



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
POST-TRANSITION CONSTRUCTION PERMIT
WCGV-TV - MILWAUKEE, WISCONSIN
CH. 25 - 1000 kW - 340.3 meters HAAT**

Prepared for: WCGV Licensee, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

GENERAL

This office has been authorized by WCGV Licensee, LLC, licensee of WCGV-TV, channel 25, Milwaukee, Wisconsin, to prepare this statement, FCC Form 301, Section III-D, and the associated exhibits in support of an application for a post-transition construction permit. It is proposed herein only to increase WCGV-TV's Effective Radiated Power (ERP) from 625 kW to 1000 kW. Additionally, in 2004 the owner of the tower support structure obtained a modification of the tower's NAD 83 geographic coordinates in the tower's FCC registration, number 1057482. The licensee therefore also requests a conformance change in WCGV-TV's NAD 27 geographic coordinates herein. No other changes are proposed.

The horizontal azimuth pattern and elevation gain pattern of the currently authorized antenna are shown in exhibits 1 to 4. Exhibit 5 is a vertical plan sketch of the authorized antenna support structure.

DTV ALLOCATION CONSIDERATIONS

A study was performed utilizing the Commission's recently revised application processing and interference analysis software to determine compliance with the post-transition limitations contained in §73.616 of the Commission's rules. Results indicate that the instant proposal to increase WCGV-TV's ERP from 625 kW to 1000 kW is predicted to cause no unacceptable level (0.5%) of new interference to the populations served by any DTV station, expansion construction permit or any other pending application for construction permit to maximize DTV facilities.

Class A Television Allocation Considerations

As required in Section 73.613 of the FCC's Rules, the interference contour overlap analysis, which is provided by the Commission's recently revised application processing and interference analysis software, was considered, based on the proposed WCGV-TV facility, to establish compliance with the protection requirements contained therein.

The study results indicate that WCGV-TV's antenna site is located inside the protected contour of an analog displacement construction permit for WMLW-CA, channel 24, Milwaukee, Wisconsin, BDISTTA-20081230ACP. Channel 24 is WCGV-TV's former analog channel. The analog facility authorized in WMLW-CA's displacement construction permit is located approximately 2.8 kilometers from WCGV-TV's authorized site, which essentially constitutes a co-location of sites. The study predicts, based on its Longley-Rice analysis, that there will be an increase in the interference population of WMLW-CA of only 0.219%, which is acceptable. According to Commission records it appears that WMLW-CA has not implemented its displacement authorization and continues to operate, according

to BESTA-20100830ABX, on its pre-displacement analog channel 41. Therefore, until such time that WMLW-CA actually might relocate its operation to channel 24, there is no interference from WCGV-TV.

The contour overlap analysis result also predicts an overlap with the protected contour of analog WOGC-CA, channel 25, Holland, Michigan, BLTTA-20020812ACT. However, the program predicts that there will be no increase at all in the interference population of WOGC-CA. No other prohibited contour overlap is predicted to exist with, nor is any interference predicted to, any other Class A LPTV stations.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.684 of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 6 contains the predicted DTV Noise Limited (41 dBu) contour and the predicted principal community (48 dBu) contour. The predicted 48 dBu contour entirely encompasses the principal community, Milwaukee, Wisconsin.

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast technical facilities are co-located with, or located within 10 km of the authorized WCGV-TV transmitter/antenna site. The applicant

recognizes its responsibility to remedy complaints of interference which might result from this proposal in accordance with applicable Rules.

RADIO FREQUENCY IMPACT

Effective October 15, 1997 the FCC adopted new guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. The guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986) and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines establish maximum permissible exposure (MPE) levels for both occupational or "controlled" environments, as well as for "uncontrolled" environments such that apply in cases that could affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (DA 04-319, February 6, 2004), provides assistance in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with guideline limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. Bulletin No. 65 provides the technical data required to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level established for "uncontrolled" environments is 0.2 milliwatts per centimeter squared (mW/cm^2) when applied to broadcast facilities operating between 30 MHz and 300 MHz, and for broadcast facilities operating between 300 MHz and 1500 MHz, primarily UHF TV stations, is derived from the formula,

(frequency (MHz)/1500). The MPE level established for occupational, or "controlled" environments is 1.0 milliwatts per centimeter squared (mW/cm^2) for operations between 30 MHz and 300 MHz, and for broadcast stations operating between 300 MHz and 1500 MHz is derived from the formula, (frequency (MHz)/300).

