ENGINEERING EXHIBIT
FURTHER AMENDED APPLICATION FOR CONSTRUCTION PERMIT
SARKES TARZIAN, INC.
STATION WRCB-DT, CHATTANOOGA, TENNESSEE
CHANNEL 13   100 KW (MAX-DA)   370 METERS

INTRODUCTION

Sarkes Tarzian, Inc (hereafter, STI) has filed a maximization application for construction permit (BPCDT-20080618ABW) to increase power for Station WRCB-DT, Chattanooga, Tennessee, Channel 13, from 34.8 kW to 100 kW and to change the antenna radiation center height above average terrain from 335 meters to 370 meters. This application remains pending. By means of the instant further amendment to BPCDT-20080618ABW, STI now corrects the ASRN for the antenna supporting structure. No other change to the pending application is proposed. As established herein, no new interference concerns are raised by the instant amendment.

INTERFERENCE CONSIDERATIONS

The currently pending maximization application for WRCB-DT does not cause interference in excess of 0.5 % to any allotment, construction permit or maximization application. However, it does receive interference in excess of 0.7 % from the pending maximization proposal for WLOS-DT, Asheville, NC, (BMPCDT-20080620AKA).[1]

This amended proposal for WRCB-DT, likewise, does not cause interference in excess of 0.5 % to any allotment, construction permit, or pending maximization application. As is the case with respect to the pending WRCB-DT application, only the WLOS-DT maximization proposal causes excessive interference to the amended WRCB-DT maximization proposal.

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[1] In this connection, it is noted that the pending WLOS-DT maximization proposal exceeds the power/height limitation of Section 73.622(f)(7) of the Rules. No support for this out of tolerance proposal has been provided.

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Station WRCB-DT, Chattanooga, Tennessee

Figure 1 is a resume of the results of an interference analysis study that was made using the William Meintel implementation of the FCC's program. Mr. Meintel is the contractor who developed the FCC's program. A Sunblade processor was used. The post transition Appendix B DTV facilities that are set forth in the Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order in MB Docket No. 87-268 were reviewed, as well as the construction permits and pending applications in the FCC's database. No changes were made to any of the FCC's default values. The 2000 Census was employed.

Figure 1 lists the worst case interference percentage prediction that occurs from the instant WRCB-DT amendment proposal from among the various scenarios that can prevail for each station's identified mode of operation. Figure 1 demonstrates that no Appendix B allotment, outstanding construction permit, or pending application will receive interference exceeding 0.5 % from the amended WRCB-DT proposal

PROPOSED OPERATION DETAILS
The antenna that will be employed is a Dielectric Model THA-C2_4H/12H-1. This antenna will replace the antenna currently employed for analog Station WRCB-TV, Channel 3. The ASRN for the antenna supporting tower is 1212122. Due to the shorter length of the new digital antenna, the overall structure height will be reduced from 777 meters above mean sea level to 754 meters above mean sea level. Following a grant of this application, the ASRN will be modified accordingly. The NAD '27 geographic coordinates for the site are 35° 09' 40" N. Latitude; 85° 18' 51" W. Longitude.

The proposed antenna has a maximum power gain of 17.26 (12.37 dBd), horizontally polarized. Maximum radiation of 100 kW will occur along an azimuth bearing of 87° True at the electrical beam tilt angle of 0.5 ° below the horizontal plane.

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Figure 2 is the azimuth relative field radiation pattern for the antenna, and Figure 3 is the
tabulation of relative field values for the pattern of Figure 2. Figure 4 is the elevation
relative field pattern for the antenna. Figure 5 is a tabulation of relative field data for the
pattern of Figure 4.

Energy from the transmitter will be transferred to the antenna by means of a 153
meter length of 50 ohm, rigid coaxial transmission line having a nominal diameter of 7.9
centimeters. The transmission line loss at Channel 13, for the given length, is 0.72 dB.
With the transmitter power output level set at 6.84 kW, a horizontally polarized
maximum effective radiated power of 100 kW will be achieved. The maximum radiation
will occur at the 0.5 ° beam tilt angle along a bearing of 87° true.

Figure 6 is a map that shows the calculated noise-limited, 36 dBu, and principal
community service, 43 dBu, F(50,90), contours for the proposed operation. All of Chattanooga
is encompassed by the 43 dBu contour, as required by the Rules. The interference-free
population that will be served within the 36 dBu contour is 1,162,070 persons (rounded to
1,162,000 persons) within an area of 26,463 square kilometers. The foregoing numbers are for
Scenario 54 for the proposed WRCB-DT operation. This is an increase over the 1,065,000
persons who are projected to be served within an area of 22,294 square kilometers by the
Appendix B allotment facilities for WRCB-DT. Figure 7 provides the underlying supporting
information for the contours of Figure 6. Calculations were made at 10° intervals, as required by
the FCC's Rules. The antenna center height above average terrain values that are listed are
based on elevation data from the FCC's NGDC 30" terrain elevation database.

