

WJSP-FM CHANNEL 201 (88.1 MHz)
CLASS C MINOR CHANGE IN
LICENSED FACILITY APPLICATION
WARM SPRINGS, GEORGIA
(GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION)

KESSLER AND GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

20070627

Prepared by William T. Godfrey, Jr.

KG&A

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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 FOR THE GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION (GPTC) LICENSED WJSP-FM CHANNEL 201 CLASS C, WARM SPRINGS, GEORGIA NON-COMMERCIAL EDUCATIONAL FM BROADCAST FACILITY (BLED-19850227KG).

The firm Kessler and Gehman Associates, Inc., has been retained by the 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 WJSP-FM Channel 201 Class C FM broadcast facility (BLED-19850222KG) requesting authorization to make changes to the following: 1) antenna; 2) antenna height radiation center; and 3) effective radiated power (ERP).

Discussion

GPTC is licensed to operate WJSP-FM Channel 201C with an ERP of 100 kW (horizontal and vertical polarization) using a Jampro model JSCP-9 nondirectional, circularly polarized, side-mounted antenna with an antenna height radiation center of 173 meters above ground level (AGL).

GPTC is in the process of converting all nine of its full-service television facilities from analog to digital as part of the DTV transition and the contract includes tower upgrades and new antennas for many of its NCE-FM facilities. The professional engineering staff of the tower company contracted for the GPTC digital conversion recommended a 110.5-meter antenna height radiation center increase using the new Dielectric model DCRC10CHVH antenna that is proposed for the WJSP-FM facility. Accordingly, the changes requested in this minor change in license application are: 1) replace the licensed Jampro model JSCP-9 nondirectional antenna with a new Dielectric model DCRC10CHVH nondirectional antenna; 2) increase the antenna

height radiation center from the licensed height of 173 meters AGL to 283.5 meters AGL; and 3) decrease the ERP from the 100 kW (circularly polarized) to 42 kW (circularly polarized). The ERP decrease is to compensate for the 110.5-meter antenna height increase so that the proposed facility's 1 mV/m service contour will be completely encompassed by the licensed facility's 1 mV/m service contour in all azimuthal directions (Exhibit 8).

Attached Figures

The following list is an index of enclosed figures produced by calculations and engineering studies of the proposed WJSP-FM Channel 201 Class C 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) Licensed WJSP-FM 1 mV/m Contour (Black) vs. Proposed WJSP-FM 1 mV/m Contour (Red) – Exhibit 8.
- 9) Proposed 1mV/m (60 dBuV/m) Community of License Contour (Exhibit 9).
- 10) FM-to-FM Interference Study (Exhibit 10).
- 11) FM Allocation Study – Browns Crossing, GA Application (Exhibit 11)
- 12) FM Allocation Study - WELL-FM CP (Exhibit 12)
- 13) FM Allocation Study – Patterson, GA Application (Exhibit 13)
- 14) FM Allocation Study - WTMQ-FM (Exhibit 14)
- 15) TV Channel 6 Study (Exhibit 15)

Transmitter Location

The proposed antenna would be side-mounted at a radiation center height of 283.5 meters on the WJSP-FM support structure (Exhibit 3). The WJSP-FM tower is registered with the FCC and has a registration number of 1018795. The antenna structure's address is 609 White House Parkway and is located 2.9 miles southwest of Warm Springs, GA.

Allocation Studies

The F(50,50) 60.0 dBuV/m protected service contours for the licensed (black) and proposed (red) WJSP-FM facilities are depicted in Exhibit 8. It can be seen that the licensed facility would completely encompass the proposed facility in all azimuthal directions.

The F(50,50) 60.0 dBuV/m protected service contour for the proposed WJSP-FM facility is depicted in Exhibit 9. It can be seen that the proposed facility's F(50,50) 60.0 dBuV/m service contour would completely encompass Warm Springs, GA in all azimuthal directions. Warm Springs, GA is the community of license for the WJSP-FM station.

Exhibit 10 is an FM-to-FM interference study which verifies that the proposed WJSP-FM (42 kW ERP) facility's F(50,10) interfering contour would not overlap any applicable station's F(50,50) 60.0 dBuV/m protected contours and that the proposed WJSP-FM (42 kW ERP) 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.

Exhibit 11 is a pictorial depiction of the contour relationship between the proposed WJSP-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 54.0 dBuV/m interfering (red) contours and the 1st-adjacent Brown Crossing, GA application's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 54.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 12 is a pictorial depiction of the contour relationship between the proposed WJSP-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 100.0 dBuV/m interfering (red) contours and the 3rd adjacent-channel WELL-FM (CP) facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 100.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 13 is a pictorial depiction of the contour relationship between the proposed WJSP-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours and the Patterson, GA co-channel application's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 14 is a pictorial depiction of the contour relationship between the proposed WJSP-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 100.0 dBuV/m interfering (red) contours and the 2nd adjacent-channel WTMQ-FM (CP) facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 100.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 15 is a TV Channel 6 study depicting the WBRC-TV Channel 6 F(50,50) Grade B contour, the WCTV-TV Channel 6 F(50,50) Grade B contour, the associated F(50,10) 48.0 dBu interfering contour for the licensed WJSP-FM facility (black) and the associated F(50,10) 48.0 dBu interfering contour for the proposed WJSP-FM facility (red). It can be seen that the interfering contour for the proposed WJSP-FM facility (red) would be completely encompassed by the interfering contour for the licensed WJSP-FM facility (black) in all azimuthal directions. Therefore, the proposed WJSP-FM facility would actually create a smaller interference area within the licensed WBRC-TV and WCTV-TV Channel 6 Grade B contours and as a result, would cause less interference. Therefore, this application complies with the Television Channel 6 protection rules in §73.525 of the FCC Rules.

Intermediate Frequency Interference (53rd & 54th Adjacent Channels)

The proposed WJSP-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 WJSP-FM transmitter site is $(201 + 53 = \underline{254} \text{ \& } 201 + 54 = \underline{255})$ the licensed WISK-FM Channel 254 Class C3 facility located approximately 95.3 km from the proposed

WJSP-FM transmitter site in Americus, GA at North Latitude 32° 04' 51" and West Longitude 84° 15' 20" where a separation of 31 km is required; therefore, the distance is easily met with a margin of 64.3 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 WJSP-FM Channel 201 blanketing contour extends 2.41 km from its transmitter and it is understood that 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 proposed WJSP-FM blanketing contour.

Environmental Impact

The proposed WJSP-FM Channel 201 Class C 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 42 kW (C-pol). It was determined that the maximum lobe of radiation from the base of the tower would occur at approximately 230.4 feet from the base of the tower (952.3-foot radial distance from the antenna center). At approximately 230.4 feet from the base of the tower, the depression angle of the main lobe would be approximately 76.0° below the horizontal. At that point, the relative field is 0.223 and the power density six feet above the ground would be approximately 0.0017 mW/cm². This would only be 0.17% of the maximum permissible exposure (MPE) limits for Occupational/Controlled Exposure and only 0.83% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI).

Since operation of the proposed WJSP-FM Channel 201 facility would 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 WJSP-FM facility would not be 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 applicant will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from electromagnetic radiation emanating from the antenna.

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.


