

**STATEMENT OF JOHN E. HIDLE, JR.
IN SUPPORT OF
AN AMENDMENT TO AN APPLICATION
TO MODIFY CONSTRUCTION PERMIT
BMPCDT-20030717AAB
WCHS-DT - CHARLESTON, WEST VIRGINIA
DT - CH. 41 – 475 kW – 514.1 M HAAT**

Prepared for: WCHS LICENSEE, LLC.

DECEMBER, 2003

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Prepared for: WCHS LICENSEE, LLC.

I am an 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.

GENERAL

This office has been authorized by WCHS Licensee, LLC., permittee of WCHS-DT, channel 41, Charleston, West Virginia, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of an Amendment to an Application to Modify a Construction Permit. The original Request to Modify a Construction Permit, file number BMPCDT-20030717AAB, proposed to relocate the transmission facilities of WCHS-DT to the WVAH-TV tower site at 38° 25' 15" N latitude, 81° 55' 27" W longitude. The original support structure of the WVAH-TV facilities collapsed during a winter storm in February, 2003, and it was proposed to replace the structure with a stronger tower that would accommodate both the facilities of WVAH-TV, as well as those of WCHS-TV. It was

proposed that WCHS-DT would share a common non-directional antenna with the digital facilities of WVAH-DT, and would collocate on the replacement tower with the analog transmission facilities of WCHS-TV on channel 8, and WVAH-TV on channel 11. However, the former WVAH-TV site has become unavailable, and therefore it is proposed that the tower (including the proposed antenna stacking configuration) intended to be constructed as a replacement tower at the now unavailable WVAH-TV site be constructed at the present site of WCHS-TV at 38° 24' 28" N latitude, 81° 54' 13" W longitude. (NAD 27 datum).

This addendum alters the previous proposal, BMPCDT-20030717AAB, in the following ways:

1. It is proposed to locate the WCHS-DT transmission facilities on a new structure at its existing tower site, located at 38° 24' 28" N latitude, 81° 54' 13" W longitude. (NAD 27 datum).
2. It is proposed herein increase the requested WCHS-DT Height Above Average Terrain (HAAT) from 504.5 meters to 514.1 meters.
3. It is proposed herein to reduce the requested WCHS-DT effective radiated power from 500 kW to 475 kW.

These proposed changes to the pending application have become necessary as a result of the unavailability of the tower site proposed in the Application to Modify Construction Permit,

file number BMPCDT-20030717AAB, filed in July, 2003.

PROPOSED NON-DIRECTIONAL ANTENNA

The applicant intends to utilize the new non-directional transmitting antenna currently proposed in the outstanding Application to Modify Construction Permit file number BMPCDT-20030717AAB, filed in July, 2003; a Dielectric TUC-O5-10/50H-1-B, that will be shared with the transmission facility of WVAH-DT channel 19. This antenna will be top-mounted on the proposed support structure, and will support the proposed analog antennas for WVAH-TV channel 11, and WCHS-TV channel 8. A Vertical Plan Antenna Sketch, showing the stacking configuration on top of the proposed support structure, is provided as Exhibit 1. The antenna manufacturer's vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibit 2A and 2B, and tabulated in Exhibit 3.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours of the WCHS-DT facility proposed herein 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), 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, the antenna site

elevation and coordinates were determined from the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The predicted principal community (48 dBu) contour completely encompasses the principal community of license, shown in Exhibit 4, as required by FCC Rules. The predicted 41 dBu protected coverage contour is also shown in Exhibit 4.

ALLOCATION CONSIDERATIONS

Full Service Television Considerations

An interference study was performed, using the Commission's application analysis program, "TV-Process," to ensure that the proposed WCHS-DT facility is in compliance with the Commission's *de minimis* interference requirements in regard to full service NTSC and DTV stations. TV-Process indicated no unacceptable interference to the authorized or requested facility of any full service NTSC or DTV station.

