TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
FM STATION WFBI (FACILITY ID 122296)
GREENVILLE, MISSISSIPPI

DECEMBER 6, 2005

CH 218C2 50 KW (MAX-DA) 98 M

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Technical Narrative

This Technical Exhibit supports a minor modification application to the construction permit for a non-commercial educational (NCE) FM station WFBI, at Greenville, Mississippi. The pending authorization specifies a non-directional effective radiated power (ERP) of 25 kilowatts (kW) (vertical polarization only).[1] This application proposes to upgrade from a Class C3 to C2 facility, change transmitter site, increase ERP and employ a directional antenna.

Proposed Facilities

The proposed transmitter site is 4.5 kilometers west of the authorized transmitter site (NAD27 coordinates: 33-32-25 N, 91-22-39 W). The FCC antenna structure registration number is 1034778 (see Figure 1). It is proposed to operate with a directional antenna maximum ERP of 50 kilowatts (vertical polarization only) and an antenna HAAT of 98 meters.

Figure 5 is a horizontal relative field "envelope" for the proposed directional antenna, used in calculating the contours from the proposed site. The pattern meets the 2 dB/decade and 15 dB min-to-max requirements of Section 73.316(b).

[1] See BNPED-20000118AET

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially 2.8 kilometers from the transmitting site. No interference problems are expected; however the applicant recognizes its responsibility to resolve complaints of blanketing interference as required by Section 73.318, and any electromagnetic problems, which may result from its proposed operation in accordance with the applicable rules.

Coverage Contours

The FCC predicted coverage contour for the propose operation was calculated in accordance with Section 73.313. No consideration was given to terrain roughness correction factors. The 60 dBu coverage contour shown in Figure 3 encompasses all of the city limits of Greenville (2000 U.S. Census).

Allocation Considerations

Sheet 1 of Figure 3 contains a separation study based on pertinent co-channel and adjacent protected and interfering contours as specified in Section 73.509 of the Commission's rules. Separation distances in the contour study are only used as an indication of which stations may be an allocation concern. Also shown in Sheet 1 is an FM separation study based on Section 73.507 concerning required separation distances to commercial stations. The FCC's FM database was used as the basis for the separation study. The stations of concern have pertinent protected and interfering contours plotted on the map in Sheet 2 of Figure 4. As is shown on the map, no prohibited contour overlap is predicted.

Channel 6 Protection

Station WABG-TV on channel 6 (Greenwood, MS) is located 80 kilometers east-southeast of the proposed site. The proposed FM interfering contour is located entirely within the Grade B contour for WABG-TV. Sheet 1 of Figure 4 is a map showing the predicted interference area from the proposed FM operation, as specified in Section 73.525. The map also shows the minor civil divisions (MCD) for the adjacent counties.

The population within the predicted interference area was determined by a uniform distribution method throughout the affected minor civil divisions (MCDs), per Section 73.525(e)(2). The uniform population within the predicted interference area, based on 2000 U.S. Census is 1,087 persons (less than the limit of 3000 per Section 73.525(c)). No population adjustments were claimed.

There are no other channel 6 TV stations located within the 166 kilometer search distance as specified in Section 73.525(a).

Radiofrequency Electromagnetic Field Exposure

The proposed facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. With station KRKD and the proposed application for WFBI being the only other known broadcast station in the vicinity, comprehensive studies were conducted to determine the calculated "worst-case" combined power density value from all stations at ground level. Theoretical studies indicate that the combined power density value from both stations will not exceed 30% of the uncontrolled limit of 0.2 mW/cm^2. The table below details the RFR calculation at the above-discussed "worst-case" point:

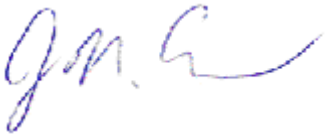
Station	ERP (kW)[2]	Radial Distance to Test Point From Antenna (m)	Relative Field Factor[3]	Calc. Power Density/ANSI Limit(mW/cm^2)	Percent of ANSI Limit
Proposed	50	92.5	0.5	0.049/0.2	24%
KRKD(FM)	6	94.9	0.5	0.006/0.2	3%
Total	56	N/A	N/A	**0.055/0.2**	**27%**

The summation of the above percents for both stations is less than 30%. Therefore, the proposed operation will not result in radiofrequency radiation exposure to the general public in excess of the Commission's standards.