WILLIAM T. GODFREY, JR.
Telecommunications Technical Consultant

27 June, 2007

ENGINEERING SPECIFICATIONS

Location: **609 White House Parkway**
2.9 miles SW of Warm Springs, GA

Mailing Address **260 14th Street N.W. Atlanta, Georgia 30318**

FM Channel	Number:	201
	Frequency:	88.1 MHz
	Class:	C

Height of Site Above Mean Sea Level (AMSL):	396.0 M
Overall Height of Structure Above Ground: (including all appurtenances)	336.0 M
Overall Height of Structure Above Mean Sea Level: (including all appurtenances)	732.0 M
Height of Site Above Average Terrain:	133.5 M
Antenna Height Radiation Center (R/C) Above Ground:	283.5 M
Antenna Height R/C Above Mean Sea Level:	679.5 M
Antenna Height R/C Above Average Terrain:	417.0 M
Average of All Non-Odd Radials:	262.5 M

Transmitter Power Required:	9.7 kW
Maximum Power Input to Antenna:	7.9 kW
Transmission Line Loss:	0.87 dB
Transmission Line Efficiency:	81.8%
RMS Gain at Main Lobe:	7.24 dB
RMS Gain at Horizontal:	7.24 dB
Maximum Effective Radiated Power:	16.23 dBk
In Beam Maximum:	42.0 kW
Maximum Effective Radiated Power:	16.23 dBk
In Horizontal Plane:	42.0 kW

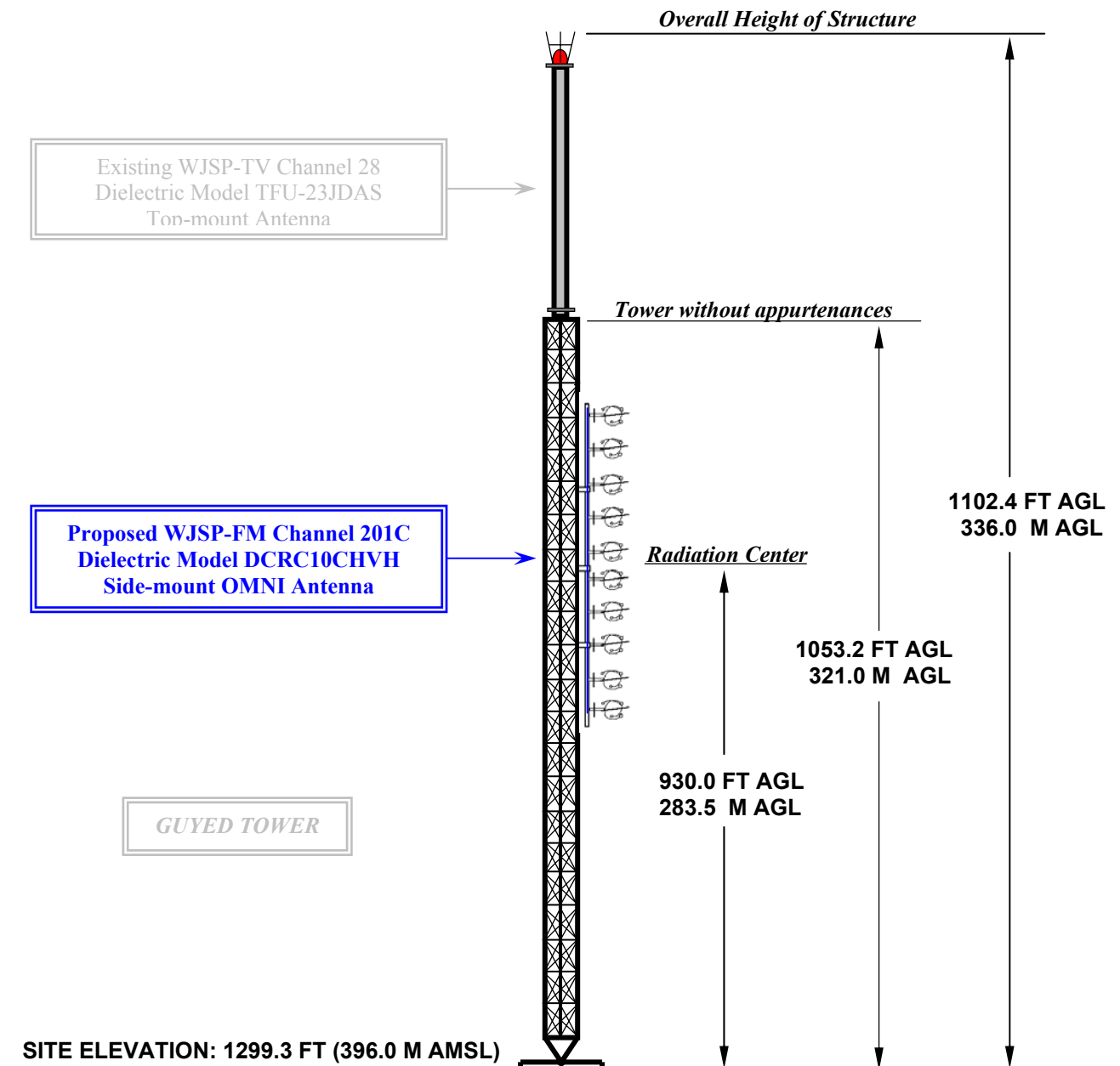
WJSP-FM CHANNEL 201 C
WARM SPRINGS, GEORGIA

**DATA FOR PROPOSED
NONDIRECTIONAL TRANSMITTING ANTENNA**

- A. **Antenna:** Dielectric Model DCRC10CHVH Circularly Polarized Side-Mount Antenna
- B. **Electrical Beam Tilt:** None
- C. **Mechanical Beam Tilt:** None
- D.

<u>RMS Gain</u>	<u>Circular Polarization</u>
Main Lobe:	5.30 (7.24 dB)
Horizontal:	5.30 (7.24 dB)
- E. **Length:** 104.0 feet (31.7 meters) – without lightning protector
- F. **Transmitter Power Output (TPO):** 9.7 kW
- G. **Transmission Line:** 3-1/8" FLEXLine® (50 ohm)
- H. **Transmission Line Efficiency:** 81.8%
- I. **Transmission Line Length:** 970 feet
- J. **Transmission Line Loss:** 0.090 dB/100 ft
- K. **Transmission Line Attenuation:** 0.87 dB

PROPOSED WJSP-FM ELEVATION VIEW



OVERALL HEIGHT AGL: 336.0 M
OVERALL HEIGHT AMSL: 732.0 M
RADIATION CENTER AGL: 283.5 M
RADIATION CENTER AMSL: 679.5 M
RADIATION CENTER HAAT: 417.0 M
AVG OF ALL NON-ODD RADIALS: 262.5 M
SITE HAAT: 133.5 M

COORDINATES (NAD 27):

