	003.7000	0385.8	046.2	159.9	007.0914	0107.1	059.8	49.11
010.0	003.7000	0383.6	046.1	159.2	006.9517	0106.2	060.3	48.80
011.0	003.7000	0381.9	046.0	158.6	006.8153	0105.1	060.8	48.47
012.0	003.7000	0380.4	045.9	158.1	006.6830	0103.9	061.3	48.13
013.0	003.7000	0379.3	045.9	157.5	006.5540	0102.7	061.8	47.80
014.0	003.7000	0379.4	045.9	156.9	006.4227	0101.7	062.3	47.49
015.0	003.7000	0378.3	045.8	156.3	006.3035	0100.9	062.8	47.18
016.0	003.7000	0377.8	045.8	155.8	006.1864	0099.9	063.3	46.87
017.0	003.7000	0378.3	045.8	155.2	006.0676	0098.7	063.8	46.55
018.0	003.7000	0378.6	045.8	154.7	005.9544	0097.3	064.4	46.22
019.0	003.7000	0379.6	045.9	154.1	005.8413	0096.1	064.9	45.91

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
020.0	003.7000	0380.4	045.9	153.6	005.7336	0095.0	065.4	45.59
021.0	003.7000	0380.0	045.9	153.2	005.6390	0094.2	066.0	45.29
022.0	003.7000	0378.6	045.8	152.7	005.5545	0093.4	066.7	44.98
023.0	003.7000	0379.3	045.9	152.3	005.4612	0092.5	067.3	44.68
024.0	003.7000	0382.1	046.0	151.8	005.3573	0091.7	067.8	44.39
025.0	003.7000	0385.2	046.1	151.2	005.2557	0091.0	068.3	44.11
026.0	003.7000	0387.6	046.3	150.8	005.1621	0090.5	068.9	43.83
027.0	003.7000	0389.3	046.4	150.3	005.0773	0090.0	069.6	43.55
028.0	003.7000	0391.0	046.4	149.9	004.9965	0089.4	070.2	43.26
029.0	003.7000	0392.8	046.5	149.5	004.9157	0088.8	070.8	42.97
030.0	003.7000	0394.6	046.6	149.1	004.8392	0088.2	071.5	42.68
031.0	003.7000	0396.2	046.7	148.7	004.7677	0087.7	072.2	42.39
032.0	003.7000	0396.9	046.7	148.4	004.7063	0087.3	072.9	42.12
033.0	003.7000	0396.0	046.7	148.2	004.6586	0087.1	073.6	41.85
034.0	003.7000	0394.9	046.6	148.0	004.6164	0087.1	074.4	41.60
035.0	003.7000	0391.8	046.5	147.8	004.5898	0087.1	075.2	41.35
036.0	003.7000	0389.1	046.3	147.7	004.5639	0087.2	076.0	41.11
037.0	003.7000	0387.4	046.3	147.5	004.5341	0087.2	076.8	40.86
038.0	003.7000	0384.7	046.1	147.4	004.5129	0087.3	077.6	40.63
039.0	003.7000	0382.1	046.0	147.3	004.4943	0087.4	078.4	40.39
040.0	003.7000	0381.6	046.0	147.1	004.4634	0087.5	079.2	40.16
041.0	003.7000	0381.5	046.0	147.0	004.4334	0087.7	080.0	39.93
042.0	003.7000	0380.9	045.9	146.9	004.4085	0087.9	080.7	39.71
043.0	003.7000	0380.0	045.9	146.7	004.3874	0088.2	081.5	39.48
044.0	003.7000	0379.8	045.9	146.6	004.3648	0088.4	082.3	39.26
045.0	003.7000	0380.1	045.9	146.5	004.3413	0088.8	083.1	39.04
046.0	003.7000	0380.4	045.9	146.4	004.3198	0089.1	083.9	38.82
047.0	003.7000	0379.5	045.9	146.3	004.3081	0089.3	084.7	38.60
048.0	003.7000	0380.1	045.9	146.2	004.2887	0089.6	085.4	38.38
049.0	003.7000	0382.2	046.0	146.1	004.2630	0090.0	086.2	38.16
050.0	003.7000	0383.3	046.1	146.0	004.2447	0090.3	087.0	37.95
051.0	003.7000	0383.1	046.0	145.9	004.2364	0090.5	087.8	37.73
052.0	003.7000	0380.9	045.9	146.0	004.2420	0090.4	088.6	37.51