ENVIRONMENTAL IMPACT CONSIDERATIONS

Environmental impact considerations are addressed for the proposed operation.
Since the site that is to be employed is already used for broadcasting purposes, only the

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environmental impact concern relating to radiofrequency radiation (rfr) exposure of humans is germane from among the list of environmentally sensitive conditions listed in Section 1.1307 of the FCC Rules.

Commencement of the WRCB-DT operation proposed herein will occur after the cessation of the WRCB-TV, Channel 3, analog operation on February 17, 2009. Since the analog operation for WRCB-TV, Channel 3, will cease before the implementation of the maximized digital operation for WRCB-DT, Channel 13, the impact of the analog operation of WRCB-TV is ignored in the rfr exposure analysis that is presented.

Consideration of prospective exposure levels to the general public at uncontrolled locations is discussed first. This is then followed by a discussion related to worker exposure at controlled locations.

The elevation pattern of Figure 4 and accompanying "Tabulation of Elevation Pattern" of Figure 5 for the proposed WRCB-DT antenna show that the relative field throughout the depression angle range from 67.5° to 90° below the horizontal plane, does not exceed 0.1. In the interest of using conservative criteria for determining the rfr exposure levels from the post-transition WRCB-DT, Channel 13, antenna, a target for uncontrolled location calculations has been chosen to be a point that is 2 meters above ground level as the touchstone for evaluating if overexposure occurs, rather than by evaluating for average whole body exposure, as set forth in the FCC's adopted standard. This procedure simplifies the calculation and adds a safety factor, as well. Also, additional safety factors are built–in by assuming that all the radiation emanates from the bottom of the antenna, and that the maximum relative field radiation within the recited depression angle range prevails throughout the depression angle range.

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Calculations of equivalent plane wave power density have been made for various target distances from the tower base, with the distances corresponding to the target touchdown points for various specified depression angles below the horizontal plane.

For the initial calculation to the target at the tower base, a relative field value in the vertical plane of 0.1 was used, although the pattern of Figure 4 shows the relative field value at 90° to be 0.035. A relative field of 0.1 is reached at a depression angle of 67.5 °. A depression angle of 67.5° corresponds to a target touchdown point at a horizontal distance of 47.2 meters from the tower base.

Thus, this initial calculation result represents the maximum power density level that could occur from the WRCB-DT, Channel 13, antenna within a radius 47.2 meters from the tower base, assuming flat earth. Within this 47.2-meter range, the greatest level of equivalent plane wave power density that could occur would be at the 2-meter above ground level target at the tower base.

The calculations were made using OET Bulletin 65, Edition 97-01, procedures. In each instance, the horizontal and slant range distances to the target from the antenna bottom were determined. The calculation included a 1.6 ground reflection coefficient. The maximum ERP used was 100 kW. The elevation pattern relative field values that were used were determined from Figure 4. Figure 8 presents the calculation results.

The Figure 8 results demonstrate that the proposed operation will not result in a power density level at any uncontrolled area that exceeds 5 % of the maximum permissible exposure (MPE) of 0.2 mW/cm^2 for Channel 13 (210-216 MHz.). This less than 5 % of the MPE contribution from the proposed WRCB-DT operation signifies that in the event that an excessive exposure level occurs at some uncontrolled location

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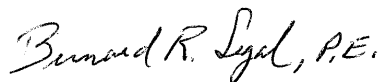Station WRCB-DT, Chattanooga, Tennessee

involving multiple contributors, STI's WRCB-DT is relieved from participating in remedial measures.

As to worker, or controlled location exposure concerns, the WRCB-DT tower is within a fenced enclosure, and the gate entranceway is kept locked at all times. Access within the fence is available only to authorized personnel. Those workers who have activities that require tower climbing, are aware of the procedures to follow to avoid rfr over-exposure. A radiation hazard warning sign is posted on the fence. The fenced area qualifies as a controlled location work area.

Procedures that are now in place regarding power reduction or termination of excitation to the antenna, according to the work effort location that is involved in order to avoid worker overexposure to rfr, will continue to be observed. In this manner, avoidance of overexposure of workers to rfr will continue to be achieved.

The proposal does not require the preparation of an "Environmental Assessment".

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 8, 2009.

Bernard R. Segal, P. E.
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Figure 1
Sheet 1 of 2

SUMMARY OF WORST CASE
INTERFERENCE ANALYSIS RESULTS
WRCB-DT, CHATTANOOGA, TENNESSEE
CHANNEL 13   100 KW (MAX-DA)   370 METERS