[2] This includes radiation in both horizontal and vertical planes.
[3] Conservative values were assumed for both stations.

Access to the transmitting site is restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower or any nearby adjacent towers, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.



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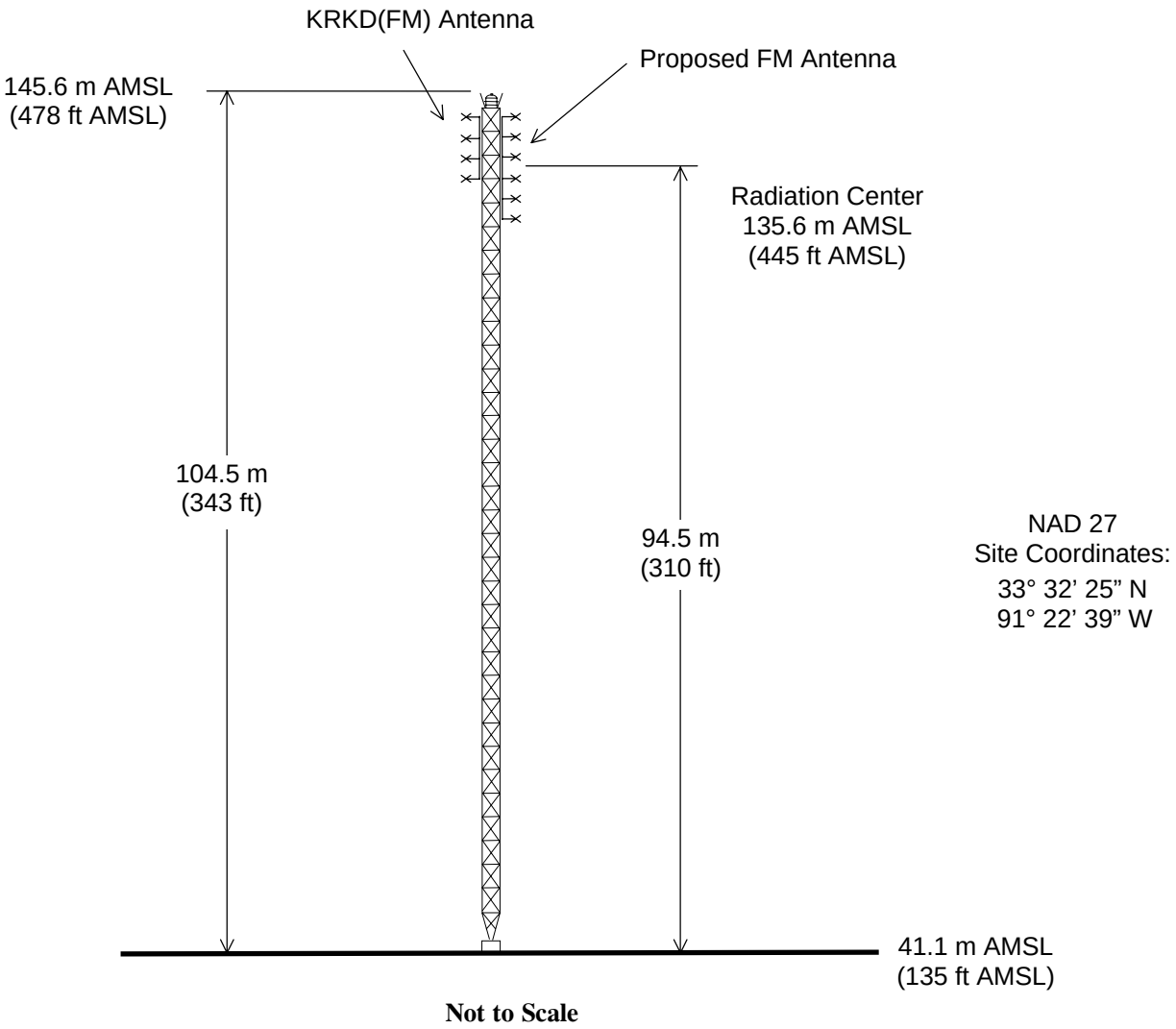
December 6, 2005