03-08-2011      Terrain Data

1295398    BNPED20071018AMP

WACG-FM A

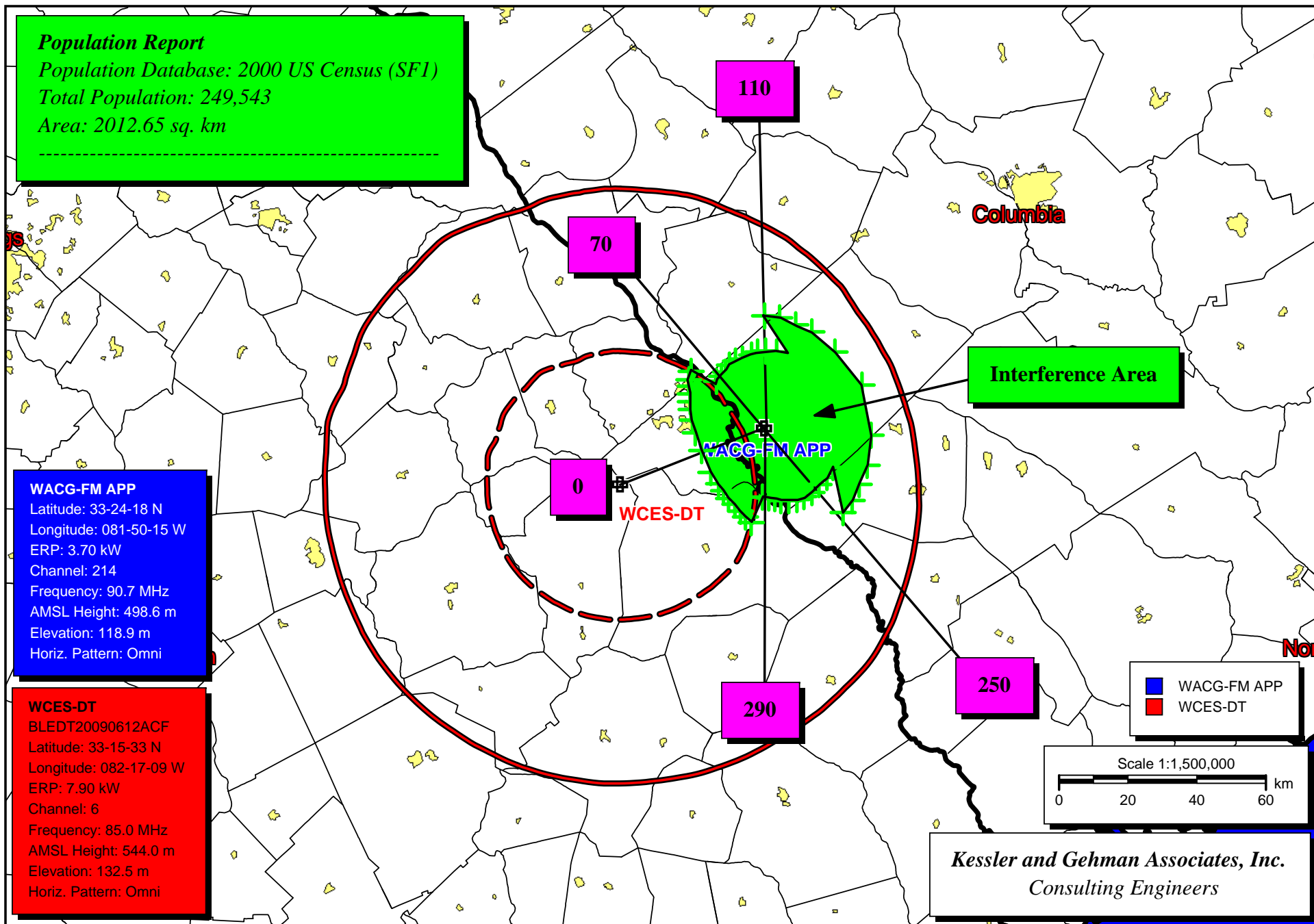
Channel = 213C2  
Max ERP = 40 kW  
RCAMSL = 264 M  
N. Lat. 34 19 20.0  
W. Lng. 81 58 57.0  
Protected  
60 dBu