Station	Net Served Population Without Prop. WRCB-DT	New IX From Prop. WRCB-DT	Percent IX From Proposed WRCB-DT
WDEF-DT, CHATTANOOGA , TN CH. 12 (DTVP0405) [17/36]	1,164,204	2,592	0.22
WDEF-DT, CHATTANOOGA, TN APPL. BMPCDT20080617ADC [17/36]	1,316,698	1,113	0.08
WVTM, BIRMINGHAM, AL CH. 13 (DTVP0417) [170/324]	1,646,587	5,074	0.31
WVTM, BIRMINGHAM, AL CP, BMPCDT20080410AAY [19/44]	1,656445	6,894	0.42
WMAZ-DT, MACON, GA CH.13 (DTVP0429) [18/24]	817,318	2,829	0.35
WMAZ-DT, MACON, GA CP, BPCDT20080306AAN [3/24]	815,990	2,711	0.33
WMAZ-DT, MACON, GA APPL. BMPCDT20080620AMS [11/24]	884,610	3,764	0.43
WBKO-DT, BOWLING GREEN, KY APPL. BMPCDT20080611AAQ [21/54]	687,591	96	0.01
WBKO-DT, BOWLING GREEN, KY CH. 13 (DTVP0439) [18/54]	599,722	64	0.01
WBKO-DT, BOWLING GREEN, KY CP, BPCDT20080327AHO [1/54]	601,798	-1,653	-0.27
WKYT-DT, LEXINGTON, KY CH. 13 (DTVP0440)/ AND BLCDT20021025AAO [137/648]	916,176	190	0.02

See Sheet 2 for a note pertaining to this study

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Figure 1
Sheet 2 of 2

SUMMARY OF WORST CASE
INTERFERENCE ANALYSIS RESULTS
WRCB-DT, CHATTANOOGA, TENNESSEE
CHANNEL 13   100 KW (MAX-DA)   370 METERS
(CONTINUED)

Station	Net Served Population Without Prop. WRCB-DT	New IX From Prop. WRCB-DT	Percent IX From Proposed WRCB-DT
WLOS-DT, ASHEVILLE, NC APPL. BMPCDT20080620AKA [332/486]	2,639,848	7,243	0.27
WLOS-DT, ASHEVILLE, NC CH. 13 (DTVP0452) and CP, BPCDT20080317AGL [148/194]	2,344,599	11,308	0.48

Note: The numbers in the square brackets under the "Station" heading signify the worst case scenario and the number of scenarios in the study, respectively.

Dielectric

FIGURE 2

AZIMUTH PATTERN

Gain	**3.75**	**(5.74 dB)**		Frequency	**213.00 MHz**
Calculated / Measured		**Calculated**		Drawing #	**THA-C2-13REV11A**

Dielectric
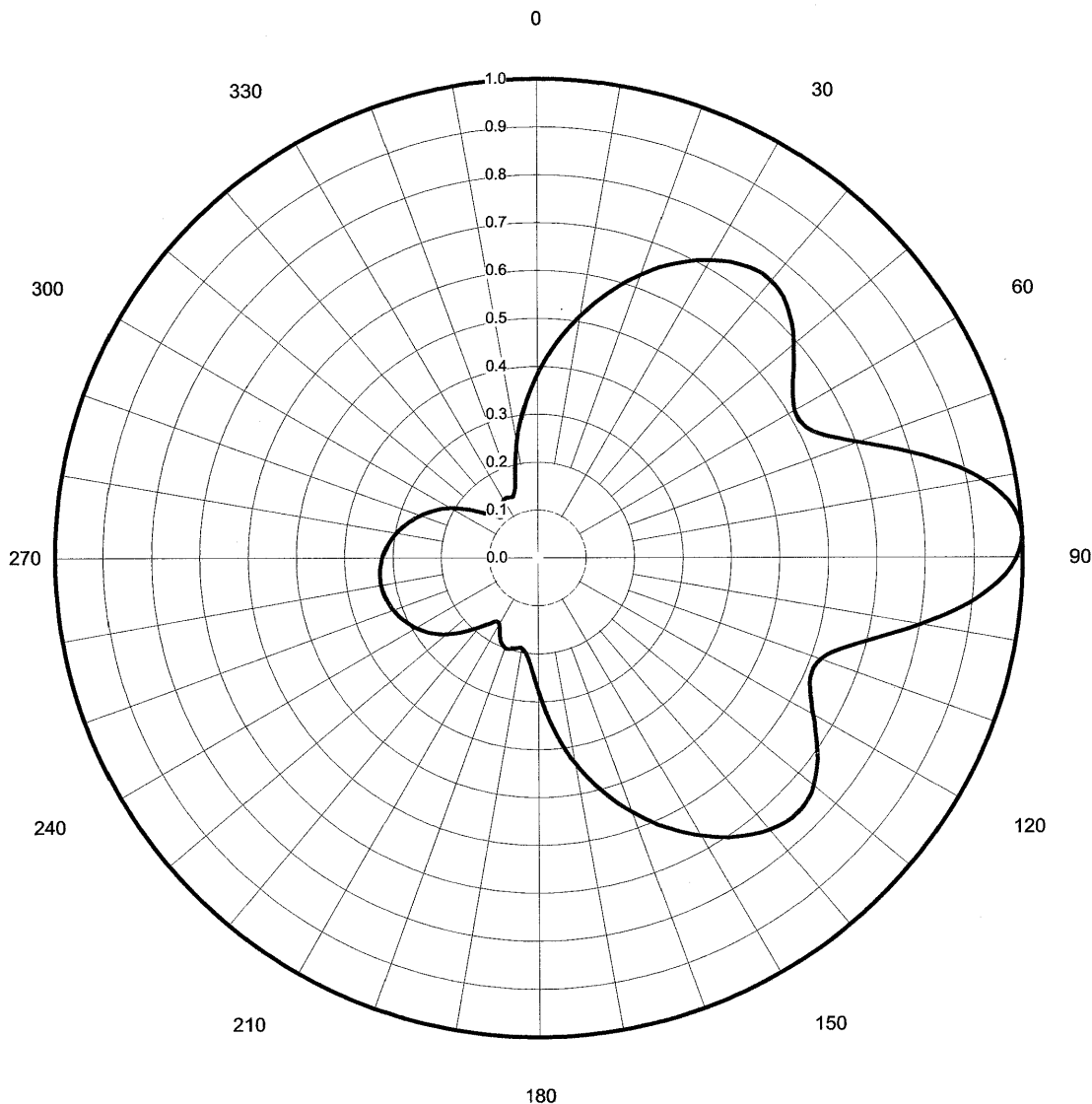
Proposal Number	**C-3057**
Date	**14-Nov-08**
Call Letters	**WRCB** Channel **13**
Location	**Chattanooga, TN**
Customer	**x**
Antenna Type	**THA-C2-4H/12H-1**