N. LATITUDE 32° 51' 08"
W. LONGITUDE 84° 42' 04"

Antenna Structure Registration Number:
1018795

NOTE: NOT TO SCALE

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WJSP-FM CHANNEL 201C

WARM SPRINGS, GEORGIA

20070626

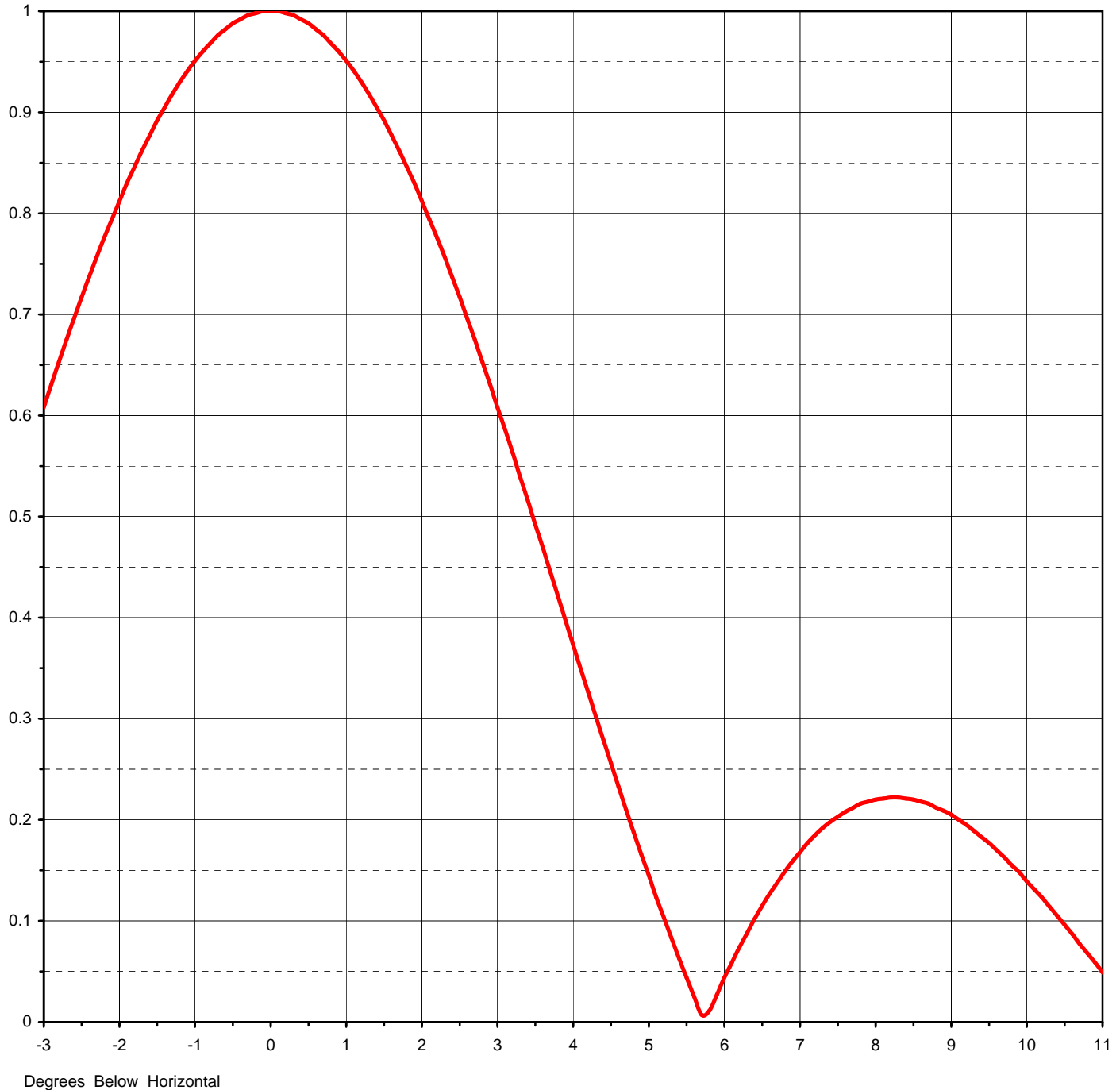
EXHIBIT 3



Proposal Number	C-01015-2	Revision:	2
Date	1-Feb-07		
Call Letters	WJSP		
Location	Warm Springs, GA		
Customer	GPTV		
Antenna Type	DCRC10CHVH		

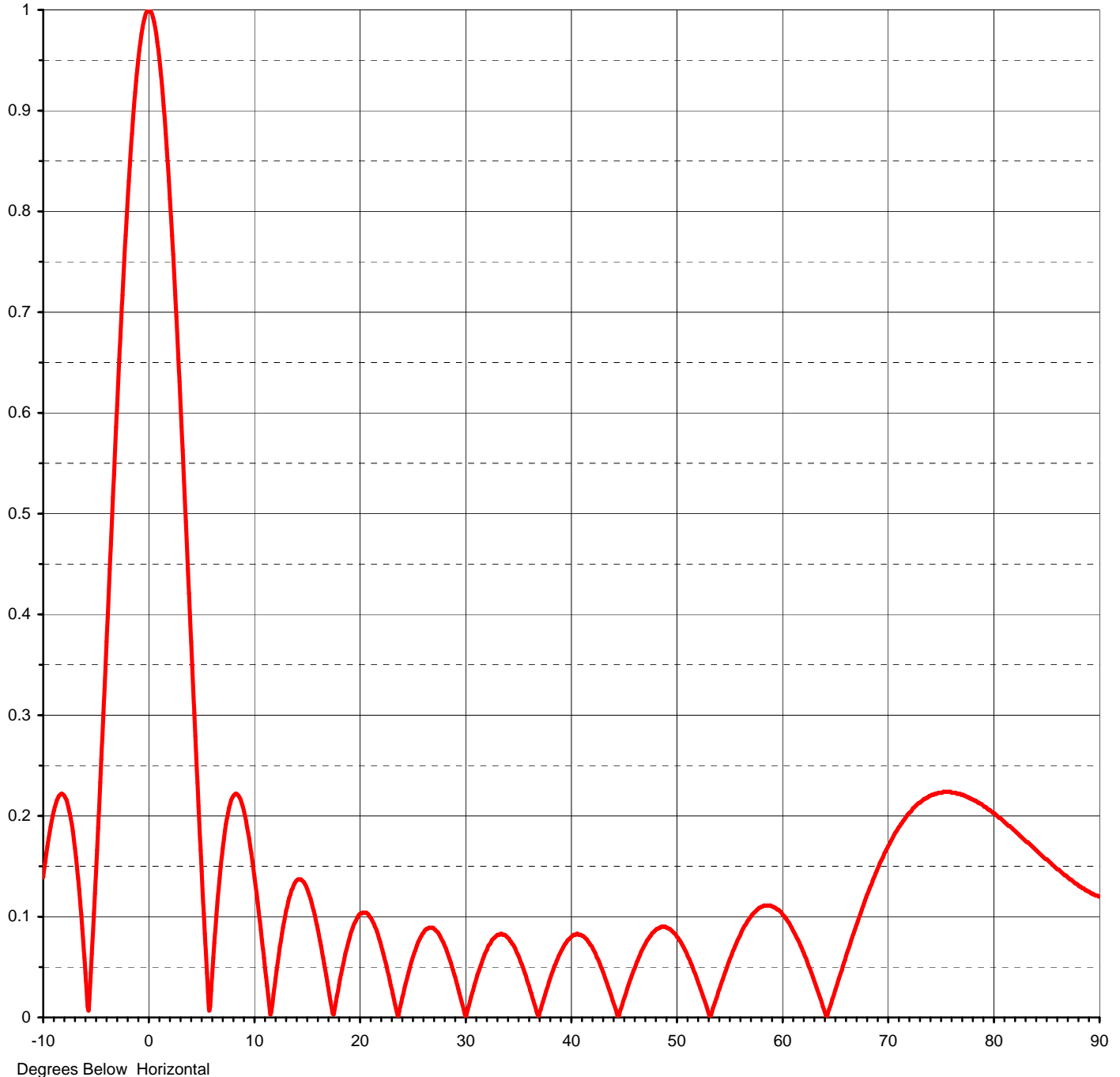
ELEVATION PATTERN

RMS Gain H POL	5.30	(7.24 dB)	Beam Tilt	0.00 deg
RMS Gain V POL	5.30	(7.24 dB)	Frequency	88.10 MHz
Calculated / Measured	Calculated		Drawing #	10C106000



ELEVATION PATTERN

RMS Gain H POL	5.30	(7.24 dB)	Beam Tilt	0.00 deg
RMS Gain V POL	5.30	(7.24 dB)	Frequency	88.10 MHz
Calculated / Measured	Calculated		Drawing #	10C106000-90