Class A Television Allocation Considerations

As required in Section 73.613 of the FCC's Rules, as established in the Report and Order establishing Class A Television Service, released April 4, 2000, a study of interference contour overlap was performed, based on the WCHS-DT facility proposed herein, to establish compliance with the protection requirements contained therein. The protection requirement is based upon a showing that that a proposal for a new or modified

facility does not create prohibited contour overlap as defined by the FCC Rules. However, a DTV station is allowed contour overlap to a Class A television station that already exists based upon the requested facility of the DTV station filed on or before December 31, 1999, or before April 30, 2000, based upon a letter of intent to maximize filed on or before December 31, 1999. A full service digital television station must provide protection of at least 34 dB based on an F(50,10) interference contour as calculated according to the method in 47 CFR §73.699, to the protected 74 dBu F(50,50) contour of a VHF co-channel Class A Station. Results of the contour overlap study, shown herein as Exhibit 5, indicate that the instant proposal will result in no increase in prohibited contour overlap of LPTV stations which have obtained Class A status. The study further shows that preexisting contour overlap to co-channel Class A television station WKPZ-LP, that is allowed based upon the facility of WCHS-DT requested prior to December 31, 1999, will be reduced by the instant proposal.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed WCHS-DT transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference created by this proposal in accordance with applicable Rules.

ENVIRONMENTAL CONSIDERATIONS

RADIO FREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted 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 provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations that apply in cases that 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" (Edition 97-01, August 1997), 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 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level 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 DT stations, is derived from the formula, $(\text{frequency}/1500)$. The MPE level for "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 in a "controlled" environment is derived from the formula, $(\text{frequency}/300)$.

The predicted emissions of WCHS-DT channel 41 must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For WCHS-DT, which will operate on channel 41 (635 MHz), the MPE level for "uncontrolled" environments is $0.423 \text{ mW}/\text{cm}^2$, and for "controlled" environments is $2.115 \text{ mW}/\text{cm}^2$.

The proposed WCHS-DT facility, channel 41, will operate with a maximum ERP of 475 kW from a horizontally polarized directional transmitting antenna with a centerline height of 432.1 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the WCHS-DT facility produces a predicted power density at two meters above ground level of $0.00772 \text{ mW}/\text{cm}^2$, which is 1.82% of the FCC guideline value for "uncontrolled" environments, and 0.364% of the FCC guideline value for "controlled" environments.

As shown in Appendix A, the total predicted percentage of the MPE value at WCHS's site, considering the cumulative predicted radiation of all of the stations which are located at the site, is only 4.51% of the limit for "uncontrolled" environments, and 0.90% of the limit for

"controlled" environments. The site is therefore in compliance with the FCC's Maximum Permitted Exposure guidelines.

OCCUPATIONAL SAFETY

The permittee of WCHS-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WCHS-DT antenna. The applicant is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection to personnel. In light of the above, the proposed modification of the WCHS-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

It is submitted that the proposal described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301, Sections III and 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: December 11, 2003