FIGURE 3

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #:   **THA-C2-13REV11A**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.384	45	0.734	90	0.988	135	0.755	180	0.278	225	0.217	270	0.322	315	0.124
1	0.398	46	0.727	91	0.979	136	0.755	181	0.263	226	0.224	271	0.320	316	0.121
2	0.411	47	0.720	92	0.966	137	0.752	182	0.250	227	0.229	272	0.318	317	0.118
3	0.425	48	0.712	93	0.952	138	0.749	183	0.237	228	0.235	273	0.316	318	0.115
4	0.438	49	0.702	94	0.935	139	0.745	184	0.226	229	0.241	274	0.314	319	0.113
5	0.450	50	0.692	95	0.916	140	0.741	185	0.216	230	0.247	275	0.312	320	0.113
6	0.463	51	0.683	96	0.896	141	0.737	186	0.208	231	0.253	276	0.310	321	0.114
7	0.476	52	0.673	97	0.873	142	0.730	187	0.202	232	0.258	277	0.307	322	0.117
8	0.489	53	0.665	98	0.850	143	0.724	188	0.198	233	0.263	278	0.304	323	0.119
9	0.501	54	0.655	99	0.826	144	0.717	189	0.194	234	0.267	279	0.301	324	0.123
10	0.513	55	0.646	100	0.801	145	0.711	190	0.191	235	0.272	280	0.298	325	0.126
11	0.525	56	0.638	101	0.777	146	0.704	191	0.189	236	0.276	281	0.295	326	0.129
12	0.537	57	0.630	102	0.753	147	0.695	192	0.191	237	0.280	282	0.291	327	0.133
13	0.550	58	0.624	103	0.729	148	0.687	193	0.192	238	0.284	283	0.287	328	0.136
14	0.561	59	0.618	104	0.707	149	0.678	194	0.194	239	0.287	284	0.284	329	0.139
15	0.572	60	0.614	105	0.686	150	0.669	195	0.195	240	0.291	285	0.280	330	0.140
16	0.584	61	0.613	106	0.668	151	0.660	196	0.195	241	0.295	286	0.276	331	0.141
17	0.596	62	0.612	107	0.651	152	0.650	197	0.197	242	0.298	287	0.272	332	0.142
18	0.608	63	0.615	108	0.638	153	0.640	198	0.199	243	0.301	288	0.268	333	0.142
19	0.618	64	0.619	109	0.627	154	0.630	199	0.200	244	0.304	289	0.263	334	0.141
20	0.629	65	0.627	110	0.619	155	0.620	200	0.199	245	0.307	290	0.259	335	0.140
21	0.639	66	0.638	111	0.615	156	0.609	201	0.198	246	0.310	291	0.255	336	0.139
22	0.650	67	0.651	112	0.612	157	0.598	202	0.196	247	0.312	292	0.250	337	0.138
23	0.660	68	0.668	113	0.613	158	0.586	203	0.193	248	0.314	293	0.245	338	0.138
24	0.669	69	0.686	114	0.614	159	0.575	204	0.189	249	0.316	294	0.240	339	0.140
25	0.678	70	0.707	115	0.618	160	0.564	205	0.184	250	0.318	295	0.236	340	0.142
26	0.687	71	0.729	116	0.624	161	0.552	206	0.179	251	0.320	296	0.231	341	0.146
27	0.695	72	0.753	117	0.630	162	0.540	207	0.174	252	0.322	297	0.226	342	0.150
28	0.704	73	0.777	118	0.638	163	0.527	208	0.169	253	0.323	298	0.220	343	0.156
29	0.711	74	0.801	119	0.646	164	0.515	209	0.164	254	0.324	299	0.215	344	0.167
30	0.717	75	0.826	120	0.655	165	0.502	210	0.160	255	0.326	300	0.209	345	0.178
31	0.724	76	0.850	121	0.665	166	0.489	211	0.157	256	0.327	301	0.203	346	0.190
32	0.730	77	0.873	122	0.673	167	0.475	212	0.157	257	0.327	302	0.197	347	0.203
33	0.737	78	0.896	123	0.683	168	0.462	213	0.157	258	0.328	303	0.190	348	0.216
34	0.741	79	0.916	124	0.692	169	0.448	214	0.160	259	0.328	304	0.184	349	0.230
35	0.745	80	0.935	125	0.702	170	0.435	215	0.163	260	0.329	305	0.178	350	0.245
36	0.749	81	0.952	126	0.712	171	0.421	216	0.169	261	0.329	306	0.172	351	0.260
37	0.752	82	0.966	127	0.720	172	0.406	217	0.173	262	0.329	307	0.165	352	0.274
38	0.755	83	0.979	128	0.727	173	0.390	218	0.178	263	0.328	308	0.159	353	0.287
39	0.755	84	0.988	129	0.734	174	0.374	219	0.183	264	0.328	309	0.153	354	0.301
40	0.754	85	0.994	130	0.741	175	0.358	220	0.188	265	0.327	310	0.147	355	0.315
41	0.753	86	0.999	131	0.747	176	0.342	221	0.193	266	0.327	311	0.142	356	0.329
42	0.750	87	1.000	132	0.750	177	0.326	222	0.199	267	0.326	312	0.137	357	0.342
43	0.747	88	0.999	133	0.753	178	0.309	223	0.205	268	0.324	313	0.132	358	0.356
44	0.741	89	0.994	134	0.754	179	0.293	224	0.211	269	0.323	314	0.128	359	0.370