The predicted emissions of WCGV-TV operating on channel 25 must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WCGV-TV, which will operate on television Channel 25 (536-542 MHz), the MPE is 0.359 milliwatts per centimeter squared (mW/cm^2) in an "uncontrolled" environment and 1.795 mW/cm^2 in a "controlled" environment. The proposed WCGV-TV facility will operate with a maximum ERP of 1000 kW from an horizontally polarized directional transmitting antenna with a centerline height of 346 meters above ground level (AGL). Considering a very conservative antenna vertical plane relative field factor of 0.3, the WCGV-TV facility is predicted to produce a power density at two meters above ground level of 0.02540 mW/cm^2 , which is 7.07% of the FCC guideline value for an "uncontrolled" environment, and 1.41% of the FCC's guideline value for "controlled" environments (see Appendix A).

There are six other full-service DTV stations, five digital and two analog low power TV stations and five FM radio stations that are authorized to be located at the site, or within the relevant proximity of 315 meters. The total percentage of the ANSI value at the proposed site, including the cumulative radiation from all post-transition broadcast stations within the relevant proximity is 78.03% of the limit for "uncontrolled" environments, and 15.61% of the limit for "controlled" environments. There are no AM stations located within 3.2 kilometers of the proposed site.

OCCUPATIONAL SAFETY

The permittee for WCGV-TV is committed to the protection of station personnel and/or tower contractors working on the tower support structure, or in the vicinity of the proposed WCGV-TV antenna. The applicant is committed to reducing power and/or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure the proper protection of persons who might be required to perform their assigned tasks in this "controlled" environment.

SUMMARY

It is submitted that the instant application for post-transition expansion construction permit for WCGV-TV seeking to increase its ERP from 625 kW to 1000 kW, as described herein complies with the Rules, Regulations and Policies of the Federal Communications Commission. This statement, FCC Form 301, Section III-D, and the attached exhibits were prepared by me, or under my direct supervision, and are believed to be true and correct to the best of my knowledge and belief.

DATED: February 16, 2011



John E. Hidle, P.E.





Proposal Number

DCA-9481

Date

13-Jul-01

Call Letters

WCGV-DT

Channel

25

Location

Milwaukee, WI

Customer

Antenna Type

TFU-28DSC-R CT170 DC

Exhibit 1

AZIMUTH PATTERN

Gain

1.70

(2.30 dB)