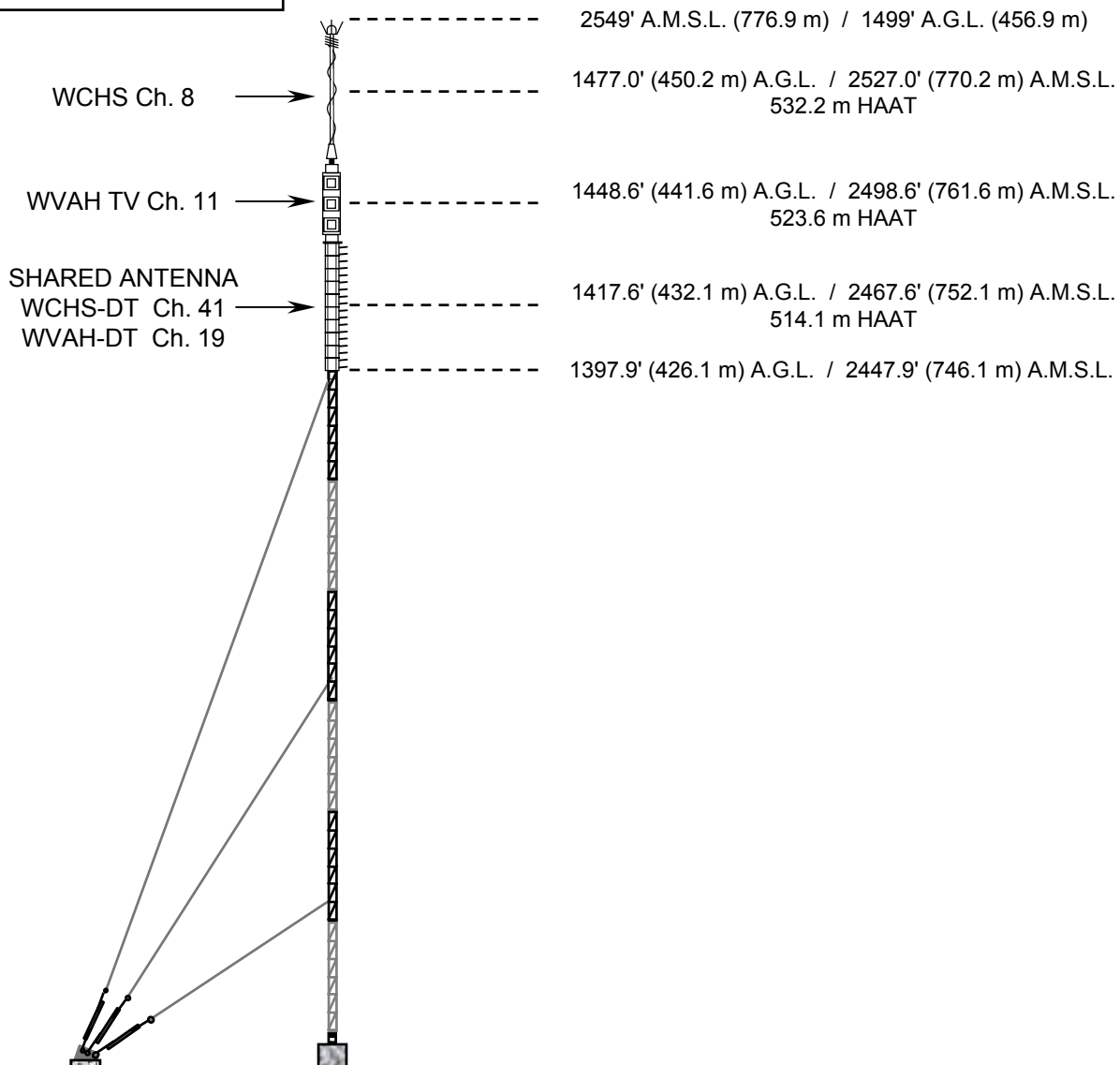


John E. Hidle, Jr.

COORDINATES NAD-27

NORTH LATITUDE: 38° 24' 28"
WEST LONGITUDE: 81° 54' 13"

EXHIBIT 1



VERTICAL PLAN ANTENNA SKETCH
WCHS-DT - CHARLESTON, WEST VIRGINIA
NEW TOWER AT EXISTING SITE
475 kW ERP - 514.1 m HAAT
DECEMBER, 2003