FIGURE 4

Proposal Number	**DCA-KC613**
Date	**12-Jun-08**
Call Letters	**WRCB** Channel **13**
Location	**Chattanooga, TN**
Customer	
Antenna Type	**THA-C2-4H/12H-1**

ELEVATION PATTERN

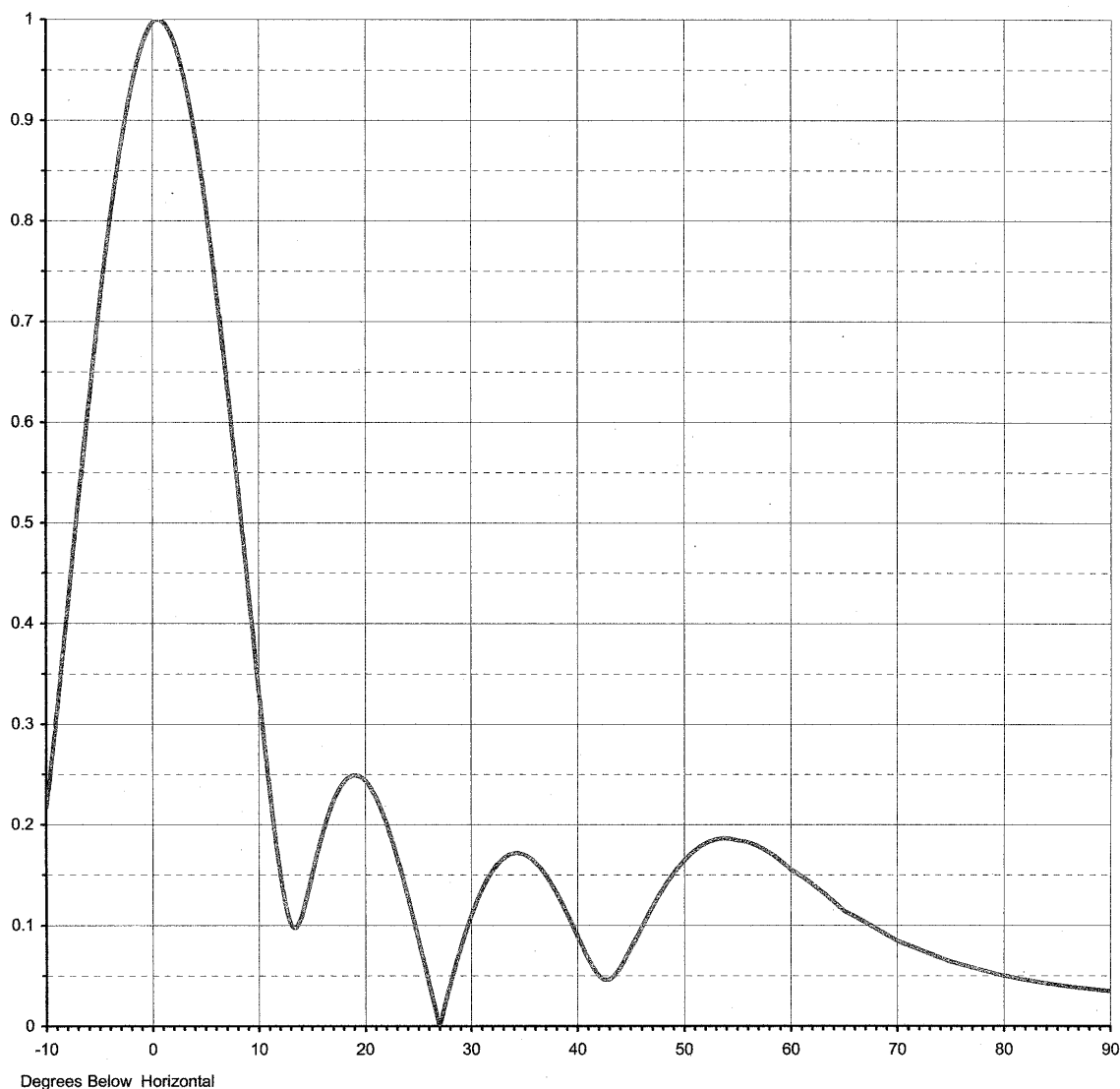|					
RMS Gain at Main Lobe	**4.60**	**(6.63 dB)**	Beam Tilt	**0.50 deg**	
RMS Gain at Horizontal	**4.60**	**(6.63 dB)**	Frequency	**213.00 MHz**	
Calculated / Measured	**Calculated**		Drawing #	**04U046050-S13050-90**	