CONSULTING ENGINEERS SINCE 1941
DECEMBER 2005

Registration No. 1034778



Not to Scale

PROPOSED ANTENNA AND SUPPORTING STRUCTURE

FM STATION WFBI

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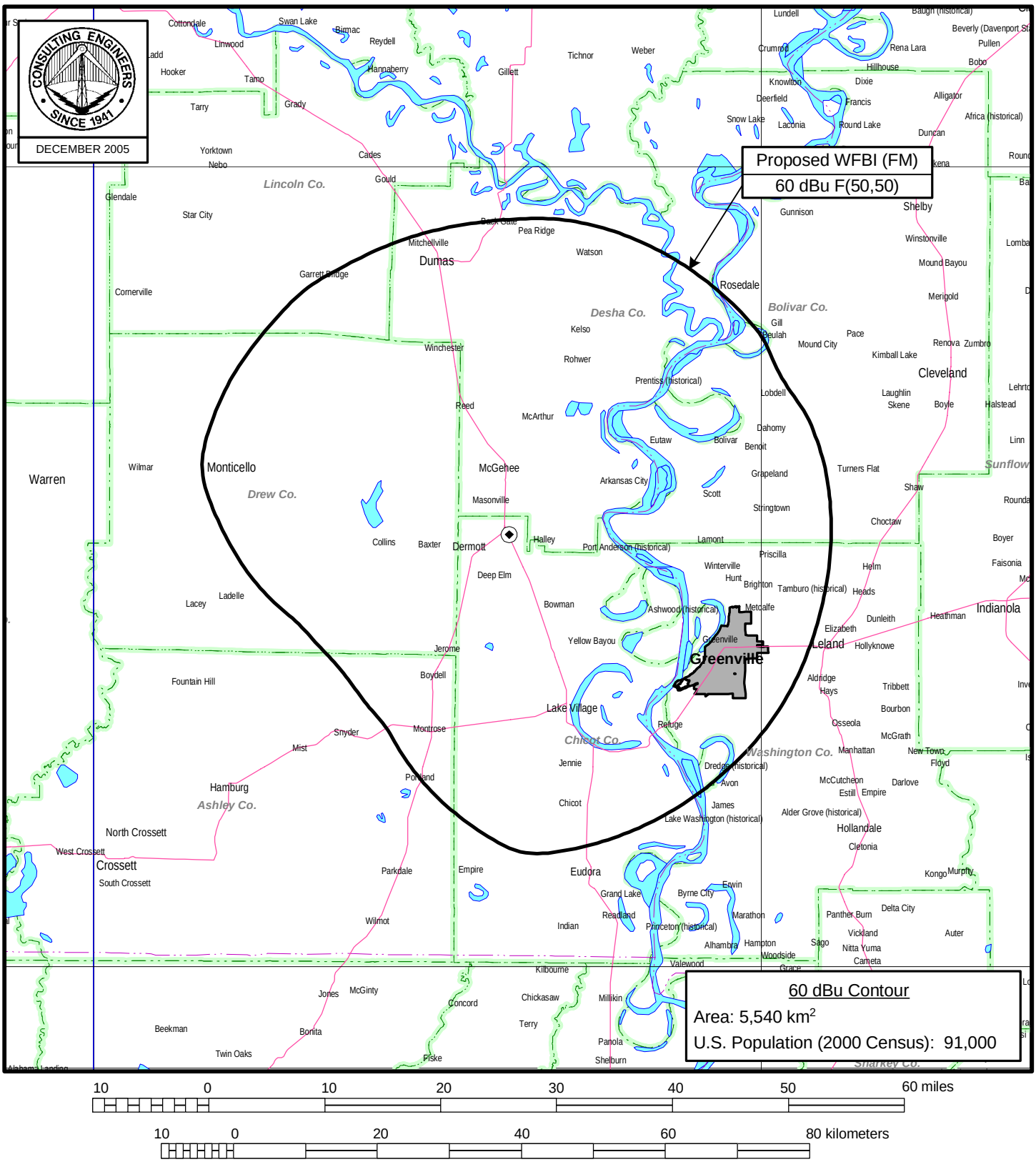

PREDICTED COVERAGE CONTOUR

FM STATION WFBI

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CDBS FM CONTOUR OVERLAP STUDY