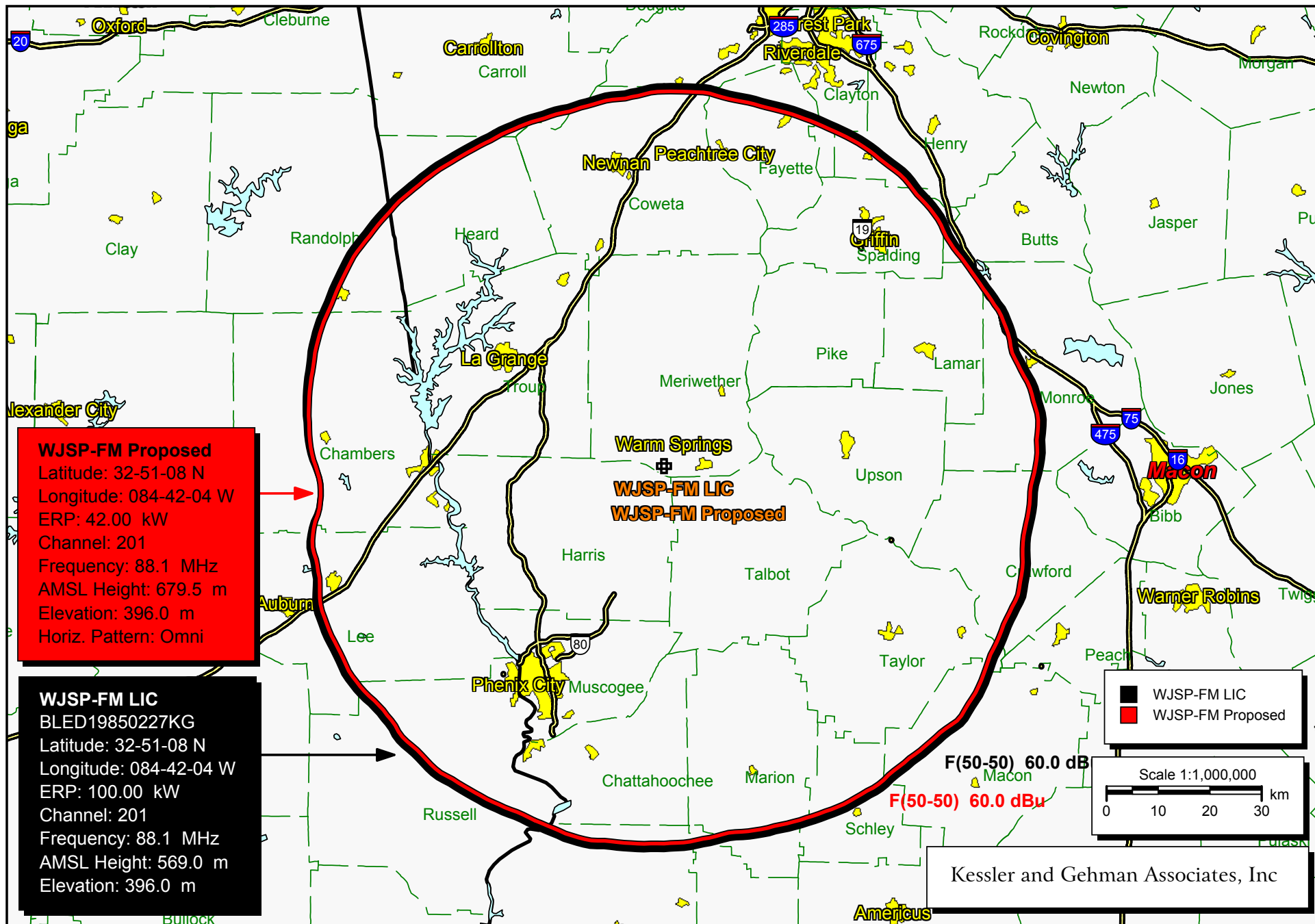
Proposal Number **C-01015-2** Revision: **2**
Date **1-Feb-07**
Call Letters **WJSP**
Location **Warm Springs, GA**
Customer **GPTV**
Antenna Type **DCRC10CHVH**