Channel = 214C2  
Max ERP = 3.7 kW  
RCAMSL = 498.6 M  
N. Lat. 33 24 18.0  
W. Lng. 81 50 15.0  
Interfering  
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
112.0	001.6974	0123.5	023.4	005.0	003.7000	0396.0	093.3	46.31	
113.0	001.6728	0123.0	023.3	004.9	003.7000	0396.2	093.0	46.43	
114.0	001.6484	0122.7	023.2	004.8	003.7000	0396.5	092.6	46.55	
115.0	001.6241	0122.2	023.1	004.6	003.7000	0396.8	092.3	46.66	
116.0	001.6000	0121.7	022.9	004.4	003.7000	0397.0	092.0	46.77	
117.0	001.5761	0120.7	022.8	004.3	003.7000	0397.2	091.6	46.88	
118.0	001.5524	0119.8	022.6	004.1	003.7000	0397.4	091.3	46.98	
119.0	001.5288	0118.9	022.5	003.9	003.7000	0397.4	091.0	47.07	
120.0	001.5054	0119.3	022.4	003.8	003.7000	0397.4	090.7	47.18	
121.0	001.4930	0119.8	022.4	003.6	003.7000	0397.5	090.4	47.29	
122.0	001.4807	0120.3	022.4	003.5	003.7000	0397.5	090.0	47.41	
123.0	001.4684	0120.8	022.4	003.4	003.7000	0397.5	089.7	47.52	
124.0	001.4562	0120.9	022.4	003.3	003.7000	0397.6	089.4	47.62	
125.0	001.4440	0120.9	022.3	003.1	003.7000	0397.6	089.1	47.72	
126.0	001.5492	0120.3	022.7	003.1	003.7000	0397.6	088.5	47.89	
127.0	001.6581	0119.4	022.9	003.2	003.7000	0397.6	088.1	48.05	
128.0	001.7707	0118.0	023.2	003.1	003.7000	0397.6	087.6	48.20	
129.0	001.8870	0116.0	023.3	003.1	003.7000	0397.5	087.2	48.35	
130.0	002.0070	0113.5	023.5	003.0	003.7000	0397.6	086.8	48.48	
131.0	002.1160	0112.0	023.6	002.9	003.7000	0397.6	086.4	48.62	
132.0	002.2278	0110.9	023.8	002.8	003.7000	0397.6	085.9	48.76	
133.0	002.3426	0110.4	024.0	002.7	003.7000	0397.6	085.5	48.92	
134.0	002.4602	0110.0	024.2	002.7	003.7000	0397.6	085.0	49.07	
135.0	002.5806	0109.5	024.4	002.6	003.7000	0397.6	084.6	49.23	
136.0	002.7040	0108.8	024.6	002.5	003.7000	0397.6	084.1	49.38	
137.0	002.8302	0108.0	024.8	002.4	003.7000	0397.7	083.7	49.52	
138.0	002.9594	0106.8	024.9	002.2	003.7000	0397.7	083.3	49.66	
139.0	003.0914	0105.4	025.0	002.0	003.7000	0397.8	082.9	49.79	
140.0	003.2262	0103.6	025.0	001.8	003.7000	0398.0	082.6	49.90	
141.0	003.3872	0102.0	025.1	001.6	003.7000	0398.1	082.2	50.03	
142.0	003.5522	0100.3	025.2	001.4	003.7000	0398.1	081.9	50.14	
143.0	003.7210	0098.2	025.2	001.2	003.7000	0398.3	081.6	50.24	
144.0	003.8938	0095.8	025.2	001.0	003.7000	0398.5	081.4	50.33	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
145.0	004.0704	0093.2	025.1	000.7	003.7000	0398.7	081.2	50.40
146.0	004.2510	0090.2	024.9	000.4	003.7000	0399.0	081.1	50.46
147.0	004.4356	0087.7	024.9	000.1	003.7000	0399.1	080.9	50.52
148.0	004.6240	0087.1	025.0	359.9	003.7000	0399.1	080.5	50.64
149.0	004.8164	0088.0	025.4	359.7	003.7000	0399.0	080.0	50.81
150.0	005.0126	0089.5	025.8	359.6	003.7000	0398.9	079.4	51.01
151.0	005.2071	0090.7	026.2	359.5	003.7000	0398.7	078.8	51.20
152.0	005.4052	0092.1	026.6	359.3	003.7000	0398.6	078.3	51.39
153.0	005.6070	0093.9	027.1	359.2	003.7000	0398.5	077.6	51.60
154.0	005.8125	0095.8	027.5	359.0	003.7000	0398.4	077.0	51.81
155.0	006.0218	0098.1	028.1	358.8	003.7000	0398.3	076.3	52.04
156.0	006.2347	0100.3	028.6	358.6	003.7000	0398.0	075.6	52.26
157.0	006.4513	0101.9	029.0	358.4	003.7000	0397.7	075.1	52.45
158.0	006.6716	0103.8	029.5	358.2	003.7000	0397.3	074.4	52.65
159.0	006.8956	0105.8	030.0	357.9	003.7000	0397.0	073.8	52.86
160.0	007.1234	0107.3	030.4	357.6	003.7000	0396.6	073.2	53.04
161.0	006.9856	0108.5	030.4	357.3	003.7000	0396.0	073.0	53.08
162.0	006.8492	0110.5	030.6	356.9	003.7000	0395.1	072.8	53.14
163.0	006.7142	0112.1	030.6	356.5	003.7000	0394.3	072.6	53.18
164.0	006.5805	0113.1	030.6	356.1	003.7000	0393.1	072.5	53.18
165.0	006.4481	0113.3	030.5	355.6	003.7000	0391.9	072.5	53.14
166.0	006.3171	0113.7	030.4	355.2	003.7000	0390.7	072.5	53.10
167.0	006.1874	0113.9	030.3	354.8	003.7000	0389.6	072.6	53.06
168.0	006.0591	0114.5	030.2	354.4	003.7000	0389.0	072.6	53.04
169.0	005.9321	0115.4	030.1	354.0	003.7000	0388.9	072.6	53.04
170.0	005.8064	0115.9	030.0	353.6	003.7000	0389.9	072.6	53.05
171.0	005.8308	0115.5	030.0	353.1	003.7000	0391.0	072.6	53.08
172.0	005.8553	0114.2	029.9	352.7	003.7000	0391.9	072.7	53.07
173.0	005.8798	0113.1	029.8	352.3	003.7000	0392.7	072.8	53.06
174.0	005.9044	0113.3	029.9	351.9	003.7000	0393.2	072.8	53.09
175.0	005.9290	0113.6	029.9	351.5	003.7000	0393.4	072.7	53.11
176.0	005.9537	0113.8	030.0	351.1	003.7000	0394.0	072.7	53.13
177.0	005.9784	0113.5	030.0	350.7	003.7000	0394.5	072.8	53.13
178.0	006.0032	0113.0	029.9	350.3	003.7000	0395.0	072.9	53.11
179.0	006.0280	0112.0	029.8	349.9	003.7000	0395.3	073.0	53.06
180.0	006.0528	0112.2	029.9	349.5	003.7000	0395.5	073.1	53.05
181.0	006.1403	0113.6	030.2	349.1	003.7000	0396.1	072.9	53.12
182.0	006.2284	0115.0	030.4	348.6	003.7000	0396.7	072.8	53.19
183.0	006.3171	0115.6	030.6	348.2	003.7000	0397.3	072.7	53.22
184.0	006.4064	0114.9	030.6	347.8	003.7000	0397.9	072.9	53.19
185.0	006.4964	0114.3	030.7	347.4	003.7000	0398.5	073.0	53.17
186.0	006.5869	0114.8	030.8	346.9	003.7000	0398.9	073.0	53.17
187.0	006.6782	0115.7	031.0	346.5	003.7000	0399.2	073.0	53.18
188.0	006.7700	0116.7	031.2	346.0	003.7000	0399.8	073.0	53.21
189.0	006.8625	0117.3	031.4	345.6	003.7000	0400.6	073.1	53.21
190.0	006.9556	0117.4	031.5	345.1	003.7000	0401.5	073.2	53.20
191.0	007.2522	0116.8	031.8	344.7	003.7000	0402.6	073.2	53.22
192.0	007.5551	0116.2	032.0	344.2	003.7000	0403.8	073.2	53.24
193.0	007.8641	0116.5	032.4	343.7	003.7000	0405.2	073.2	53.30
194.0	008.1794	0116.3	032.6	343.2	003.7000	0406.1	073.2	53.31
195.0	008.5008	0116.2	032.9	342.7	003.7000	0406.5	073.3	53.30