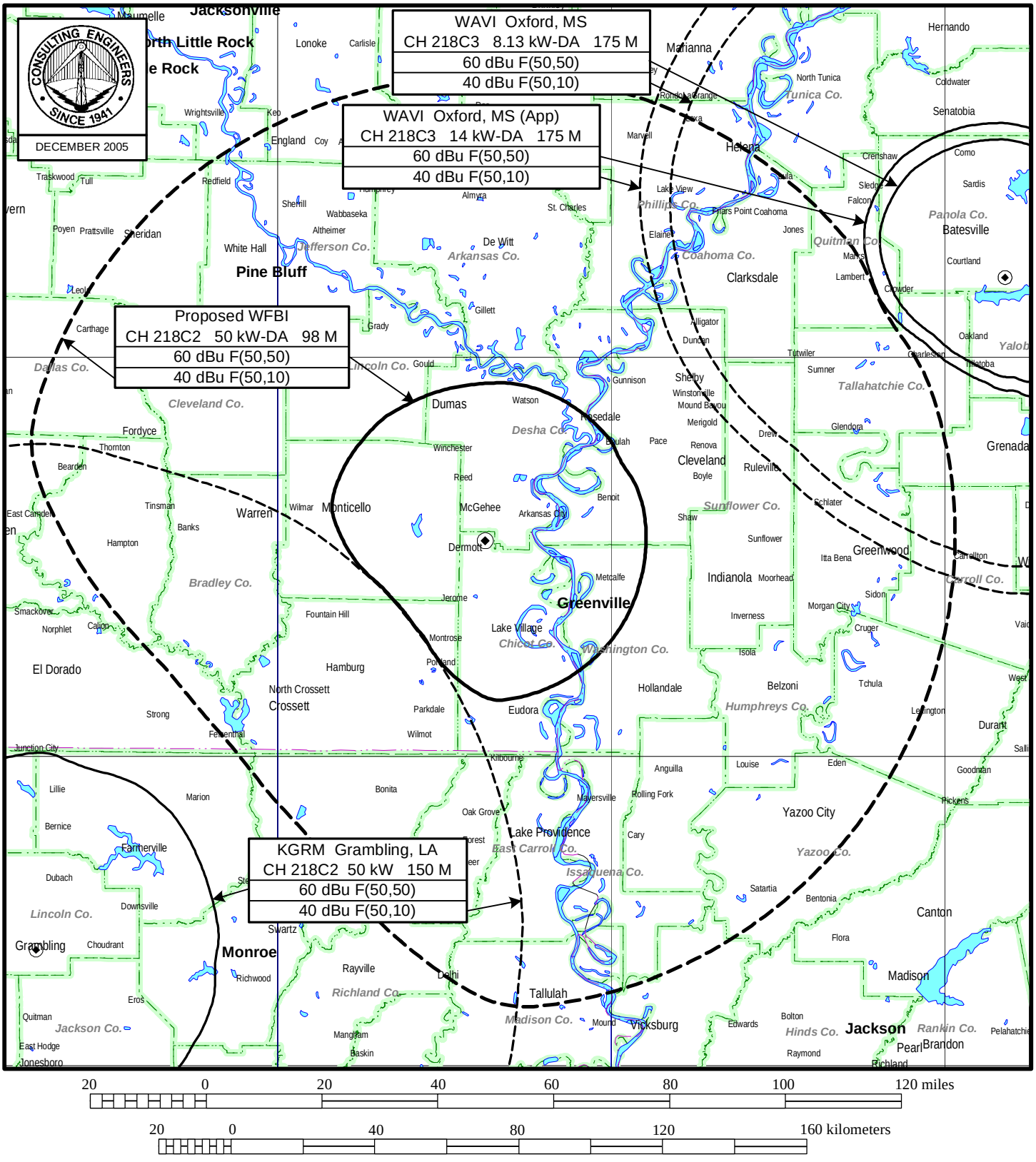
12/6/2005 Separation Buffer: 50 km
Channel: 218C2 Coordinates: 33-32-25 N 91-22-39 W
ERP = 50 kW MAX HAAT = 100 M