CARL T. JONES
CORPORATION

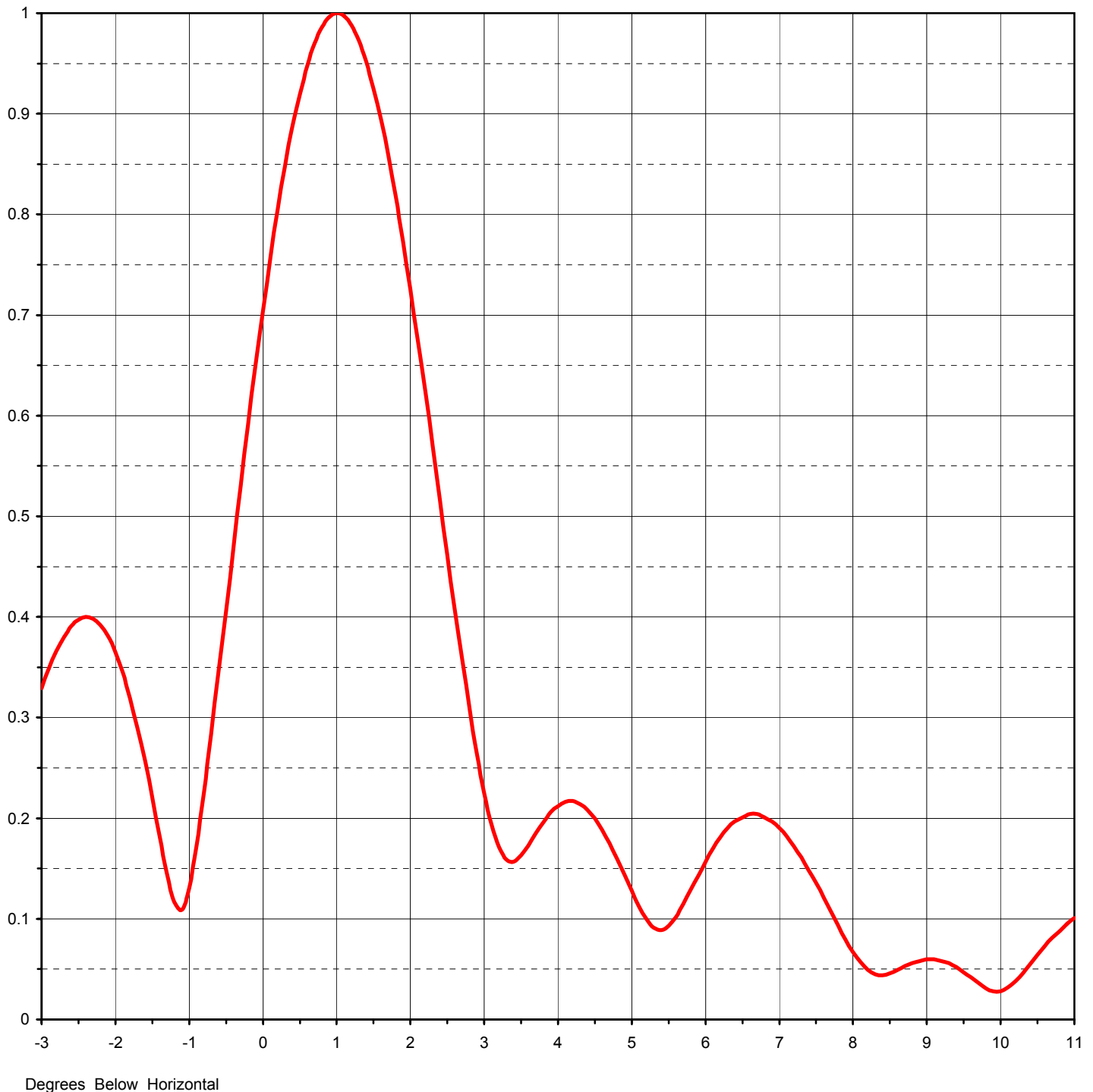
NOTE : NOT DRAWN TO SCALE



Proposal Number	DCA-10186	Exhibit 2A
Date	4-Mar-03	
Call Letters	WCHS-DT	Channel 41
Location	Charleston, WV	
Customer	Sinclair	
Antenna Type	TUC-O5-10/50H-1-B	

ELEVATION PATTERN

RMS Gain at Main Lobe	21.60 (13.34 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	10.70 (10.29 dB)	Frequency	635.00 MHz
Calculated / Measured	Calculated	Drawing #	10U216100