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
196.0	008.8285	0116.2	033.2	342.2	003.7000	0406.6	073.3	53.29
197.0	009.1623	0117.0	033.6	341.7	003.7000	0406.9	073.4	53.29
198.0	009.5024	0118.4	034.1	341.1	003.7000	0407.1	073.3	53.30
199.0	009.8486	0118.7	034.4	340.6	003.7000	0407.4	073.4	53.28
200.0	010.2010	0118.6	034.7	340.1	003.7000	0407.7	073.6	53.22
201.0	010.5432	0118.2	034.9	339.6	003.7000	0407.8	073.9	53.15
202.0	010.8910	0118.6	035.2	339.1	003.7000	0407.7	074.0	53.08
203.0	011.2445	0119.0	035.5	338.6	003.7000	0407.7	074.3	53.01
204.0	011.6036	0120.2	035.9	338.0	003.7000	0408.7	074.4	52.98
205.0	011.9684	0120.5	036.2	337.6	003.7000	0409.6	074.7	52.92
206.0	012.3388	0119.1	036.2	337.2	003.7000	0410.1	075.1	52.79
207.0	012.7148	0117.3	036.3	336.9	003.7000	0410.3	075.6	52.64
208.0	013.0965	0115.9	036.3	336.6	003.7000	0410.4	076.1	52.49
209.0	013.4839	0114.6	036.4	336.2	003.7000	0410.2	076.5	52.33
210.0	013.8768	0114.7	036.6	335.8	003.7000	0409.6	076.9	52.18
211.0	013.9098	0115.0	036.7	335.5	003.7000	0409.1	077.4	52.01
212.0	013.9429	0114.8	036.7	335.2	003.7000	0408.9	077.9	51.82
213.0	013.9760	0114.7	036.7	335.0	003.7000	0408.9	078.5	51.64
214.0	014.0091	0114.7	036.7	334.8	003.7000	0408.9	079.0	51.46
215.0	014.0422	0114.5	036.7	334.5	003.7000	0409.0	079.5	51.28
216.0	014.0755	0113.7	036.6	334.4	003.7000	0409.0	080.2	51.07
217.0	014.1087	0112.0	036.4	334.3	003.7000	0409.0	080.8	50.85
218.0	014.1420	0111.4	036.3	334.1	003.7000	0409.0	081.4	50.65
219.0	014.1753	0110.8	036.2	334.0	003.7000	0409.1	082.0	50.45
220.0	014.2086	0110.2	036.2	333.8	003.7000	0409.1	082.6	50.25
221.0	013.8439	0109.8	035.9	333.8	003.7000	0409.1	083.3	50.02
222.0	013.4839	0110.4	035.8	333.8	003.7000	0409.2	083.9	49.81
223.0	013.1286	0111.1	035.7	333.7	003.7000	0409.3	084.5	49.61
224.0	012.7780	0111.4	035.5	333.7	003.7000	0409.3	085.2	49.39
225.0	012.4323	0111.5	035.3	333.6	003.7000	0409.4	085.8	49.17
226.0	012.0912	0110.9	035.0	333.7	003.7000	0409.3	086.5	48.95
227.0	011.7549	0110.9	034.8	333.7	003.7000	0409.3	087.2	48.73
228.0	011.4233	0110.0	034.4	333.9	003.7000	0409.1	087.8	48.50
229.0	011.0965	0108.8	034.0	334.0	003.7000	0409.0	088.5	48.27
230.0	010.7744	0107.8	033.7	334.1	003.7000	0409.0	089.2	48.05
231.0	010.3877	0106.4	033.2	334.4	003.7000	0409.0	089.9	47.83