Call Id	City St	Status	File Num	Channel Freq	ERP MaxHAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WMAO-FM	GREENWOOD MS	BLED LIC C	19831114AL	215 C1 90.9	100.000N 272		33-22-34 090-32-32	N	103.0	79.76 4.78	75.0 Close
WFBI 122296	*GREENVILLE MS*	*BNPED CP C*	*20000118AE*	*218 C3 91.5*	*25.000 N 72*		*33-32-11 091-19-45*	*N*	*95.5*	*4.51*	
WAVI 78221	OXFORD MS	BLED LIC C	20020207AA	218 C3 91.5	8.130 Y 191	42085	34-11-57 089-49-09	N	62.6	161.65 -9.55	171.2 Short
Contour overlap protection provided. See Sheet 2											
WAVI 78221	OXFORD MS	BPED APP C	20050719AH	218 C3 91.5	14.000 Y 191	70125	34-11-57 089-49-09	N	62.6	161.65 -14.14	175.8 Short
Contour overlap protection provided. See Sheet 2											
KGRM 24741	GRAMBLING LA	BLED LIC C	19901005KA	218 C2 91.5	50.000 N 175		32-30-56 092-43-27	N	228.1	169.54 -16.29	185.8 Short
Contour overlap protection provided. See Sheet 2											
WVSD 43178	ITTA BENA MS	BLED LIC C	19900507KD	219 A 91.7	3.000 N 94		33-31-05 090-20-38	N	91.2	96.05 2.77	93.3 Close

CDBS FM SEPARATION STUDY

12/6/2005 Separation Buffer: 50 km
Channel: 218C2 Coordinates: 33-32-25 N 91-22-39 W

Call Id	City St	Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 215	207
WKXY 77755	CLARKSDALE MS	BLH LIC C	20030428AAE	221 A 92.1	0.5 43	N	34-12-40 090-34-42	Y	44.5	104.90 49.90	49.0 Clear	55.0
WIQQ 66330	LELAND MS	BLH LIC C	19900924KE	272 A 102.3	1.7 134	N	33-23-50 091-00-33	N	114.9	37.74 22.74	0.0 Clear	15.0



CONTOUR OVERLAP MAP

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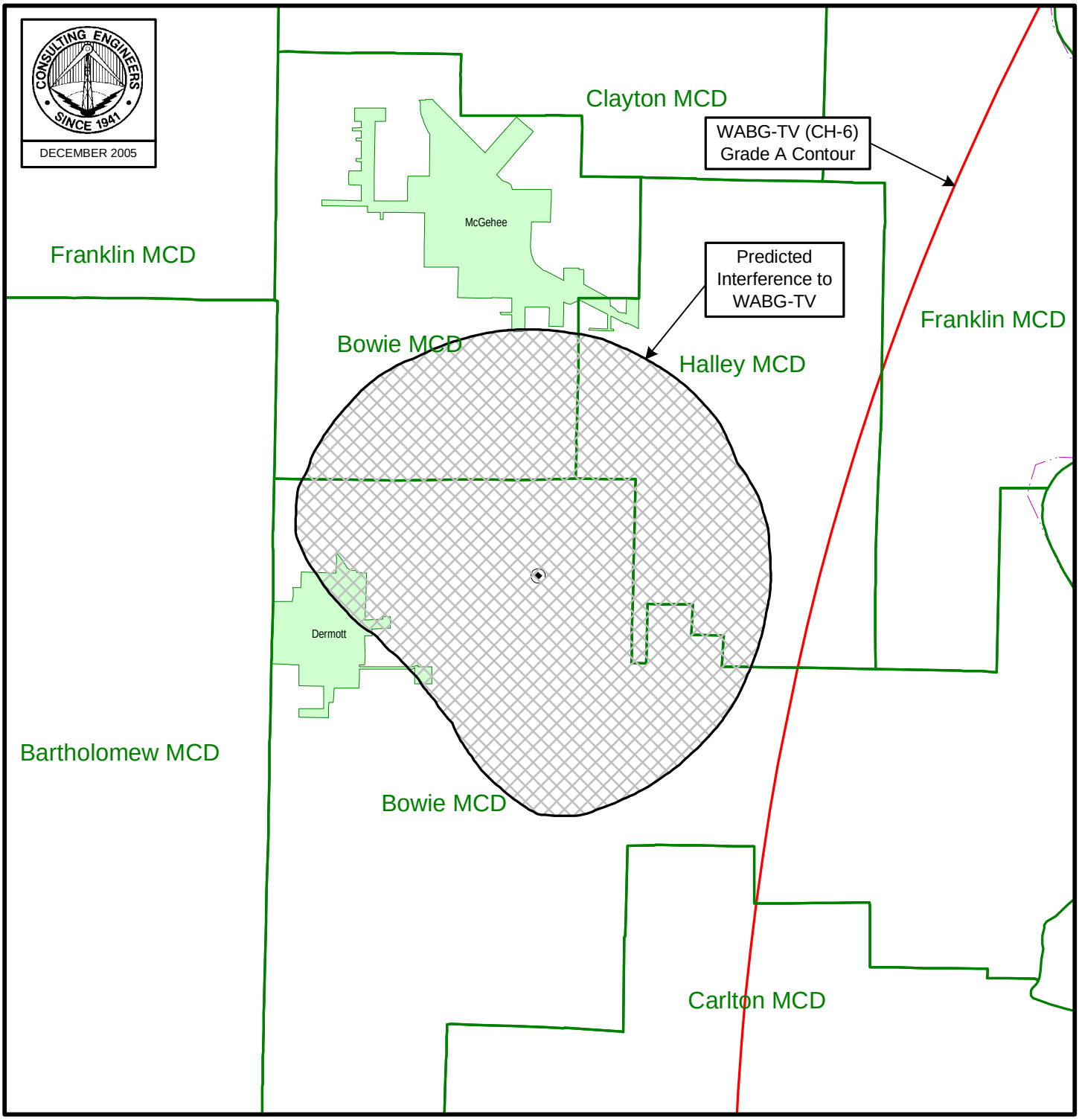