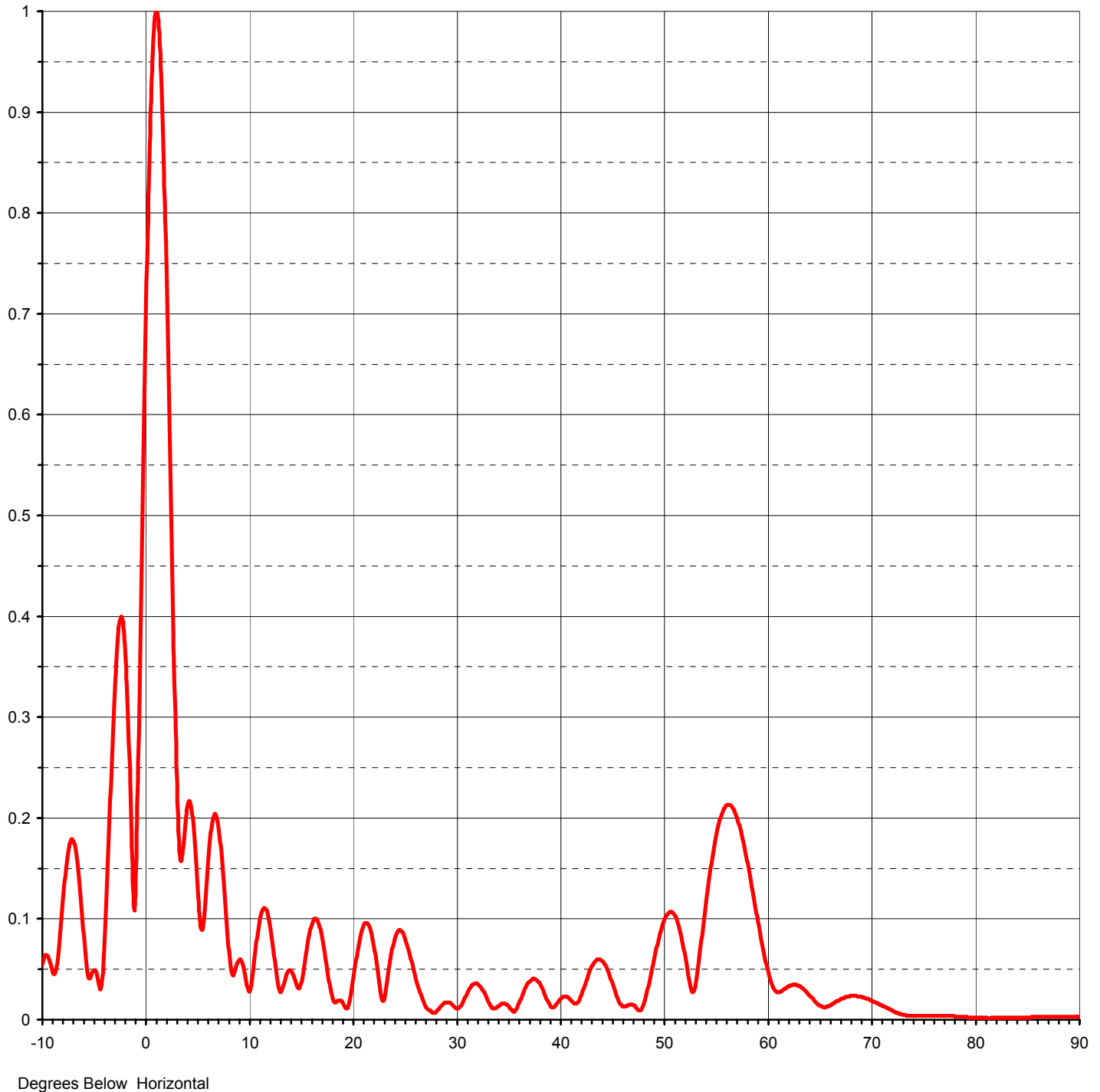




Proposal Number	DCA-10186	Exhibit 2B
Date	4-Mar-03	
Call Letters	WCHS-DT	Channel 41
Location	Charleston, WV	
Customer	Sinclair	
Antenna Type	TUC-O5-10/50H-1-B	

ELEVATION PATTERN

RMS Gain at Main Lobe	21.60 (13.34 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	10.70 (10.29 dB)	Frequency	635.00 MHz
Calculated / Measured	Calculated	Drawing #	10U216100-90