## TV Channel 6 Population Report

### Polygon Population Report

Population Database: 2000 US Census (SF1)

Total Population: 249,543

Housing Units: 110,297

Polygon Area: 2012.65 sq. km

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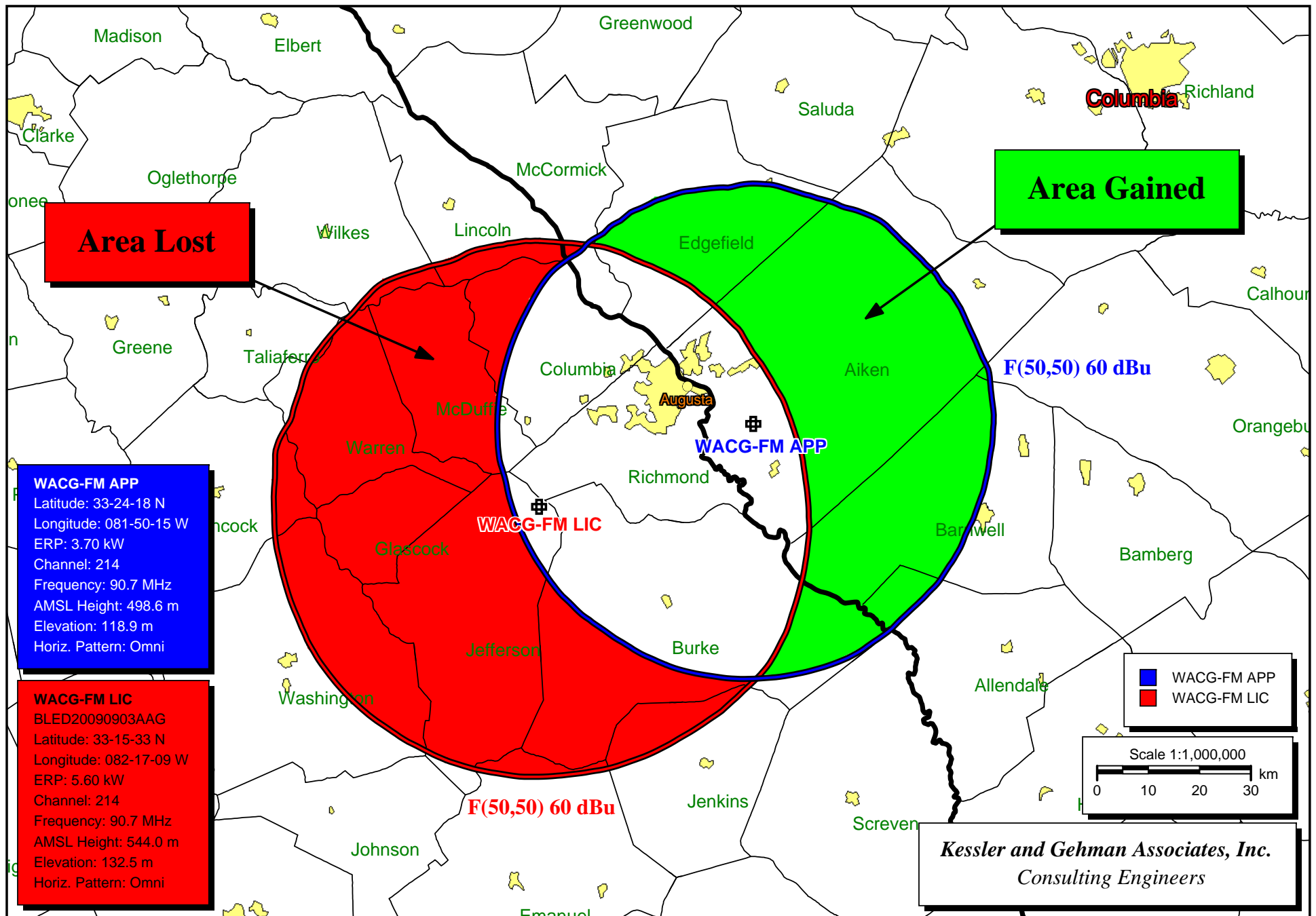
#### Total Breakdown