CH 6 INTERFERENCE MAP WITH U.S. CENSUS MINOR CIVIL DIVISIONS (MCD)

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TABULATION OF WFBI(FM)/WABG-TV FIELD STRENGTH CONTOURS*

RelAzimuth(°T)	FMAzimuth	FMContour	FMDist(km)	TVDist(km)	TVAzimuth	TVContour	Ch6Adjust	FMHAAT	TVHAAT
0.00	103.23	79.73099	6.16	73.69	283.69	67.55166	12.17934	96.66	598.22
5.00	108.23	79.72580	6.17	73.71	283.28	67.54298	12.18281	96.76	598.19
10.00	113.23	79.70891	6.17	73.78	282.86	67.51485	12.19406	96.81	598.15
15.00	118.23	79.68370	6.20	73.88	282.45	67.47283	12.21087	97.25	598.11
20.00	123.23	79.64748	6.23	74.03	282.05	67.41246	12.23502	97.70	598.09
25.00	128.23	79.59735	6.25	74.24	281.66	67.32893	12.26843	97.76	598.05
30.00	133.23	79.53192	6.25	74.51	281.29	67.21986	12.31206	97.08	598.00
35.00	138.23	79.45850	6.26	74.81	280.94	67.09749	12.36100	96.70	597.95
40.00	143.23	79.38196	6.29	75.14	280.61	66.96392	12.41804	96.84	597.91
45.00	148.23	79.30618	6.32	75.52	280.30	66.81235	12.49383	96.80	597.88
50.00	153.23	79.22406	6.35	75.93	280.02	66.64810	12.57595	96.99	597.86
55.00	158.23	79.13368	6.37	76.38	279.78	66.46736	12.66632	96.73	597.85
60.00	163.23	79.03888	6.41	76.85	279.55	66.27774	12.76113	96.98	597.85
65.00	168.23	78.93924	6.47	77.34	279.34	66.07849	12.86075	97.66	597.85
70.00	173.23	78.84378	6.45	77.88	279.23	65.85947	12.98432	97.89	597.85
75.00	178.23	78.75293	6.39	78.44	279.18	65.63231	13.12061	97.79	597.85
80.00	183.23	78.65999	6.18	79.01	279.28	65.39996	13.26002	97.83	597.85
85.00	188.23	78.57166	5.87	79.56	279.48	65.17916	13.39250	97.82	597.85
90.00	193.23	78.49150	5.57	80.05	279.70	64.97876	13.51274	97.83	597.85
95.00	198.23	78.41989	5.27	80.48	279.95	64.79974	13.62016	97.72	597.85
100.00	203.23	78.35757	4.97	80.86	280.23	64.64394	13.71363	97.03	597.88
105.00	208.23	78.30405	4.67	81.19	280.51	64.51012	13.79393	96.66	597.90
110.00	213.23	78.25357	4.48	81.49	280.73	64.38393	13.86964	96.37	597.93
115.00	218.23	78.20404	4.36	81.79	280.92	64.26012	13.94393	96.35	597.95
120.00	223.23	78.15598	4.29	82.08	281.10	64.13994	14.01604	96.30	597.98
125.00	228.23	78.10999	4.23	82.35	281.28	64.02495	14.08503	96.21	598.00
130.00	233.23	78.08066	4.24	82.64	281.44	63.90328	14.17738	95.81	598.03
135.00	238.23	78.05505	4.30	82.95	281.59	63.77531	14.27975	95.77	598.05
140.00	243.23	78.02527	4.44	83.30	281.73	63.62634	14.39893	96.44	598.06
145.00	248.23	77.99692	4.57	83.63	281.90	63.48462	14.51230	95.21	598.08
150.00	253.23	77.95874	4.85	84.08	282.04	63.29366	14.66508	95.54	598.09
155.00	258.23	77.92015	5.14	84.54	282.22	63.10074	14.81941	95.07	598.10
160.00	263.23	77.87193	5.44	84.99	282.44	62.90644	14.96549	94.32	598.11
165.00	268.23	77.81346	5.77	85.44	282.69	62.71154	15.10192	94.17	598.13