Calculated / Measured

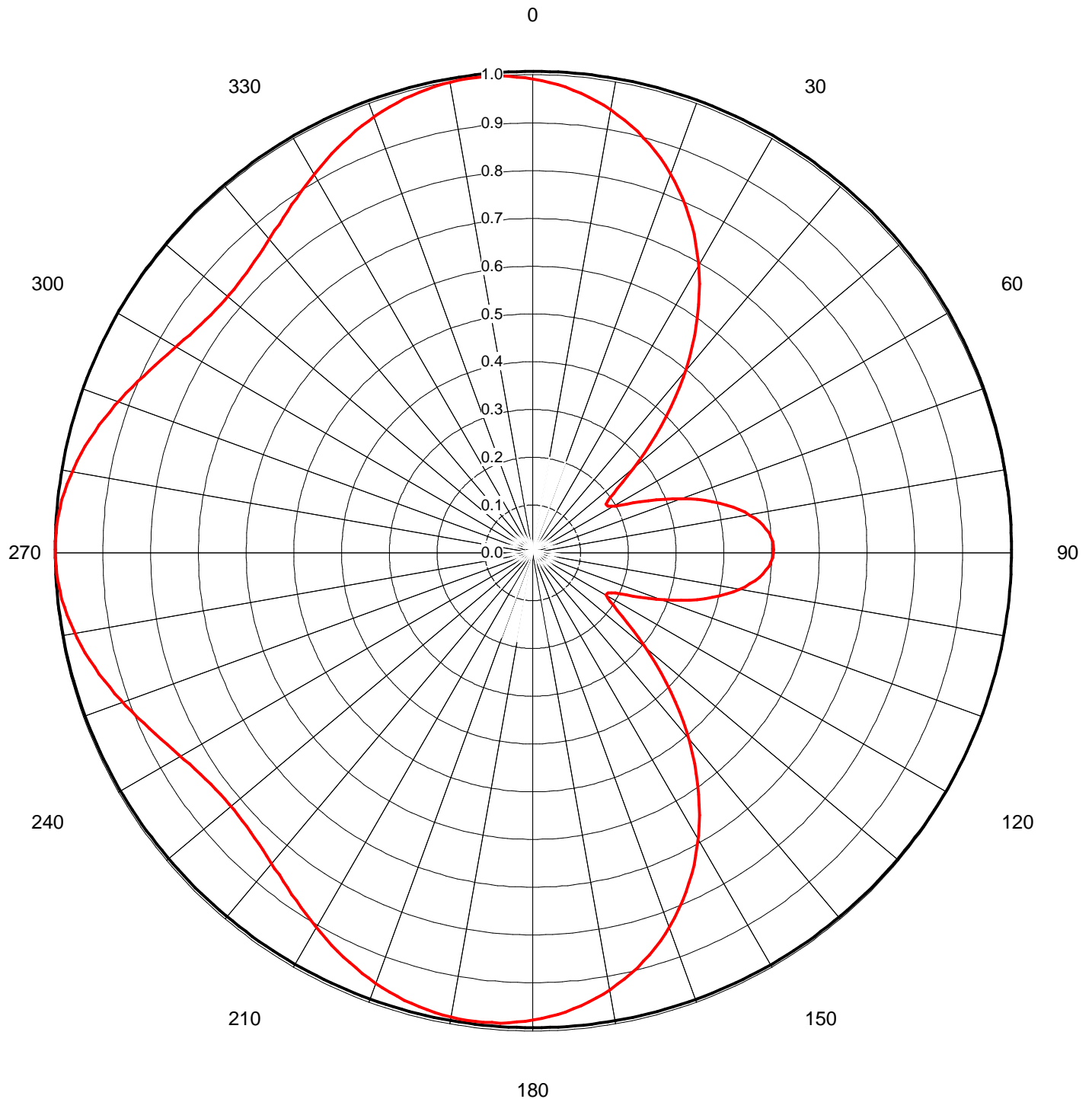
Calculated

Frequency

539.00 MHz

Drawing #

TFU-CT170-25





Proposal Number **DCA-9481**

Date **13-Jul-01**

Call Letters **WCGV-DT**

Location **Milwaukee, WI**

Customer

Antenna Type **TFU-28DSC-R CT170 DC**

Exhibit 2

Channel **25**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **28Q215075-90**