White:	147,482	[	59.1%	]
Black:	90,070	[	36.1%	]
Hispanic:	5,375	[	2.2%	]
Native American:	671	[	0.3%	]
Asian:	2,708	[	1.1%	]
Pacific Islander:	113	[	0.0%	]
Mixed Race:	2,832	[	1.1%	]
Other:	292	[	0.1%	]

Total: 249,543

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	Housing Units	Population
Georgia		
Burke County		
Total	8,842	22,243
Polygon	121	312
Columbia County		
Total	33,321	89,288
Polygon	1,679	4,720
Richmond County		
Total	82,312	199,775
Polygon	55,649	123,351
South Carolina		
Aiken County		
Total	61,987	142,552
Polygon	52,840	121,138
Barnwell County		
Total	10,191	23,478
Polygon	6	15
Edgefield County		
Total	9,223	24,595
Polygon	2	7



WACG-FM License vs. WACG-FM Proposed

## Distance to Contour Calculations for the Proposed WACG-FM Facility

Call Letters: WACG-FM  
Latitude: 33-24-18 N  
Longitude: 081-50-15 W  
ERP: 3.70 kW  
Channel: 214  
Frequency: 90.7 MHz  
AMSL Height: 498.6 m  
Elevation: 118.9 m  
HAAT: 420.8 m  
Horiz. Antenna Pattern: Omni

Type of contour: FCC  
Location Variability: 50.0 %  
Time Variability: 50.0 %  
# of Radials Calculated: 360  
Field Strength: 60.00 dBuV/m

Primary Terrain: V-Soft 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	46.9	399.2
1.0	46.8	398.6
2.0	46.8	398.2
3.0	46.8	397.9
4.0	46.8	397.8
5.0	46.7	396.5
6.0	46.6	394.4
7.0	46.5	391.4
8.0	46.3	388.5
9.0	46.2	386.2
10.0	46.1	383.9
11.0	46.0	382.0
12.0	45.9	380.3
13.0	45.8	379.1
14.0	45.8	379.2
15.0	45.8	377.9
16.0	45.8	377.4
17.0	45.8	378.0
18.0	45.8	378.5
19.0	45.9	379.4
20.0	45.9	380.0
21.0	45.9	379.4
22.0	45.8	377.9
23.0	45.8	378.4
24.0	45.9	381.2
25.0	46.1	384.2
26.0	46.2	386.8
27.0	46.3	388.6
28.0	46.4	390.4
29.0	46.5	392.1
30.0	46.6	393.9
31.0	46.7	395.5
32.0	46.7	396.3
33.0	46.7	395.4
34.0	46.6	394.1
35.0	46.4	391.0

*Distance to Contour Calculations for the Proposed WACG-FM Facility*

36.0	46.3	388.2
37.0	46.2	386.4
38.0	46.1	383.8
39.0	45.9	381.1
40.0	45.9	380.7
41.0	45.9	380.5
42.0	45.9	380.0
43.0	45.8	379.2
44.0	45.8	379.0
45.0	45.9	379.3
46.0	45.9	379.6
47.0	45.8	378.7
48.0	45.9	379.4
49.0	46.0	381.4
50.0	46.0	382.7
51.0	46.0	382.5
52.0	45.9	380.2
53.0	45.8	378.6
54.0	45.8	378.9
55.0	45.9	381.1
56.0	46.1	385.1
57.0	46.2	386.9
58.0	46.2	386.7
59.0	46.2	386.9
60.0	46.3	387.2
61.0	46.3	387.6
62.0	46.2	386.6
63.0	46.2	385.7
64.0	46.1	385.0
65.0	46.1	384.4
66.0	46.1	384.4
67.0	46.1	384.7
68.0	46.2	385.4
69.0	46.2	386.3
70.0	46.3	387.2
71.0	46.3	387.9
72.0	46.3	389.0
73.0	46.4	390.5
74.0	46.5	392.4
75.0	46.7	395.6
76.0	46.9	399.1
77.0	47.0	402.2
78.0	47.1	402.7
79.0	47.0	401.5
80.0	46.9	399.8
81.0	46.8	398.6
82.0	46.8	397.7
83.0	46.8	397.4
84.0	46.8	397.3
85.0	46.8	398.0
86.0	46.8	398.7
87.0	46.9	399.7
88.0	46.9	400.4
89.0	46.9	399.5
90.0	46.9	399.0
91.0	46.8	397.7
92.0	46.8	397.0