170.00	273.23	77.75420	6.14	85.90	282.98	62.51398	15.24021	94.30	598.16
175.00	278.23	77.70483	6.46	86.29	283.32	62.34943	15.35540	93.21	598.19
180.00	283.23	77.67848	6.64	86.49	283.69	62.26162	15.41687	93.02	598.22
185.00	288.23	77.66466	6.77	86.60	284.08	62.21551	15.44914	93.84	598.24
190.00	293.23	77.67328	6.78	86.53	284.47	62.24427	15.42901	93.20	598.27
195.00	298.23	77.68286	6.82	86.46	284.86	62.27621	15.40665	94.53	598.28
200.00	303.23	77.70377	6.83	86.30	285.24	62.34592	15.35786	94.85	598.28
205.00	308.23	77.73138	6.82	86.08	285.61	62.43794	15.29344	95.07	598.29
210.00	313.23	77.76456	6.82	85.83	285.97	62.54853	15.21603	95.38	598.30
215.00	318.23	77.80301	6.82	85.53	286.32	62.67668	15.12632	95.81	598.32
220.00	323.23	77.84985	6.79	85.17	286.63	62.83284	15.01701	95.48	598.34
225.00	328.23	77.90334	6.73	84.74	286.91	63.01670	14.88664	94.15	598.37
230.00	333.23	77.94202	6.66	84.29	287.17	63.21004	14.73197	92.90	598.40
235.00	338.23	77.98029	6.65	83.84	287.42	63.40141	14.57887	92.91	598.44
240.00	343.23	78.02101	6.63	83.37	287.64	63.60507	14.41595	92.82	598.47
245.00	348.23	78.06339	6.62	82.87	287.85	63.81688	14.24649	92.92	598.50
250.00	353.23	78.11508	6.60	82.35	288.02	64.03769	14.07739	92.97	598.53
255.00	358.23	78.20605	6.58	81.80	288.15	64.26516	13.94090	93.20	598.53
260.00	3.23	78.29813	6.56	81.25	288.26	64.49529	13.80282	93.68	598.53
265.00	8.23	78.39117	6.54	80.69	288.33	64.72793	13.66324	94.09	598.53
270.00	13.23	78.48398	6.55	80.12	288.38	64.95997	13.52402	95.25	598.53
275.00	18.23	78.57730	6.51	79.55	288.37	65.19327	13.38404	95.06	598.53
280.00	23.23	78.66924	6.48	78.99	288.33	65.42309	13.24615	95.04	598.53
285.00	28.23	78.75940	6.45	78.43	288.25	65.64851	13.11089	95.20	598.53
290.00	33.23	78.84727	6.43	77.89	288.14	65.86818	12.97909	95.41	598.53
295.00	38.23	78.94014	6.40	77.36	288.00	66.08028	12.85986	95.68	598.53
300.00	43.23	79.04041	6.37	76.87	287.81	66.28079	12.75960	95.68	598.50
305.00	48.23	79.13506	6.34	76.40	287.59	66.47011	12.66495	95.68	598.46
310.00	53.23	79.21686	6.25	75.99	287.31	66.63373	12.58314	95.57	598.42
315.00	58.23	79.28758	6.15	75.63	286.99	66.77516	12.51242	95.74	598.37
320.00	63.23	79.36490	6.15	75.25	286.70	66.92980	12.43510	95.89	598.35
325.00	68.23	79.45476	6.22	74.84	286.43	67.09126	12.36349	96.38	598.33
330.00	73.23	79.53384	6.24	74.51	286.09	67.22307	12.31077	96.94	598.31
335.00	78.23	79.60132	6.25	74.23	285.73	67.33554	12.26578	98.02	598.29
340.00	83.23	79.64638	6.21	74.05	285.34	67.41063	12.23575	97.29	598.29
345.00	88.23	79.68575	6.20	73.88	284.94	67.47623	12.20951	97.32	598.28
350.00	93.23	79.71561	6.20	73.76	284.53	67.52601	12.18960	97.56	598.28
355.00	98.23	79.72682	6.17	73.71	284.11	67.54471	12.18212	96.84	598.24