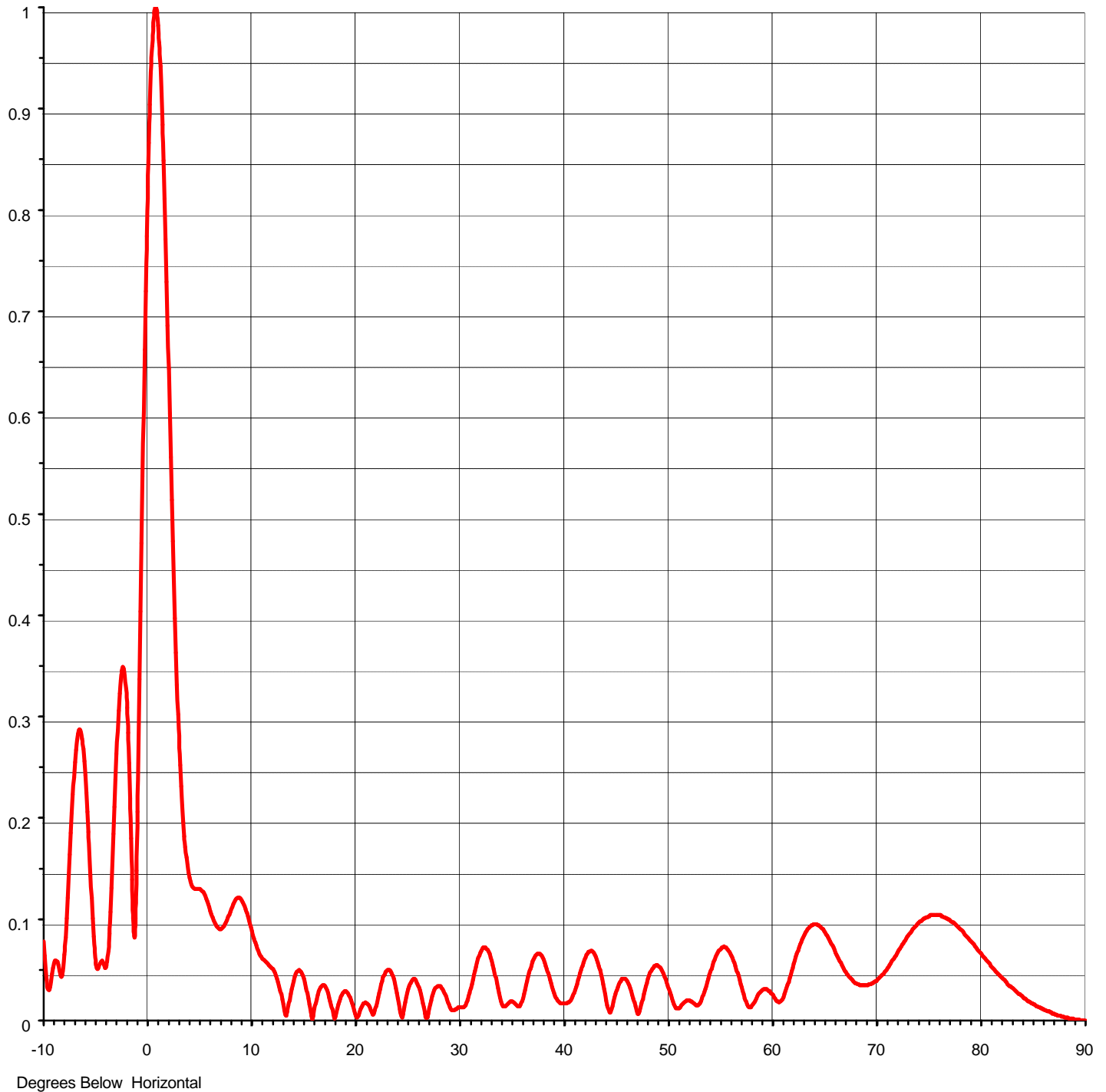
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.078	2.4	0.473	10.6	0.071	30.5	0.014	51.0	0.012	71.5	0.060
-9.5	0.030	2.6	0.397	10.8	0.066	31.0	0.027	51.5	0.017	72.0	0.068
-9.0	0.056	2.8	0.331	11.0	0.063	31.5	0.049	52.0	0.020	72.5	0.076
-8.5	0.050	3.0	0.275	11.5	0.057	32.0	0.067	52.5	0.017	73.0	0.084
-8.0	0.065	3.2	0.231	12.0	0.052	32.5	0.072	53.0	0.016	73.5	0.091
-7.5	0.164	3.4	0.196	12.5	0.041	33.0	0.062	53.5	0.028	74.0	0.097
-7.0	0.255	3.6	0.171	13.0	0.021	33.5	0.042	54.0	0.045	74.5	0.101
-6.5	0.287	3.8	0.153	13.5	0.010	34.0	0.019	54.5	0.060	75.0	0.103
-6.0	0.242	4.0	0.141	14.0	0.035	34.5	0.015	55.0	0.070	75.5	0.104
-5.5	0.143	4.2	0.134	14.5	0.049	35.0	0.019	55.5	0.072	76.0	0.104
-5.0	0.057	4.4	0.131	15.0	0.044	35.5	0.015	56.0	0.066	76.5	0.102
-4.5	0.058	4.6	0.130	15.5	0.022	36.0	0.019	56.5	0.054	77.0	0.099
-4.0	0.053	4.8	0.130	16.0	0.006	36.5	0.039	57.0	0.036	77.5	0.095
-3.5	0.131	5.0	0.130	16.5	0.029	37.0	0.058	57.5	0.019	78.0	0.090
-3.0	0.263	5.2	0.128	17.0	0.035	37.5	0.066	58.0	0.013	78.5	0.084
-2.8	0.306	5.4	0.125	17.5	0.023	38.0	0.062	58.5	0.022	79.0	0.078
-2.6	0.336	5.6	0.120	18.0	0.002	38.5	0.047	59.0	0.029	79.5	0.072
-2.4	0.349	5.8	0.115	18.5	0.019	39.0	0.030	59.5	0.031	80.0	0.066
-2.2	0.340	6.0	0.108	19.0	0.029	39.5	0.019	60.0	0.026	80.5	0.059
-2.0	0.309	6.2	0.102	19.5	0.023	40.0	0.017	60.5	0.019	81.0	0.053
-1.8	0.254	6.4	0.097	20.0	0.007	40.5	0.018	61.0	0.021	81.5	0.047
-1.6	0.180	6.6	0.093	20.5	0.011	41.0	0.027	61.5	0.035	82.0	0.042
-1.4	0.101	6.8	0.091	21.0	0.018	41.5	0.043	62.0	0.052	82.5	0.036
-1.2	0.101	7.0	0.090	21.5	0.010	42.0	0.060	62.5	0.069	83.0	0.032
-1.0	0.206	7.2	0.092	22.0	0.014	42.5	0.068	63.0	0.082	83.5	0.027
-0.8	0.337	7.4	0.095	22.5	0.036	43.0	0.065	63.5	0.091	84.0	0.023
-0.6	0.471	7.6	0.099	23.0	0.049	43.5	0.050	64.0	0.095	84.5	0.019
-0.4	0.601	7.8	0.104	23.5	0.047	44.0	0.026	64.5	0.093	85.0	0.016
-0.2	0.720	8.0	0.110	24.0	0.027	44.5	0.008	65.0	0.087	85.5	0.013
0.0	0.823	8.2	0.115	24.5	0.003	45.0	0.026	65.5	0.078	86.0	0.011
0.2	0.904	8.4	0.119	25.0	0.027	45.5	0.039	66.0	0.067	86.5	0.009
0.4	0.962	8.6	0.121	25.5	0.040	46.0	0.040	66.5	0.057	87.0	0.007
0.6	0.994	8.8	0.121	26.0	0.036	46.5	0.029	67.0	0.048	87.5	0.005
0.8	1.000	9.0	0.119	26.5	0.017	47.0	0.010	67.5	0.041	88.0	0.003
1.0	0.982	9.2	0.115	27.0	0.007	47.5	0.017	68.0	0.037	88.5	0.002
1.2	0.942	9.4	0.110	27.5	0.027	48.0	0.037	68.5	0.035	89.0	0.001
1.4	0.884	9.6	0.103	28.0	0.034	48.5	0.051	69.0	0.035	89.5	0.000
1.6	0.811	9.8	0.099	28.5	0.029	49.0	0.055	69.5	0.037	90.0	0.000
1.8	0.729	10.0	0.092	29.0	0.016	49.5	0.048	70.0	0.040		
2.0	0.643	10.2	0.084	29.5	0.010	50.0	0.035	70.5	0.045		
2.2	0.556	10.4	0.077	30.0	0.013	50.5	0.019	71.0	0.052		