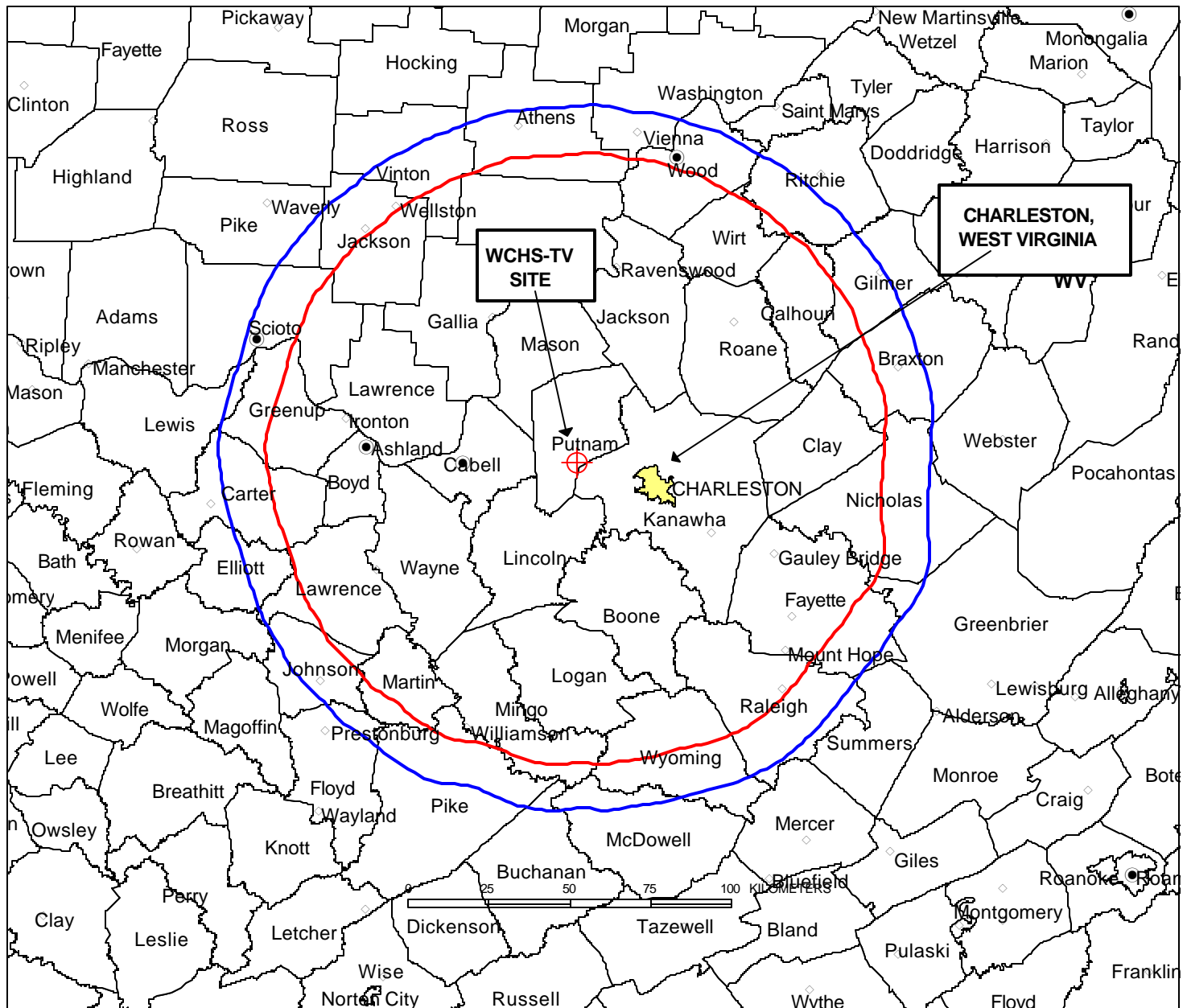


Proposal Number **DCA-10186** **Exhibit 3**
 Date **4-Mar-03**
 Call Letters **WCHS-DT** Channel **41**
 Location **Charleston, WV**
 Customer **Sinclair**
 Antenna Type **TUC-O5-10/50H-1-B**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **10U216100-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.055	2.4	0.516	10.6	0.064	30.5	0.014	51.0	0.105	71.5	0.011
-9.5	0.063	2.6	0.409	10.8	0.081	31.0	0.025	51.5	0.091	72.0	0.009
-9.0	0.047	2.8	0.309	11.0	0.095	31.5	0.034	52.0	0.067	72.5	0.007
-8.5	0.062	3.0	0.225	11.5	0.111	32.0	0.036	52.5	0.038	73.0	0.005
-8.0	0.120	3.2	0.171	12.0	0.096	32.5	0.030	53.0	0.031	73.5	0.004
-7.5	0.167	3.4	0.157	12.5	0.059	33.0	0.020	53.5	0.067	74.0	0.004
-7.0	0.177	3.6	0.173	13.0	0.028	33.5	0.011	54.0	0.108	74.5	0.004
-6.5	0.144	3.8	0.196	13.5	0.040	34.0	0.013	54.5	0.147	75.0	0.004
-6.0	0.083	4.0	0.212	14.0	0.049	34.5	0.016	55.0	0.179	75.5	0.004
-5.5	0.041	4.2	0.217	14.5	0.038	35.0	0.014	55.5	0.201	76.0	0.004
-5.0	0.049	4.4	0.208	15.0	0.034	35.5	0.008	56.0	0.212	76.5	0.004
-4.5	0.033	4.6	0.188	15.5	0.064	36.0	0.015	56.5	0.212	77.0	0.004
-4.0	0.080	4.8	0.160	16.0	0.092	36.5	0.027	57.0	0.203	77.5	0.004
-3.5	0.205	5.0	0.128	16.5	0.100	37.0	0.037	57.5	0.185	78.0	0.003
-3.0	0.329	5.2	0.100	17.0	0.085	37.5	0.041	58.0	0.161	78.5	0.003
-2.8	0.366	5.4	0.089	17.5	0.055	38.0	0.037	58.5	0.132	79.0	0.003
-2.6	0.391	5.6	0.102	18.0	0.025	38.5	0.026	59.0	0.103	79.5	0.002
-2.4	0.400	5.8	0.129	18.5	0.018	39.0	0.015	59.5	0.075	80.0	0.002