TABULATION OF ELEVATION PATTERN

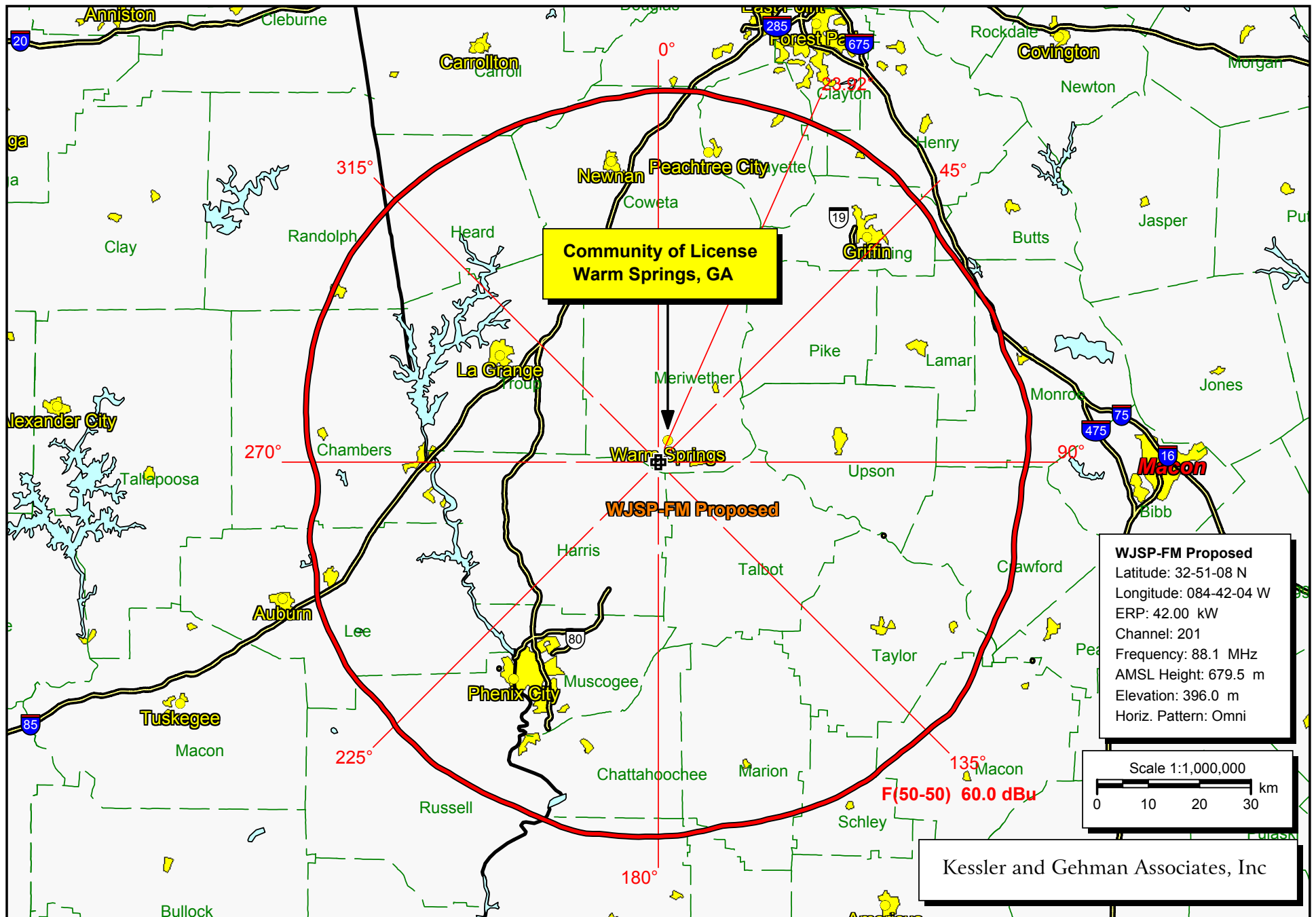
Elevation Pattern Drawing #: **10C106000-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.139	2.4	0.737	10.6	0.096	30.5	0.016	51.0	0.064	71.5	0.196
-9.5	0.177	2.6	0.696	10.8	0.077	31.0	0.035	51.5	0.052	72.0	0.203
-9.0	0.205	2.8	0.653	11.0	0.059	31.5	0.051	52.0	0.038	72.5	0.209
-8.5	0.220	3.0	0.608	11.5	0.012	32.0	0.065	52.5	0.023	73.0	0.213
-8.0	0.220	3.2	0.563	12.0	0.031	32.5	0.075	53.0	0.007	73.5	0.217
-7.5	0.203	3.4	0.516	12.5	0.070	33.0	0.081	53.5	0.009	74.0	0.220
-7.0	0.168	3.6	0.469	13.0	0.100	33.5	0.083	54.0	0.025	74.5	0.222
-6.5	0.115	3.8	0.421	13.5	0.122	34.0	0.080	54.5	0.040	75.0	0.223
-6.0	0.044	4.0	0.373	14.0	0.135	34.5	0.073	55.0	0.055	75.5	0.224
-5.5	0.044	4.2	0.326	14.5	0.137	35.0	0.063	55.5	0.068	76.0	0.223
-5.0	0.145	4.4	0.279	15.0	0.130	35.5	0.050	56.0	0.080	76.5	0.222
-4.5	0.256	4.6	0.233	15.5	0.114	36.0	0.034	56.5	0.091	77.0	0.221
-4.0	0.373	4.8	0.188	16.0	0.092	36.5	0.017	57.0	0.099	77.5	0.219
-3.5	0.492	5.0	0.145	16.5	0.065	37.0	0.001	57.5	0.105	78.0	0.216
-3.0	0.608	5.2	0.103	17.0	0.035	37.5	0.019	58.0	0.109	78.5	0.213
-2.8	0.653	5.4	0.063	17.5	0.004	38.0	0.036	58.5	0.111	79.0	0.210
-2.6	0.696	5.6	0.025	18.0	0.026	38.5	0.051	59.0	0.111	79.5	0.206
-2.4	0.737	5.8	0.011	18.5	0.053	39.0	0.063	59.5	0.108	80.0	0.203
-2.2	0.776	6.0	0.044	19.0	0.075	39.5	0.073	60.0	0.104	80.5	0.198
-2.0	0.812	6.2	0.074	19.5	0.092	40.0	0.079	60.5	0.097	81.0	0.194
-1.8	0.846	6.4	0.102	20.0	0.102	40.5	0.082	61.0	0.088	81.5	0.190
-1.6	0.877	6.6	0.127	20.5	0.104	41.0	0.082	61.5	0.078	82.0	0.185
-1.4	0.905	6.8	0.149	21.0	0.100	41.5	0.078	62.0	0.066	82.5	0.180
-1.2	0.930	7.0	0.168	21.5	0.090	42.0	0.071	62.5	0.053	83.0	0.175
-1.0	0.951	7.2	0.185	22.0	0.075	42.5	0.060	63.0	0.039	83.5	0.171
-0.8	0.968	7.4	0.198	22.5	0.055	43.0	0.048	63.5	0.024	84.0	0.166
-0.6	0.982	7.6	0.208	23.0	0.032	43.5	0.033	64.0	0.008	84.5	0.161
-0.4	0.992	7.8	0.216	23.5	0.009	44.0	0.017	64.5	0.011	85.0	0.157
-0.2	0.998	8.0	0.220	24.0	0.015	44.5	0.001	65.0	0.028	85.5	0.152
0.0	1.000	8.2	0.222	24.5	0.037	45.0	0.016	65.5	0.044	86.0	0.147
0.2	0.998	8.4	0.221	25.0	0.057	45.5	0.032	66.0	0.061	86.5	0.143
0.4	0.992	8.6	0.218	25.5	0.072	46.0	0.047	66.5	0.077	87.0	0.139
0.6	0.982	8.8	0.212	26.0	0.083	46.5	0.060	67.0	0.092	87.5	0.135
0.8	0.968	9.0	0.205	26.5	0.088	47.0	0.071	67.5	0.107	88.0	0.131
1.0	0.951	9.2	0.195	27.0	0.089	47.5	0.080	68.0	0.122	88.5	0.128
1.2	0.930	9.4	0.183	27.5	0.084	48.0	0.086	68.5	0.135	89.0	0.125
1.4	0.905	9.6	0.170	28.0	0.074	48.5	0.089	69.0	0.148	89.5	0.122
1.6	0.877	9.8	0.163	28.5	0.060	49.0	0.090	69.5	0.159	90.0	0.120
1.8	0.846	10.0	0.148	29.0	0.043	49.5	0.087	70.0	0.170		
2.0	0.812	10.2	0.131	29.5	0.024	50.0	0.082	70.5	0.180		
2.2	0.776	10.4	0.114	30.0	0.004	50.5	0.074	71.0	0.189		

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WJSP-FM (License) vs. WJSP-FM (Proposed)



Proposed WJSP-FM Community of License Contour

NCE-FM Interference Study

WJSP-FM

REFERENCE CH# 201C - 88.1 MHz, Pwr= 42 kW, HAAT=417.0 M, COR= 679.5 M
 32 51 08.0 N. Average Protected F(50-50)= 71.87 km
 84 42 04.0 W.

DISPLAY DATES
 DATA 06-26-07
 SEARCH 06-26-07

CH CITY	CALL	TYPE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
06-2C WBRC Birmingham		LI	_CY	290.5 109.3	208.06 BLCT19880229KI	33 29 19.0 86 47 58.0	100.000 420	615	113.2 241.2R Wbrc License, Inc.	-33.1M
06Z3C WCTV Thomasville		LI	_HY	163.3 343.7	252.43 BLCT19870630KF	30 40 13.0 83 56 26.0	97.700 619	667	128.4 259.0R Gray Television Licensee,	-6.5M
202A AP0681 Browns Crossing		APP	_CX	82.0 262.7	126.05 BNPED19991101ABO	33 00 08.0 83 21 55.0	0.600 233	22.8 233	15.2 Community Public Radio, In	3.54
204C1 WELL-FM Dadeville		CP	DVX	260.4 80.0	75.77 BMPED20070118ABT	32 44 11.0 85 29 54.0	60.000 129	2.7 349	28.2 James Jarrell Communicatio	38.89
201A AP7014 Patterson		APP	DCX	45.1 225.9	185.38 BNPED19991228AAR	34 01 15.0 83 16 33.0	0.875 46	46.1 274	12.9 Community Public Radio, In	7.48
201A AP9311 Patterson		APP	_CX	45.1 225.9	185.38 BNPED19991228AAR	34 01 15.0 83 16 33.0	0.875 46	46.1 274	12.9 Community Public Radio, In	7.48
203C3 WTMQ Lumpkin Amended 980121		CP	DCX	190.1 10.0	88.26 BPED19970818MB	32 04 07.0 84 51 55.0	10.000 100	3.3 224	33.7 Spanish Cultural Education	45.17
202C3 WJCK Piedmont		LIC	DVX	319.1 138.5	145.43 BLED20050630AEC	33 50 12.0 85 43 59.0	2.700 295	38.3 556	25.4 Immanuel Broadcasting Netw	14.01
204A WFRP Americus		LIC	_CX	154.9 335.2	92.97 BLED20050516AQM	32 05 34.0 84 16 56.0	4.200 70	1.9 198	18.5 Family Stations, Inc.	65.12
201C1 WAYT Thomasville		LIC	DCX	163.9 344.3	251.87 BLED20040602ABZ	30 40 06.0 83 58 10.0	35.000 392	155.5 438	66.6 Way-fm Media Group, Inc.	18.70
203C2 WTMQ Lumpkin		APP	DCX	192.8 12.7	98.19 BMPED20070126AAW	31 59 20.0 84 55 59.0	25.000 164	4.8 278	44.8 Spanish Cultural Education	43.96
203C2 WTMQ Lumpkin		APP	DCX	192.8 12.7	98.19 BMPED20070126AAW	31 59 20.0 84 55 59.0	24.500 164	4.7 278	44.2 Spanish Cultural Education	44.61
203C1 WRAS Atlanta		LIC	_CN	22.3 202.6	99.94 BLED19870417KD	33 41 04.0 84 17 23.0	100.000 133	6.6 401	55.5 Georgia State University	35.15
202C WAPR Selma		LIC	_VN	248.2 67.1	207.65 BLED19960515KC	32 08 30.0 86 44 43.0	53.000 427	112.5 503	76.3 Ua-asu-tsu Educational Rad	26.08
06+2C WJBF Augusta		LI	_HY	76.2 257.8	274.54 BLCT20040130AOR	33 24 20.0 81 50 01.0	100.000 495	564	121.6 250.6R Media General Communicatio	23.9M
204C1 WELL-FM Dadeville		LIC	DVN	270.5 89.9	100.55 BLED19950215KA	32 51 20.0 85 46 31.0	100.000 93	3.8 279	36.6 James Jarrell Communicatio	55.39
201C1 WUTC Chattanooga		LIC	_CN	348.6 168.3	266.65 BLED19931130KA	35 12 26.0 85 16 52.0	30.000 271	160.7 673	69.9 University Of Tennessee	32.34
06Z3 LMWABW Pelham		AP	DHN	163.3 343.7	252.43 BPRM20060619ABE	30 40 13.0 83 56 26.0	3.800 474	525	81.1 211.6R Test	40.8M
06Z2 LMWCES Wren		AP	DHN	78.0 259.3	230.05 BPRM20060619ABI	33 15 33.0 82 17 09.0	30.000 436	551	48.8 178.7R Test	51.4M
202A WAWH Dublin		LIC	_C_	101.5 282.5	167.11 BLED20000222ABG	32 32 27.0 82 57 27.0	0.400 25	11.4 105	8.0 American Family Associatio	54.95
254C3 WISK-FM Americus		LIC	_CN	153.9 334.1	95.25 BLH19921013KD	32 04 51.0 84 15 20.0	25.000 92	19.6 216	78.7 31.0R Sumter Broadcasting Co., I	64.2M
201C2 WSJL Northport		CP	DEX	286.3 104.8	261.30 BPED19971009MD	33 28 51.0 87 24 03.0	20.000 150	85.8 280	29.9 Mary V Harris Foundation	67.92
202A WNEE Jasper		LIC	DCX	7.9 188.0	180.85 BLED20000303AAA	34 28 01.0 84 25 49.0	0.200 1	6.7 451	4.8 Community Public Radio, In	69.49
255A AL0259 Tallapoosa New Allotment.		VAC	---	330.1 149.8	103.08 RM10708	33 39 20.0 85 15 27.0	6.000 100	19.6 435	78.7 29.0R Ssr Communications	74.1M