Proposal Number	DCA-9481	Exhibit 3
Date	13-Jul-01	
Call Letters	WCGV-DT	Channel 25
Location	Milwaukee, WI	
Customer		
Antenna Type	TFU-28DSC-R CT170 DC	

ELEVATION PATTERN

RMS Gain at Main Lobe	21.50 (13.32 dB)	Beam Tilt	0.75 deg
RMS Gain at Horizontal	14.60 (11.64 dB)	Frequency	539.00 MHz
Calculated / Measured	Calculated	Drawing #	28Q215075-90





Proposal Number
Date
Call Letters
Location
Customer
Antenna Type

DCA-9481
13-Jul-01
WCGV-DT
Milwaukee, WI

Channel

Exhibit 4

25

TFU-28DSC-R CT170 DC

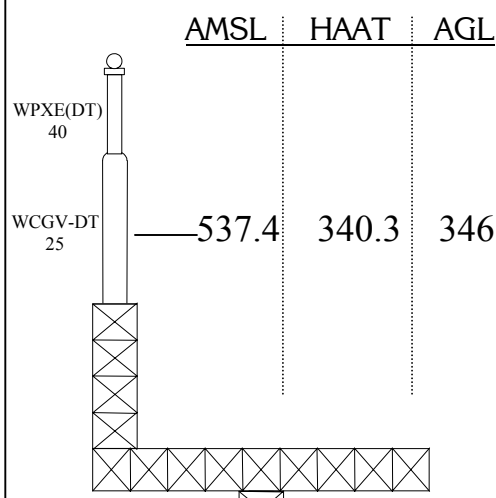
TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-CT170-25**