*Distance to Contour Calculations for the Proposed WACG-FM Facility*

93.0	46.8	397.1
94.0	46.7	396.9
95.0	46.7	396.6
96.0	46.7	395.8
97.0	46.6	394.4
98.0	46.6	393.8
99.0	46.6	393.8
100.0	46.6	394.6
101.0	46.7	395.1
102.0	46.7	395.2
103.0	46.6	394.8
104.0	46.6	394.9
105.0	46.7	395.5
106.0	46.7	396.2
107.0	46.7	395.8
108.0	46.6	394.9
109.0	46.6	394.4
110.0	46.6	394.6
111.0	46.6	394.8
112.0	46.7	395.3
113.0	46.7	396.2
114.0	46.7	396.5
115.0	46.7	395.6
116.0	46.6	395.0
117.0	46.7	395.2
118.0	46.7	396.1
119.0	46.8	398.3
120.0	47.0	400.9
121.0	47.0	402.6
122.0	47.1	403.3
123.0	47.1	403.6
124.0	47.2	404.7
125.0	47.2	405.1
126.0	47.2	405.1
127.0	47.2	405.9
128.0	47.3	407.3
129.0	47.4	408.8
130.0	47.5	410.8
131.0	47.5	411.8
132.0	47.5	411.9
133.0	47.5	410.6
134.0	47.4	410.1
135.0	47.5	411.1
136.0	47.5	411.4
137.0	47.5	411.2
138.0	47.5	411.4
139.0	47.5	411.6
140.0	47.5	412.0
141.0	47.6	413.2
142.0	47.7	414.5
143.0	47.8	416.0
144.0	47.9	418.4
145.0	48.0	421.2
146.0	48.2	424.4
147.0	48.3	426.2
148.0	48.4	427.4
149.0	48.4	428.4

*Distance to Contour Calculations for the Proposed WACG-FM Facility*

150.0	48.5	429.3
151.0	48.5	430.5
152.0	48.6	432.1
153.0	48.7	434.3
154.0	48.9	437.1
155.0	49.0	439.1
156.0	49.1	440.3
157.0	49.1	441.7
158.0	49.2	442.9
159.0	49.2	443.7
160.0	49.3	444.1
161.0	49.3	444.6
162.0	49.3	445.1
163.0	49.3	445.5
164.0	49.4	445.9
165.0	49.4	446.1
166.0	49.4	446.5
167.0	49.4	446.9
168.0	49.4	447.3
169.0	49.5	447.5
170.0	49.5	447.9
171.0	49.5	448.3
172.0	49.5	448.7
173.0	49.5	449.2
174.0	49.6	449.8
175.0	49.6	450.0
176.0	49.6	450.1
177.0	49.6	450.3
178.0	49.6	450.8
179.0	49.7	451.3
180.0	49.7	452.0
181.0	49.7	452.7
182.0	49.8	453.3
183.0	49.8	453.9
184.0	49.8	454.3
185.0	49.8	454.6
186.0	49.9	454.8
187.0	49.9	454.9
188.0	49.8	454.6
189.0	49.8	454.6
190.0	49.9	454.9
191.0	49.9	455.3
192.0	49.9	455.8
193.0	49.9	456.3
194.0	50.0	456.6
195.0	50.0	457.0
196.0	50.0	457.5
197.0	50.0	457.7
198.0	50.0	457.8
199.0	50.0	457.5
200.0	50.0	456.9
201.0	49.9	456.2
202.0	49.9	455.8
203.0	49.9	455.1
204.0	49.9	455.1
205.0	49.9	455.5
206.0	49.9	455.3

*Distance to Contour Calculations for the Proposed WACG-FM Facility*

207.0	49.8	454.4
208.0	49.8	453.8
209.0	49.7	452.3
210.0	49.7	451.7
211.0	49.7	451.3
212.0	49.7	451.7
213.0	49.7	452.1
214.0	49.7	451.6
215.0	49.7	451.3
216.0	49.7	451.1
217.0	49.7	451.8
218.0	49.7	452.7
219.0	49.8	453.6
220.0	49.8	453.9
221.0	49.9	455.7
222.0	50.0	457.1
223.0	50.0	457.3
224.0	50.0	457.1
225.0	50.0	456.8
226.0	50.0	456.7
227.0	50.0	457.8
228.0	50.1	459.1
229.0	50.1	459.4
230.0	50.1	458.9
231.0	50.1	458.4
232.0	50.0	458.0
233.0	50.0	457.3
234.0	49.9	456.5
235.0	49.9	456.1
236.0	49.9	455.8
237.0	49.9	455.8
238.0	49.9	456.0
239.0	49.9	455.6
240.0	49.9	455.5
241.0	49.9	455.3
242.0	49.9	455.1
243.0	49.9	454.8
244.0	49.8	454.5
245.0	49.8	454.3
246.0	49.8	454.1
247.0	49.8	453.8
248.0	49.8	453.5
249.0	49.8	453.0
250.0	49.7	452.6
251.0	49.7	452.4
252.0	49.7	452.1
253.0	49.7	451.7
254.0	49.7	451.2
255.0	49.6	450.2
256.0	49.5	449.2
257.0	49.5	448.9
258.0	49.5	449.1
259.0	49.6	450.7
260.0	49.7	452.6
261.0	49.9	454.7
262.0	49.9	456.2
263.0	50.0	456.8