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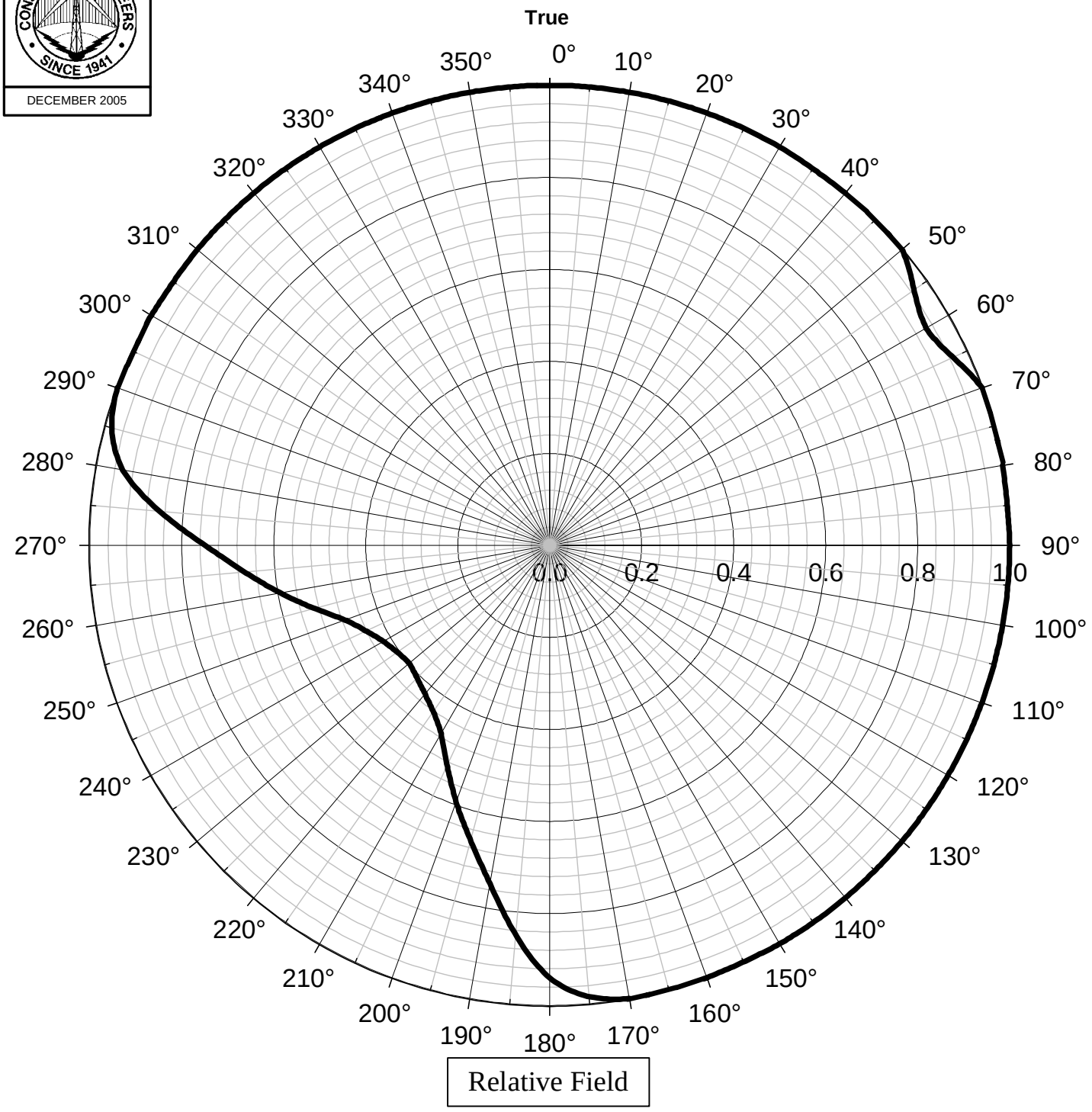

PROPOSED DIRECTIONAL ANTENNA ENVELOPE

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