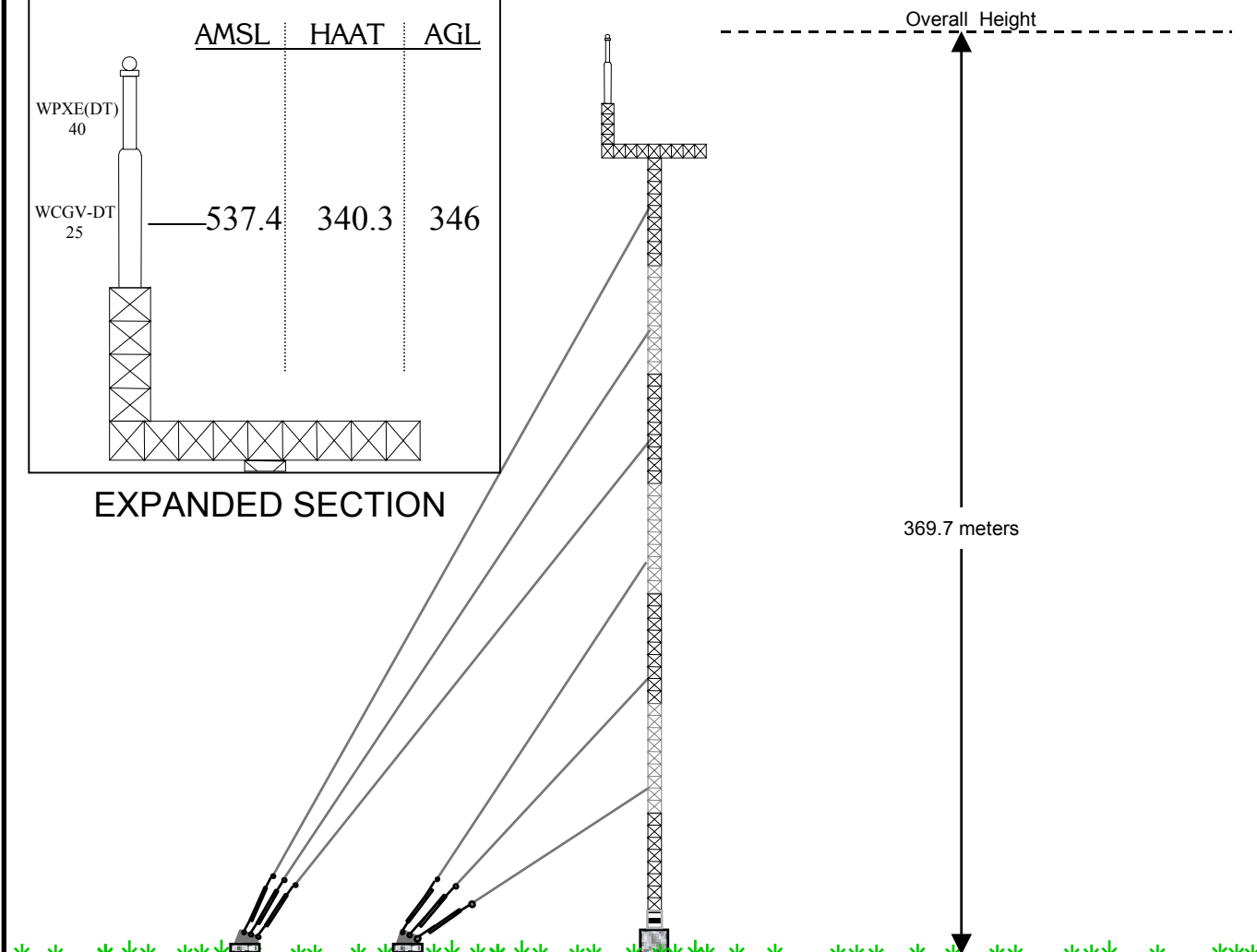
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.984	45	0.392	90	0.503	135	0.392	180	0.984	225	0.836	270	1.000	315	0.836
1	0.981	46	0.371	91	0.502	136	0.414	181	0.987	226	0.833	271	1.000	316	0.839
2	0.977	47	0.350	92	0.501	137	0.435	182	0.989	227	0.832	272	0.999	317	0.842
3	0.973	48	0.329	93	0.497	138	0.457	183	0.991	228	0.830	273	0.998	318	0.845
4	0.969	49	0.308	94	0.494	139	0.478	184	0.992	229	0.830	274	0.996	319	0.850
5	0.964	50	0.288	95	0.489	140	0.499	185	0.993	230	0.830	275	0.994	320	0.854
6	0.959	51	0.269	96	0.483	141	0.520	186	0.994	231	0.830	276	0.991	321	0.859
7	0.953	52	0.250	97	0.476	142	0.540	187	0.994	232	0.831	277	0.988	322	0.864
8	0.947	53	0.234	98	0.468	143	0.560	188	0.994	233	0.833	278	0.985	323	0.869
9	0.940	54	0.217	99	0.459	144	0.580	189	0.994	234	0.834	279	0.981	324	0.875
10	0.934	55	0.205	100	0.450	145	0.600	190	0.993	235	0.837	280	0.977	325	0.881
11	0.926	56	0.193	101	0.438	146	0.619	191	0.992	236	0.840	281	0.972	326	0.886
12	0.918	57	0.186	102	0.427	147	0.637	192	0.990	237	0.844	282	0.967	327	0.892
13	0.910	58	0.180	103	0.414	148	0.656	193	0.988	238	0.848	283	0.962	328	0.898
14	0.901	59	0.180	104	0.401	149	0.673	194	0.986	239	0.852	284	0.956	329	0.904
15	0.891	60	0.180	105	0.387	150	0.691	195	0.983	240	0.857	285	0.950	330	0.911
16	0.882	61	0.187	106	0.373	151	0.707	196	0.980	241	0.862	286	0.945	331	0.917
17	0.871	62	0.193	107	0.357	152	0.724	197	0.977	242	0.868	287	0.938	332	0.923
18	0.860	63	0.205	108	0.342	153	0.740	198	0.973	243	0.873	288	0.932	333	0.928
19	0.849	64	0.216	109	0.326	154	0.755	199	0.969	244	0.879	289	0.925	334	0.934
20	0.837	65	0.231	110	0.310	155	0.770	200	0.965	245	0.886	290	0.919	335	0.940
21	0.824	66	0.245	111	0.293	156	0.785	201	0.960	246	0.892	291	0.912	336	0.945
22	0.812	67	0.261	112	0.277	157	0.798	202	0.956	247	0.899	292	0.905	337	0.951
23	0.798	68	0.277	113	0.261	158	0.812	203	0.951	248	0.905	293	0.899	338	0.956
24	0.785	69	0.293	114	0.245	159	0.824	204	0.945	249	0.912	294	0.892	339	0.960
25	0.770	70	0.310	115	0.231	160	0.837	205	0.940	250	0.919	295	0.886	340	0.965
26	0.755	71	0.326	116	0.216	161	0.849	206	0.934	251	0.925	296	0.879	341	0.969
27	0.740	72	0.342	117	0.205	162	0.860	207	0.928	252	0.932	297	0.873	342	0.973
28	0.724	73	0.357	118	0.193	163	0.871	208	0.923	253	0.938	298	0.868	343	0.977
29	0.707	74	0.373	119	0.187	164	0.882	209	0.917	254	0.945	299	0.862	344	0.980
30	0.691	75	0.387	120	0.180	165	0.891	210	0.911	255	0.950	300	0.857	345	0.983
31	0.673	76	0.401	121	0.180	166	0.901	211	0.904	256	0.956	301	0.852	346	0.986
32	0.656	77	0.414	122	0.180	167	0.909	212	0.898	257	0.962	302	0.848	347	0.988
33	0.637	78	0.427	123	0.186	168	0.918	213	0.892	258	0.967	303	0.844	348	0.990
34	0.619	79	0.438	124	0.193	169	0.926	214	0.886	259	0.972	304	0.840	349	0.992
35	0.600	80	0.450	125	0.205	170	0.934	215	0.881	260	0.977	305	0.837	350	0.993
36	0.580	81	0.459	126	0.217	171	0.940	216	0.875	261	0.981	306	0.834	351	0.994
37	0.560	82	0.468	127	0.234	172	0.947	217	0.869	262	0.985	307	0.833	352	0.994
38	0.540	83	0.476	128	0.250	173	0.953	218	0.864	263	0.988	308	0.831	353	0.994
39	0.520	84	0.483	129	0.269	174	0.959	219	0.859	264	0.991	309	0.830	354	0.994
40	0.499	85	0.489	130	0.288	175	0.964	220	0.854	265	0.994	310	0.830	355	0.993
41	0.478	86	0.494	131	0.308	176	0.969	221	0.850	266	0.996	311	0.830	356	0.992
42	0.457	87	0.497	132	0.329	177	0.973	222	0.845	267	0.998	312	0.830	357	0.991
43	0.435	88	0.501	133	0.350	178	0.977	223	0.842	268	0.999	313	0.832	358	0.989
44	0.414	89	0.502	134	0.371	179	0.981	224	0.839	269	1.000	314	0.833	359	0.987