Terrain database is USGS 03 SEC

ERP and HAAT are on direct line to and from reference station.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

Incoming contour overlap is ignored.

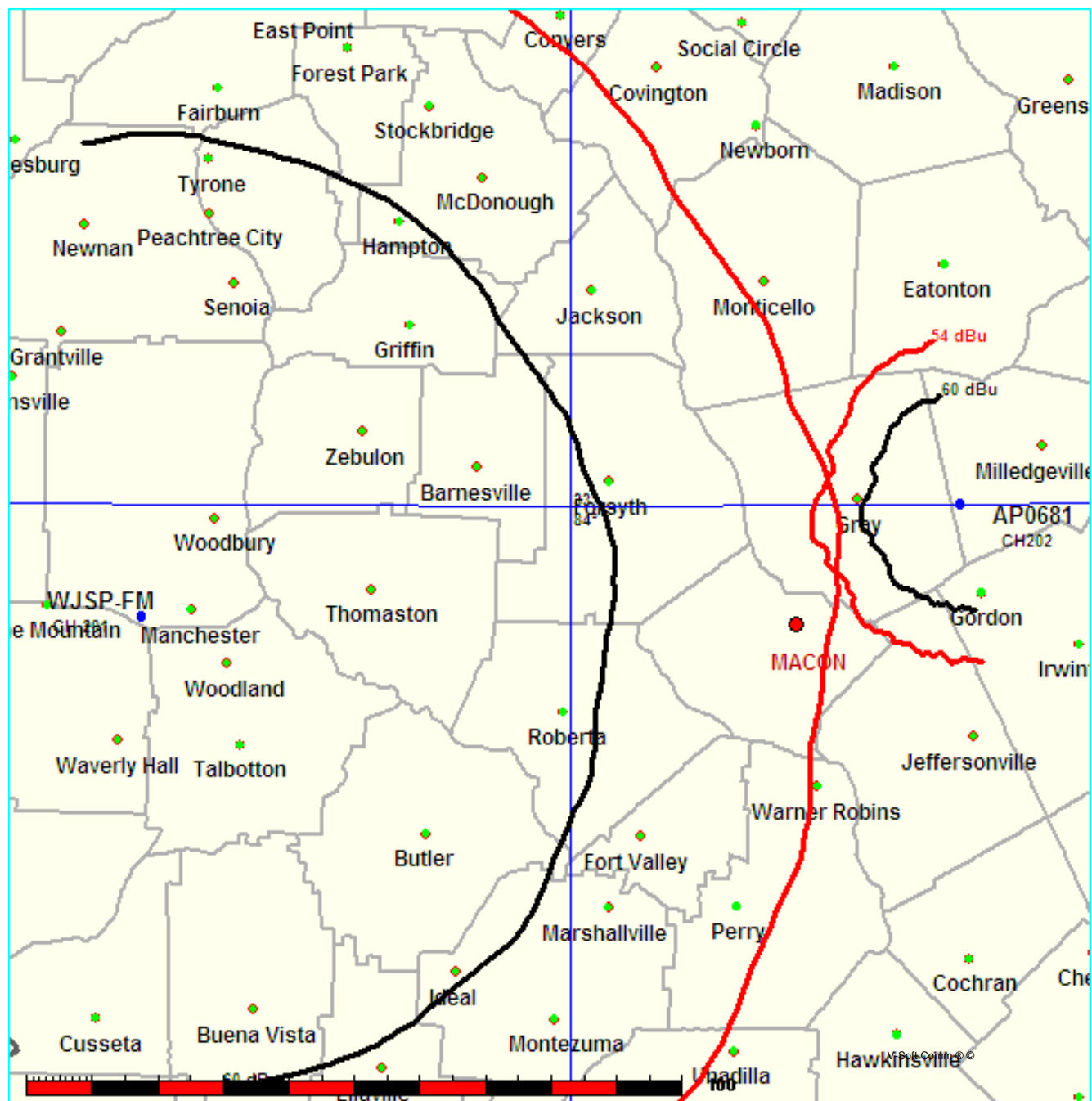
NCE-FM Interference Study
WJSP-FM and Browns Crossing, GA APP

FMCommander Single Allocation Study
06-26-2007

WJSP-FM CH 201 C
42.0 kW 679.5 M COR
Prot. = 60 dBu
Intef. = 54 dBu

AP0681 CH 202 A
0.6 kW, 233 M COR
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:1,500,000