Degrees Below Horizontal

FIGURE 5

Proposal Number **DCA-KC613**
Date **12-Jun-08**
Call Letters **WRCB** Channel **13**
Location **Chattanooga, TN**
Customer
Antenna Type **THA-C2-4H/12H-1**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **04U046050-S13050-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.218	2.4	0.966	10.6	0.282	30.5	0.121	51.0	0.174	71.5	0.079
-9.5	0.264	2.6	0.958	10.8	0.263	31.0	0.133	51.5	0.178	72.0	0.077
-9.0	0.313	2.8	0.950	11.0	0.244	31.5	0.144	52.0	0.181	72.5	0.075
-8.5	0.363	3.0	0.941	11.5	0.199	32.0	0.153	52.5	0.184	73.0	0.072
-8.0	0.415	3.2	0.932	12.0	0.159	32.5	0.160	53.0	0.185	73.5	0.070
-7.5	0.467	3.4	0.921	12.5	0.126	33.0	0.166	53.5	0.186	74.0	0.068
-7.0	0.519	3.6	0.910	13.0	0.104	33.5	0.169	54.0	0.187	74.5	0.066
-6.5	0.571	3.8	0.899	13.5	0.098	34.0	0.171	54.5	0.186	75.0	0.064
-6.0	0.622	4.0	0.887	14.0	0.106	34.5	0.172	55.0	0.185	75.5	0.063
-5.5	0.671	4.2	0.874	14.5	0.124	35.0	0.171	55.5	0.184	76.0	0.061
-5.0	0.719	4.4	0.861	15.0	0.146	35.5	0.168	56.0	0.183	76.5	0.060
-4.5	0.762	4.6	0.847	15.5	0.167	36.0	0.164	56.5	0.181	77.0	0.058
-4.0	0.803	4.8	0.832	16.0	0.188	36.5	0.158	57.0	0.179	77.5	0.057
-3.5	0.841	5.0	0.817	16.5	0.205	37.0	0.151	57.5	0.176	78.0	0.056
-3.0	0.876	5.2	0.801	17.0	0.220	37.5	0.143	58.0	0.173	78.5	0.054
-2.8	0.889	5.4	0.785	17.5	0.232	38.0	0.134	58.5	0.170	79.0	0.053
-2.6	0.901	5.6	0.768	18.0	0.241	38.5	0.124	59.0	0.166	79.5	0.052
-2.4	0.913	5.8	0.750	18.5	0.247	39.0	0.114	59.5	0.161	80.0	0.050
-2.2	0.924	6.0	0.732	19.0	0.249	39.5	0.103	60.0	0.156	80.5	0.049
-2.0	0.934	6.2	0.714	19.5	0.249	40.0	0.091	60.5	0.153	81.0	0.048
-1.8	0.943	6.4	0.695	20.0	0.245	40.5	0.080	61.0	0.149	81.5	0.047
-1.6	0.952	6.6	0.676	20.5	0.238	41.0	0.069	61.5	0.146	82.0	0.046
-1.4	0.961	6.8	0.657	21.0	0.229	41.5	0.060	62.0	0.142	82.5	0.045
-1.2	0.968	7.0	0.638	21.5	0.218	42.0	0.052	62.5	0.138	83.0	0.044
-1.0	0.975	7.2	0.618	22.0	0.204	42.5	0.047	63.0	0.134	83.5	0.043
-0.8	0.981	7.4	0.598	22.5	0.188	43.0	0.046	63.5	0.130	84.0	0.043
-0.6	0.986	7.6	0.578	23.0	0.171	43.5	0.050	64.0	0.125	84.5	0.042
-0.4	0.991	7.8	0.558	23.5	0.152	44.0	0.057	64.5	0.119	85.0	0.041
-0.2	0.995	8.0	0.537	24.0	0.133	44.5	0.066	65.0	0.115	85.5	0.040
0.0	0.998	8.2	0.516	24.5	0.112	45.0	0.075	65.5	0.112	86.0	0.040
0.2	0.999	8.4	0.496	25.0	0.091	45.5	0.086	66.0	0.109	86.5	0.039
0.4	1.000	8.6	0.475	25.5	0.069	46.0	0.096	66.5	0.106	87.0	0.038
0.6	1.000	8.8	0.454	26.0	0.047	46.5	0.107	67.0	0.103	87.5	0.038
0.8	0.999	9.0	0.434	26.5	0.025	47.0	0.117	67.5	0.100	88.0	0.037
1.0	0.998	9.2	0.413	27.0	0.004	47.5	0.126	68.0	0.097	88.5	0.036
1.2	0.995	9.4	0.393	27.5	0.017	48.0	0.135	68.5	0.094	89.0	0.036
1.4	0.992	9.6	0.372	28.0	0.038	48.5	0.143	69.0	0.091	89.5	0.035
1.6	0.988	9.8	0.362	28.5	0.057	49.0	0.151	69.5	0.088	90.0	0.035
1.8	0.984	10.0	0.342	29.0	0.075	49.5	0.157	70.0	0.085		
2.0	0.979	10.2	0.322	29.5	0.092	50.0	0.163	70.5	0.083		
2.2	0.973	10.4	0.302	30.0	0.107	50.5	0.169	71.0	0.081		