COORDINATES NAD-27
 NORTH LATITUDE: 43° 05' 46"
 WEST LONGITUDE: 87° 54' 15"

RADIATION CENTERLINE HEIGHT IN METERS



EXPANDED SECTION



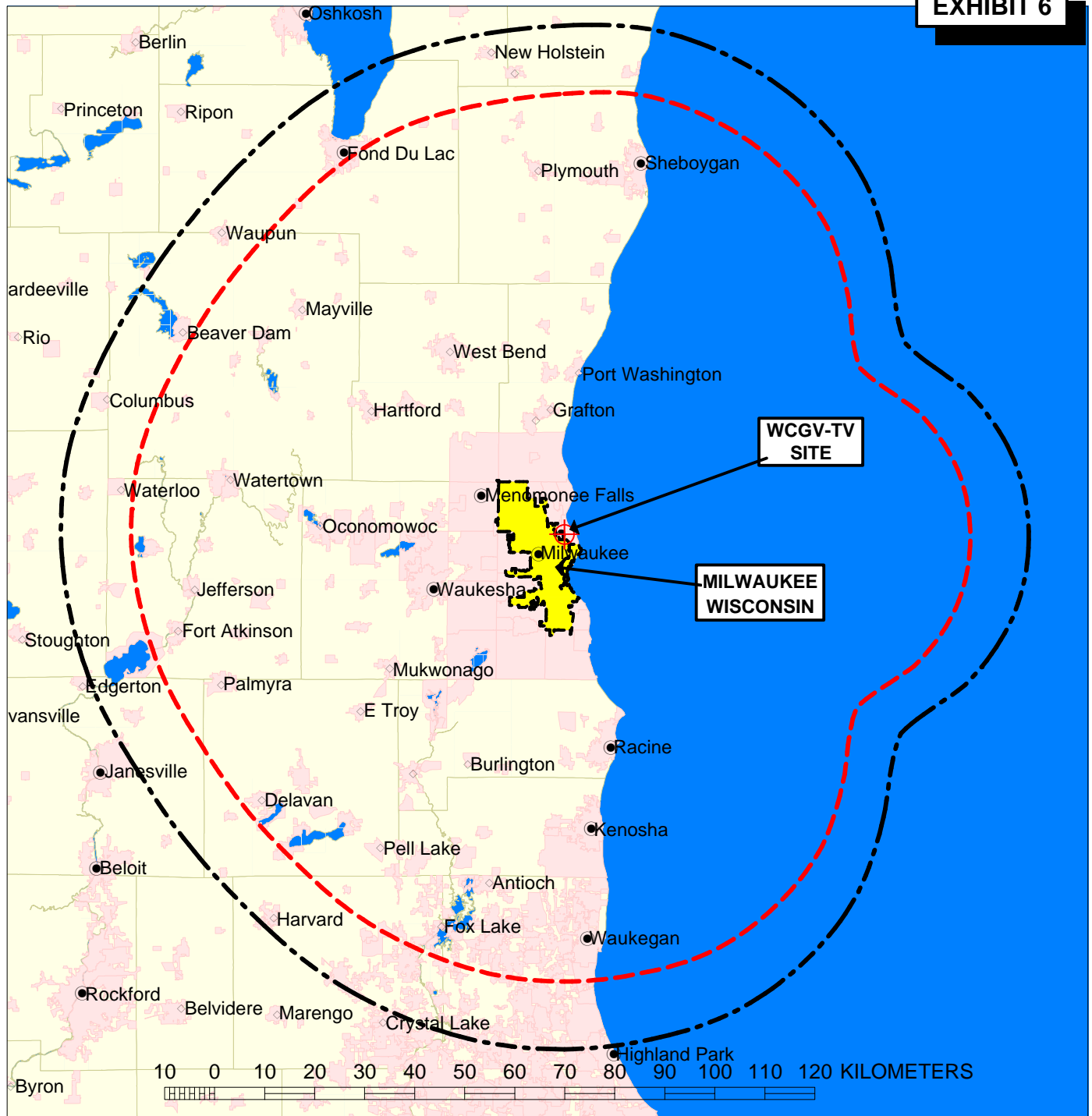
GROUND ELEVATION = 191.4 meters A.M.S.L. / AVERAGE TERRAIN = 197.1 meters A.M.S.L.