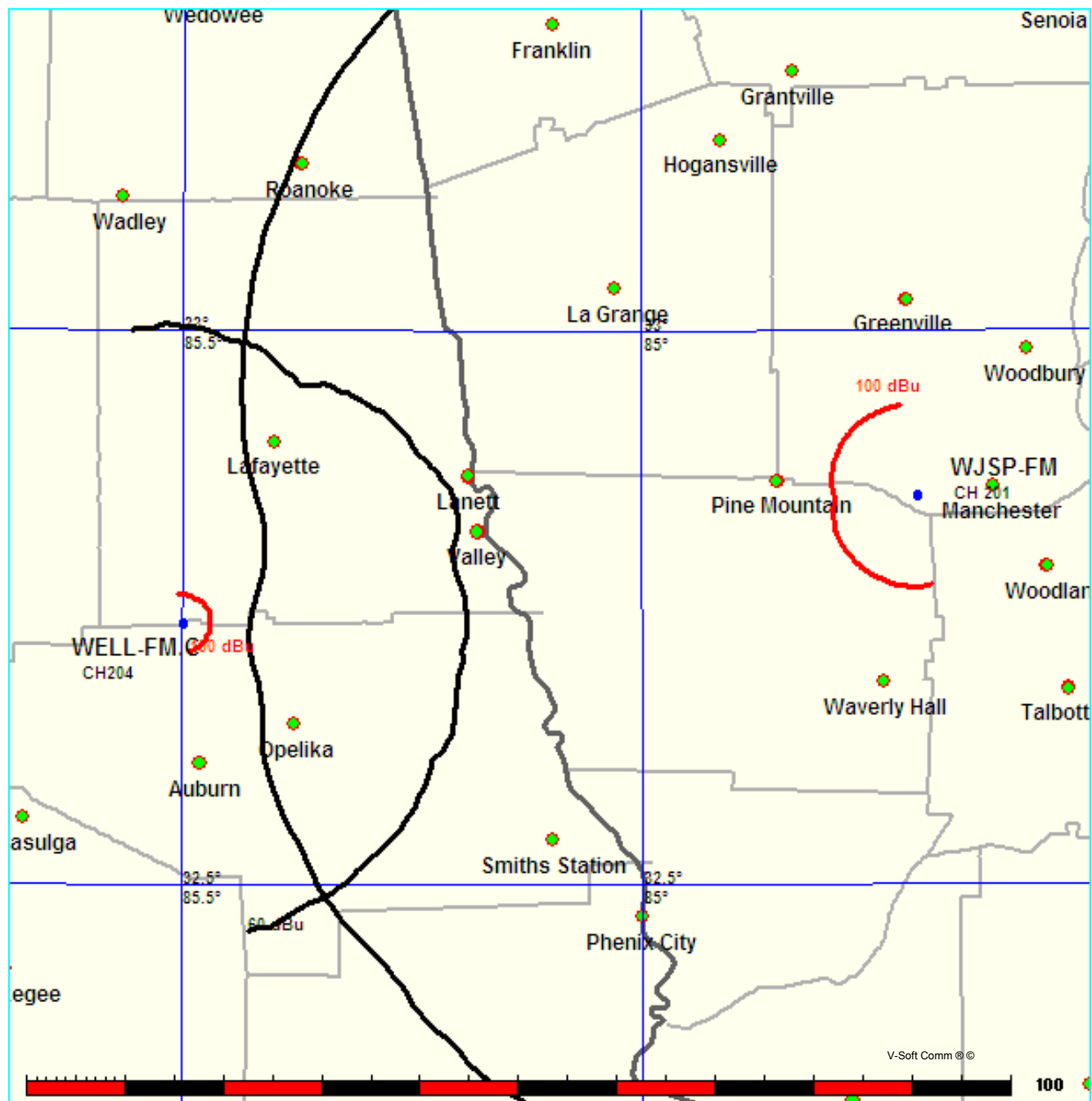
NCE-FM Interference Study
WJSP-FM and WELL-FM (CP)

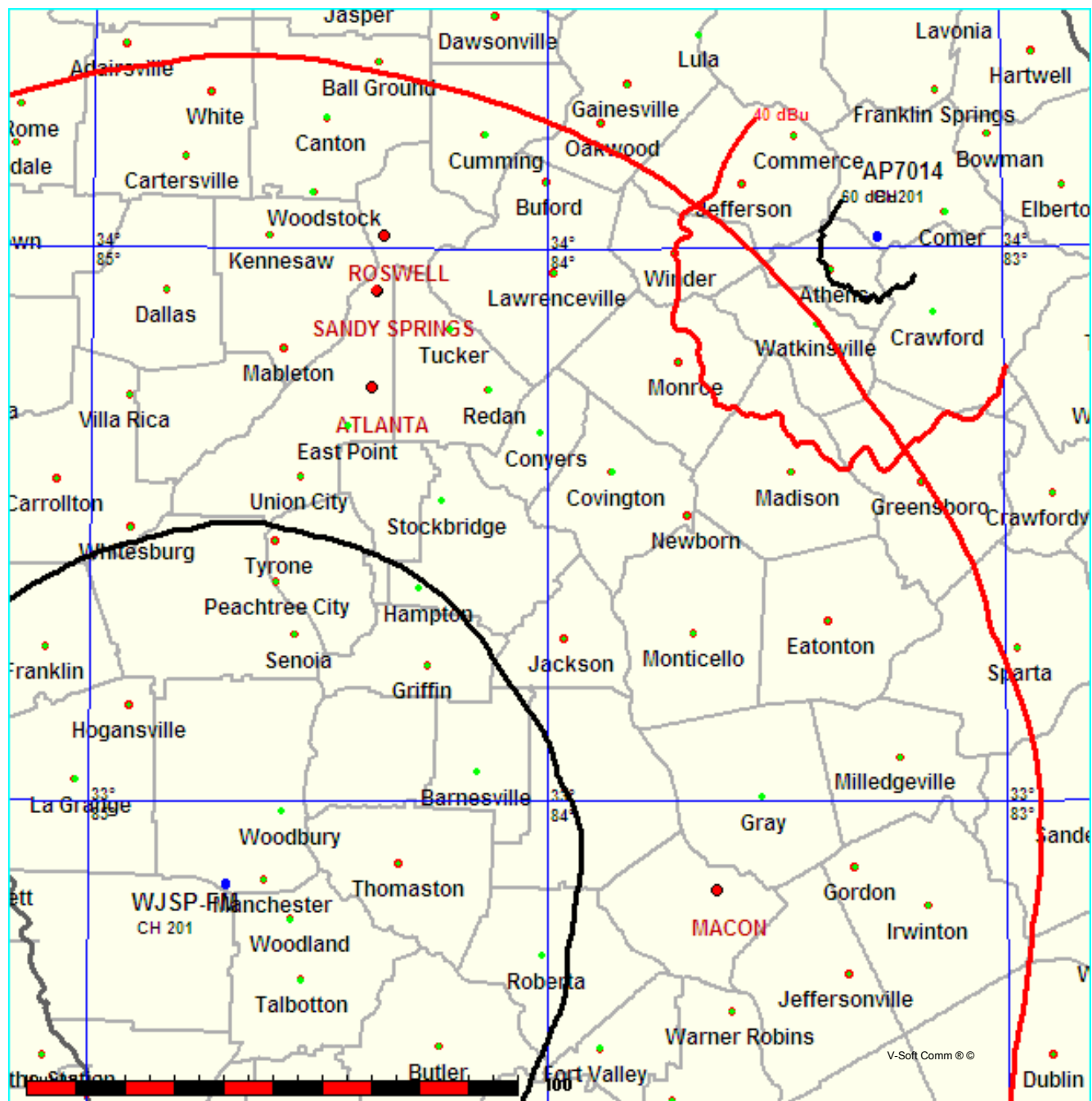
FMCommander Single Allocation Study
06-26-2007

WJSP-FM CH 201 C
42.0 kW 679.5 M COR
Prot. = 60 dBu
Intef. = 100 dBu

WELL-FM.C CH 204 C1 BMPED20070118ABT
60.0 kW, 349 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