FIGURE 6
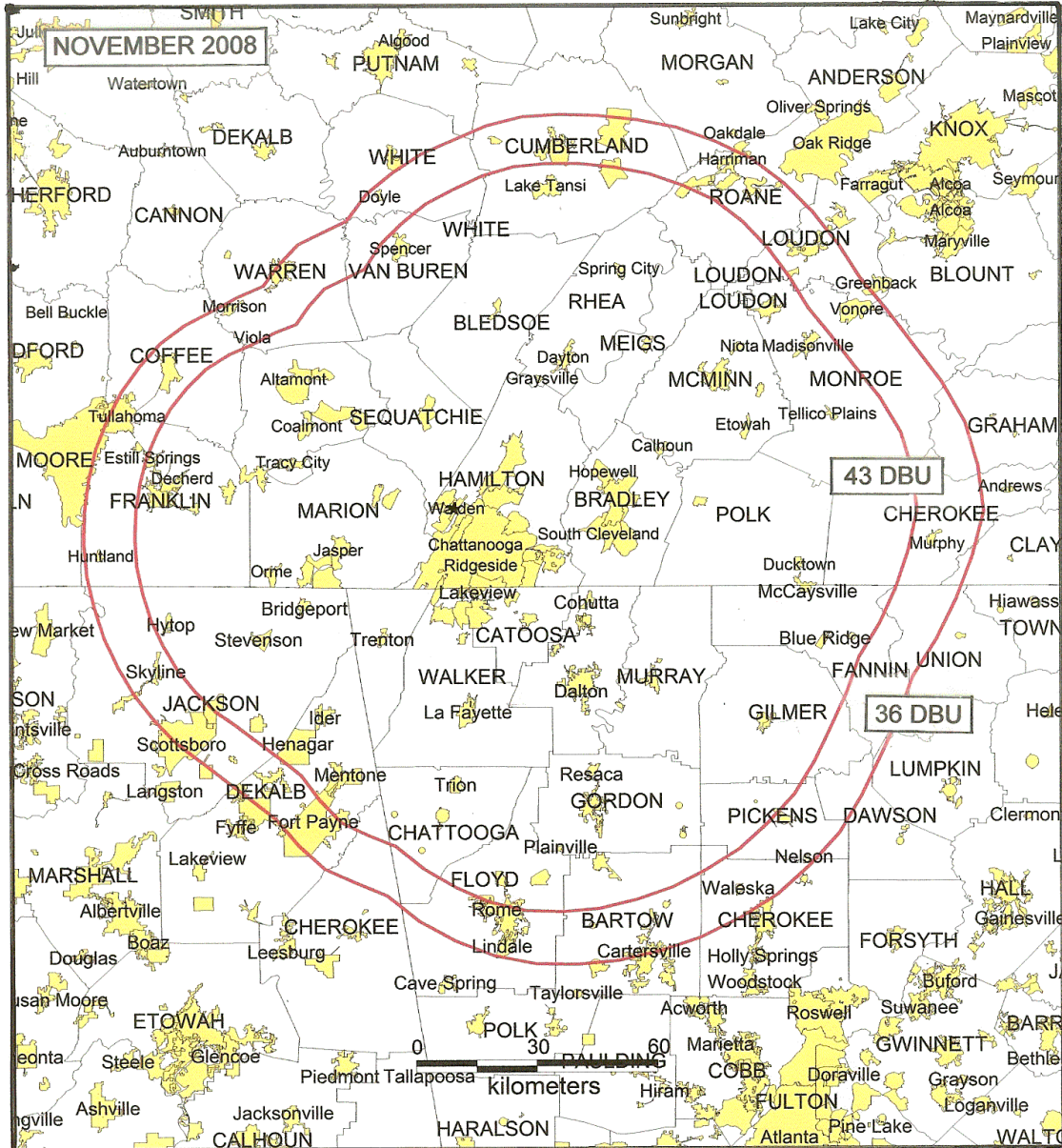
CALCULATED F(50,90) CONTOURS

SARKES TARZIAN, INC.
STATION WRCB-DT, CHATTANOOGA, TENNESSEE
CHANNEL 13   100 KW (MAX-DA)   370 METERS

Bernard R. Segal, P. E.   Consulting Engineer

FIGURE 7

ELEVATION DATA AND
DISTANCES TO SERVICE CONTOURS
PROPOSED WRCB-DT, CHATTANOOGA, TENNESSEE
CH. 13   100 KW (MAX-DA)   370 METERS

NAD '27 Site Coordinates: 35° 09' 40" N; 85° 18' 51" W
Antenna Radiation Center: 749 meters AMSL

		Depression Angle To Radio		Distance To	
				43 dBu	36 dBu
Azimuth	HAAT	Horizon	ERP	Contour	Contour
(Deg. True)	(meters)	(degrees)	(kW)	(km)	(km)
0	216	0.4	14.7	78.4	90.7
10	225	0.4	26.3	83.6	95.8
20	227	0.4	39.6	86.9	99.1
30	232	0.4	51.4	89.2	101.6
40	277	0.5	56.9	92.3	105.0
50	493	0.6	47.9	106.1	120.7
60	507	0.6	37.7	104.9	119.0
70	518	0.6	50.0	108.0	122.4
80	529	0.6	87.4	113.2	129.6
90	514	0.6	97.6	113.4	129.8
100	523	0.6	64.2	110.4	125.4
110	522	0.6	38.3	106.0	119.9
120	518	0.6	42.9	106.7	120.8
130	525	0.6	54.9	109.2	123.8
140	531	0.6	54.9	109.5	124.2
150	524	0.6	44.8	107.5	121.6
160	518	0.6	31.8	104.2	118.0
170	528	0.6	18.9	100.6	113.8
180	527	0.6	7.7	93.3	106.4
190	515	0.6	3.7	86.5	99.4
200	470	0.6	4.0	84.5	96.7
210	307	0.5	2.6	69.9	82.5
220	370	0.5	3.5	77.1	89.5
230	310	0.5	6.1	77.0	89.2
240	371	0.5	8.5	83.8	96.4
250	245	0.4	10.1	77.3	90.0
260	221	0.4	10.8	76.3	88.8
270	255	0.4	10.4	78.1	90.7
280	255	0.4	8.9	76.9	89.5