VERTICAL PLAN ANTENNA SKETCH

WCGV-TV - MILWAUKEE, WISCONSIN
 Ch. 25 - 1000 kW - 340.3 M HAAT
 FEBRUARY, 2011

CARL T. JONES
 CORPORATION

NOTE : NOT DRAWN TO SCALE



PREDICTED COVERAGE CONTOURS

WCGV-TV, MILWAUKEE, WISCONSIN

DTV - CH. 25 - 1000 kW - 340.3 m HAAT

Predicted Principal Community Contour

F(50,90) - 48 dBu

Area = 21,205 sq km

Population = 2,543,360

Predicted Noise Limited Contour

F(50,90) - 41 dBu

Area = 28,201 sq km

Population = 2,987,311

FEBRUARY 2011

CARL T. JONES
CORPORATION

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
WCGV-TV, MILWAUKEE, WISCONSIN
CHANNEL 25, 1000 kW ERP, 340.3 m HAAT
FEBRUARY, 2011

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT ** mAGL</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>PREDICTED POWER DENSITY (mW/cm²)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm²)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WCGV-TV	DT	25	539	H	344	1000.000	0.300	0.02540	0.359	7.07%
WWAZ-TV	DT	5	79	H	360	25.000	0.300	0.00058	0.200	0.29%
WMVS	DT	8	183	H & V	360.1	69.000	0.300	0.00320	0.200	1.60%
WVTV	DT	18	497	H & V	306.1	745.000	0.300	0.04780	0.331	14.43%
WMKE-LD	DT	21	515	H & V	119.9	15.000	0.300	0.00627	0.343	1.83%
WVCY-TV	DT	22	521	H	292.1	196.000	0.300	0.00691	0.347	1.99%
WPVS-LP	TV	29	563	H & V	233	127.000	0.300	0.00703	0.375	1.87%
WPVS-LP	DT	29	563	H & V	233	8.700	0.300	0.00096	0.375	0.26%
WPVS-LP	DT	30	569	H & V	253.6	15.000	0.300	0.00140	0.379	0.37%
WBWT-LP	DT	31	575	H	196	10.500	0.300	0.00082	0.383	0.21%
WMVT	DT	35	599	H & V	359	688.000	0.300	0.03209	0.399	8.04%
WMVS	DT	36	605	H	211	15.000	0.300	0.00101	0.403	0.25%
WBWT-LP	TV	38	617	H	196	150.000	0.300	0.00587	0.411	1.43%
WPXE-TV	DT	40	629	H	364	830.000	0.300	0.01883	0.419	4.49%
WLDB	FM	227	93.3	H & V	275	16.000	1.000	0.01414	0.200	7.07%
WKLH	FM	243	96.5	H & V	261	20.000	1.000	0.01962	0.200	9.81%
WLVM-FM	FM	271	102.1	H & V	269.3	8.800	1.000	0.00811	0.200	4.05%
WXSS	FM	279	103.7	H & V	272	19.500	1.000	0.01761	0.200	8.81%
WMIL-FM	FM	291	106.1	H & V	310	12.000	1.000	0.00834	0.200	4.17%

TOTAL PERCENTAGE OF ANSI VALUE= 78.03%

*** The antenna heights indicated above are 2 meters less than the actual antenna heights
so that the predicted power densities consider the 2 meter human height allowance.*

This evaluation includes facilities collocated at the site, and facilities located within 315 meters.