Scale = 1:1,000,000





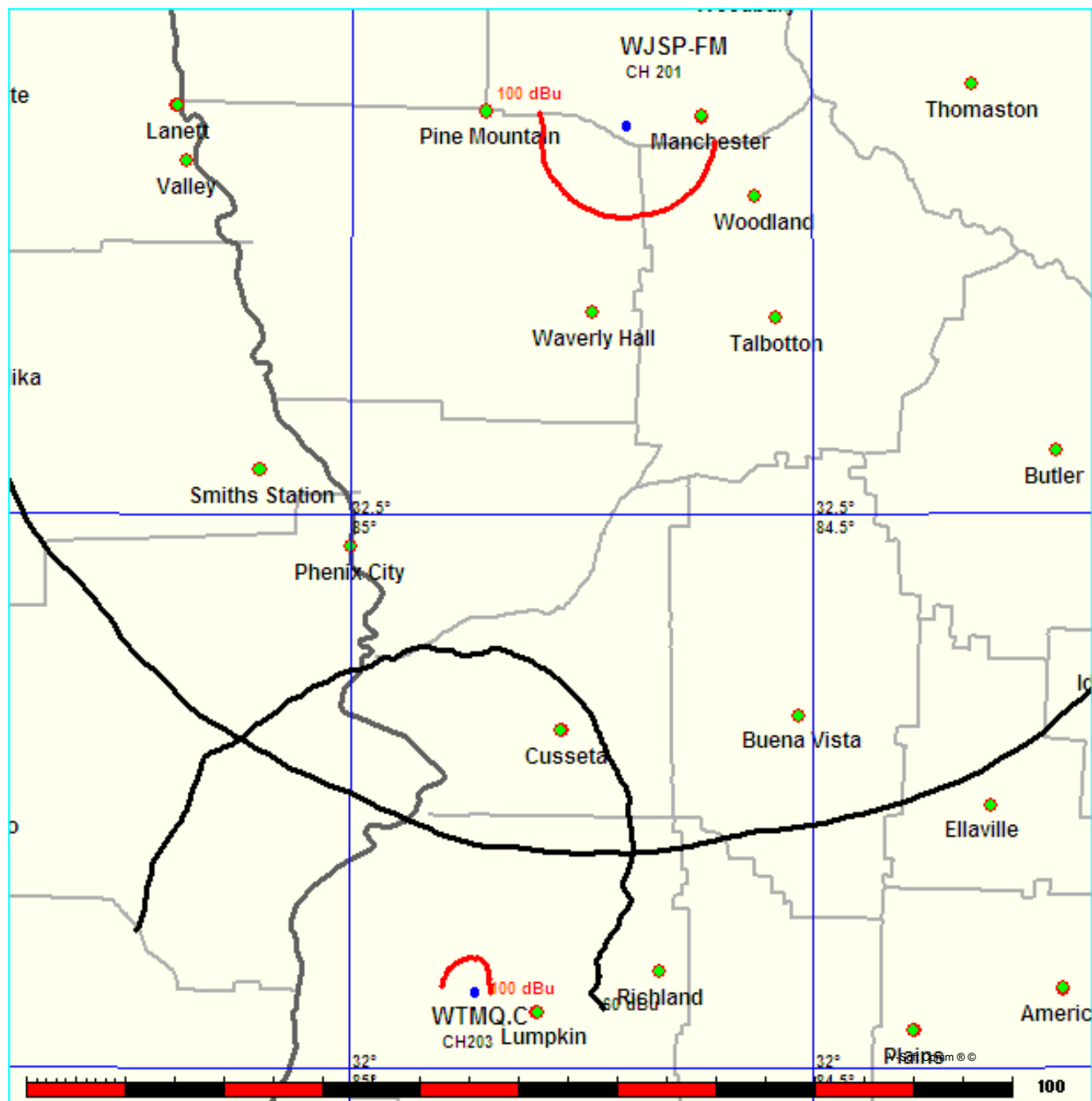
NCE-FM Interference Study
WJSP-FM and WTMQ-FM

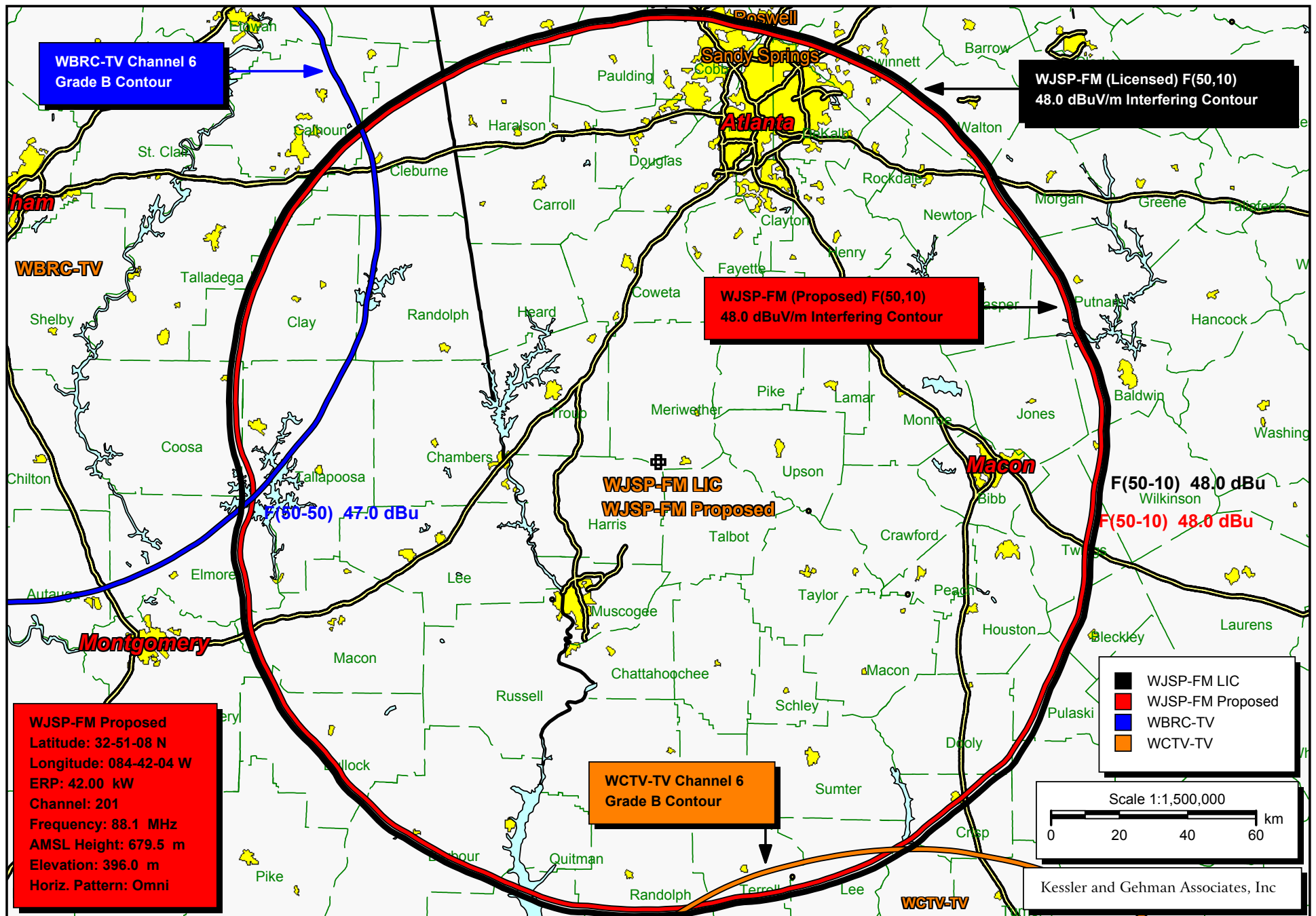
FMCommander Single Allocation Study
06-26-2007

WJSP-FM CH 201 C
42.0 kW 679.5 M COR
Prot. = 60 dBu
Intef. = 100 dBu

WTMQ.C CH 203 C3 BPED19970818MB
10.0 kW, 224 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

Scale = 1:1,000,000





WJSP-FM TV Channel 6 Studies