290	265	0.5	6.7	75.2	87.7
300	244	0.4	4.4	70.5	83.4
310	216	0.4	2.2	63.3	76.0
320	201	0.4	1.3	58.6	70.7
330	173	0.4	2.0	59.8	72.0
340	169	0.4	2.0	59.7	71.8
350	193	0.4	6.0	69.6	82.2

Note: In each direction, the relative field at the depression angle to the radio horizon exceeds 90 % of the maximum in the vertical plane. Therefore, the maximum ERP was used to determine the contour distance.

Figure 8

RADIOFREQUENCY RADIATION EXPOSURE ANALYSIS
RESULTS FOR UNCONTROLLED LOCATIONS
WRCB-DT, CHATTANOOGA, TENNESSEE
CHANNEL 13   100 KW (MAX-DA)   370 METERS

Depression Angle to Target	Distance To Target		Relative Field At Depression Angle	Power Density At Target	Percent Of MPE
	Horizontal	Slant			
(Degrees)	(Meters)	(Meters)		(mW/cm^2)	
90.0	0.0	114	0.100	0.0025	1.3
54.0	82.8	141	0.187	0.0059	3.0
34.5	166	201	0.172	0.0024	1.2
19.0	331	350	0.249	0.0017	0.9
10.0	646	656	0.342	0.0009	0.5
7.4	878	885	0.598	0.0015	0.8
5.0	1303	1308	0.817	0.0013	0.7
3.0	2175	2178	0.941	0.0006	0.3
1.0	6531	6532	0.998	0.0001	0.1

Notes: 1) The calculations made are from the antenna bottom to a target located 2 meters above ground level at the horizontal distance from the tower base for the designated depression angle below the horizontal plane.

2) The calculations assume flat earth.

3) The calculations included a1.6 ground reflection factor.

4) The maximum permissible exposure (MPE) for Channel 13 (210-216 MHz) is 0.2 mW/cm^2.