*Distance to Contour Calculations for the Proposed WACG-FM Facility*

264.0	50.0	456.7
265.0	49.9	456.5
266.0	49.9	456.3
267.0	49.9	456.1
268.0	49.9	455.8
269.0	49.9	455.6
270.0	49.9	455.4
271.0	49.9	455.2
272.0	49.9	454.9
273.0	49.8	454.7
274.0	49.8	454.4
275.0	49.8	454.2
276.0	49.8	454.0
277.0	49.8	453.8
278.0	49.8	453.6
279.0	49.8	453.3
280.0	49.8	452.9
281.0	49.7	452.5
282.0	49.7	452.0
283.0	49.7	451.4
284.0	49.6	450.9
285.0	49.6	450.6
286.0	49.6	450.3
287.0	49.6	450.0
288.0	49.6	449.6
289.0	49.5	449.1
290.0	49.5	448.7
291.0	49.5	448.1
292.0	49.5	447.6
293.0	49.4	447.0
294.0	49.4	446.4
295.0	49.4	445.9
296.0	49.3	445.5
297.0	49.3	445.3
298.0	49.3	445.3
299.0	49.3	445.3
300.0	49.3	445.4
301.0	49.4	445.7
302.0	49.4	445.7
303.0	49.4	445.8
304.0	49.3	445.5
305.0	49.3	444.9
306.0	49.3	444.0
307.0	49.2	442.6
308.0	49.1	440.2
309.0	48.9	437.1
310.0	48.7	433.5
311.0	48.5	429.1
312.0	48.3	425.5
313.0	48.0	421.4
314.0	47.8	416.7
315.0	47.6	413.4
316.0	47.6	413.1
317.0	47.7	415.3
318.0	47.7	415.9
319.0	47.7	414.2
320.0	47.5	411.6



*Distance to Contour Calculations for the Proposed WACG-FM Facility*

321.0	47.4	408.4
322.0	47.2	406.5
323.0	47.4	408.6
324.0	47.5	411.2
325.0	47.5	411.4
326.0	47.4	409.2
327.0	47.3	407.5
328.0	47.4	409.5
329.0	47.5	411.9
330.0	47.7	414.1
331.0	47.6	413.2
332.0	47.5	411.2
333.0	47.4	409.8
334.0	47.4	409.4
335.0	47.4	409.4
336.0	47.5	410.4
337.0	47.5	410.4
338.0	47.4	408.9
339.0	47.3	408.0
340.0	47.3	408.2
341.0	47.3	407.8
342.0	47.3	407.4
343.0	47.3	407.0
344.0	47.2	405.2
345.0	47.0	402.6
346.0	46.9	400.4
347.0	46.9	399.4
348.0	46.8	398.1
349.0	46.7	396.4
350.0	46.7	395.4
351.0	46.6	394.1
352.0	46.5	392.9
353.0	46.5	391.1
354.0	46.3	388.6
355.0	46.4	389.8
356.0	46.5	392.8
357.0	46.7	395.3
358.0	46.8	397.3
359.0	46.8	398.6

Average HAAT for radials shown: 421.4 m

**United States of America**  
**FEDERAL COMMUNICATIONS COMMISSION**  
**FM BROADCAST STATION CONSTRUCTION PERMIT**

Authorizing Official:

Official Mailing Address:

GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSIO  
260 14TH ST NW  
ATLANTA GA 30318

Penelope A. Dade  
Supervisory Analyst  
Audio Division  
Media Bureau

Facility ID: 23922

Grant Date: December 20, 2005

Call Sign: WACG-FM

This permit expires 3:00 a.m.  
local time, December 20, 2008.

Permit File Number: BPED-20051014AAE

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

EXHIBIT 20

Name of Permittee: GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION

Station Location: GA-AUGUSTA

Frequency (MHz): 90.7

Channel: 214

Class: C2

Hours of Operation:Unlimited

Transmitter: Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Transmitter output power: As required to achieve authorized ERP.

Antenna type:Non-Directional

Antenna Coordinates: North Latitude:33 deg24 min18 sec

West Longitude:81 deg50 min15 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	3.7	0
Height of radiation center above ground (Meters):	380	0
Height of radiation center above mean sea level (Meters):	499	0
Height of radiation center above average terrain (Meters):	421	0

Antenna structure registration number: 1024410

Overall height of antenna structure above ground (including obstruction lighting if any) see the registration for this antenna structure.

Special operating conditions or restrictions:

- 1
- The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

\*\*\* END OF AUTHORIZATION \*\*\*