-2.2	0.392	6.0	0.157	19.0	0.018	39.5	0.013	60.0	0.051	80.5	0.002
-2.0	0.365	6.2	0.181	19.5	0.011	40.0	0.020	60.5	0.034	81.0	0.002
-1.8	0.319	6.4	0.197	20.0	0.036	40.5	0.023	61.0	0.027	81.5	0.002
-1.6	0.257	6.6	0.204	20.5	0.068	41.0	0.020	61.5	0.029	82.0	0.002
-1.4	0.182	6.8	0.201	21.0	0.091	41.5	0.016	62.0	0.033	82.5	0.002
-1.2	0.117	7.0	0.190	21.5	0.095	42.0	0.023	62.5	0.035	83.0	0.002
-1.0	0.131	7.2	0.172	22.0	0.077	42.5	0.037	63.0	0.034	83.5	0.002
-0.8	0.225	7.4	0.148	22.5	0.043	43.0	0.051	63.5	0.030	84.0	0.002
-0.6	0.345	7.6	0.121	23.0	0.019	43.5	0.059	64.0	0.025	84.5	0.002
-0.4	0.469	7.8	0.093	23.5	0.050	44.0	0.059	64.5	0.018	85.0	0.002
-0.2	0.591	8.0	0.067	24.0	0.077	44.5	0.052	65.0	0.014	85.5	0.003
0.0	0.705	8.2	0.049	24.5	0.089	45.0	0.038	65.5	0.012	86.0	0.003
0.2	0.805	8.4	0.044	25.0	0.082	45.5	0.023	66.0	0.014	86.5	0.003
0.4	0.887	8.6	0.049	25.5	0.066	46.0	0.013	66.5	0.018	87.0	0.003
0.6	0.948	8.8	0.056	26.0	0.045	46.5	0.014	67.0	0.021	87.5	0.003
0.8	0.986	9.0	0.060	26.5	0.028	47.0	0.015	67.5	0.023	88.0	0.003
1.0	1.000	9.2	0.058	27.0	0.014	47.5	0.010	68.0	0.024	88.5	0.003
1.2	0.988	9.4	0.052	27.5	0.009	48.0	0.013	68.5	0.024	89.0	0.003
1.4	0.952	9.6	0.042	28.0	0.007	48.5	0.032	69.0	0.023	89.5	0.003
1.6	0.894	9.8	0.036	28.5	0.013	49.0	0.055	69.5	0.021	90.0	0.003
1.8	0.818	10.0	0.028	29.0	0.017	49.5	0.079	70.0	0.019		
2.0	0.726	10.2	0.032	29.5	0.016	50.0	0.097	70.5	0.016		
2.2	0.624	10.4	0.046	30.0	0.011	50.5	0.106	71.0	0.014		




PREDICTED COVERAGE CONTOURS

WCHS-DT, CHARLESTON, WEST VIRGINIA

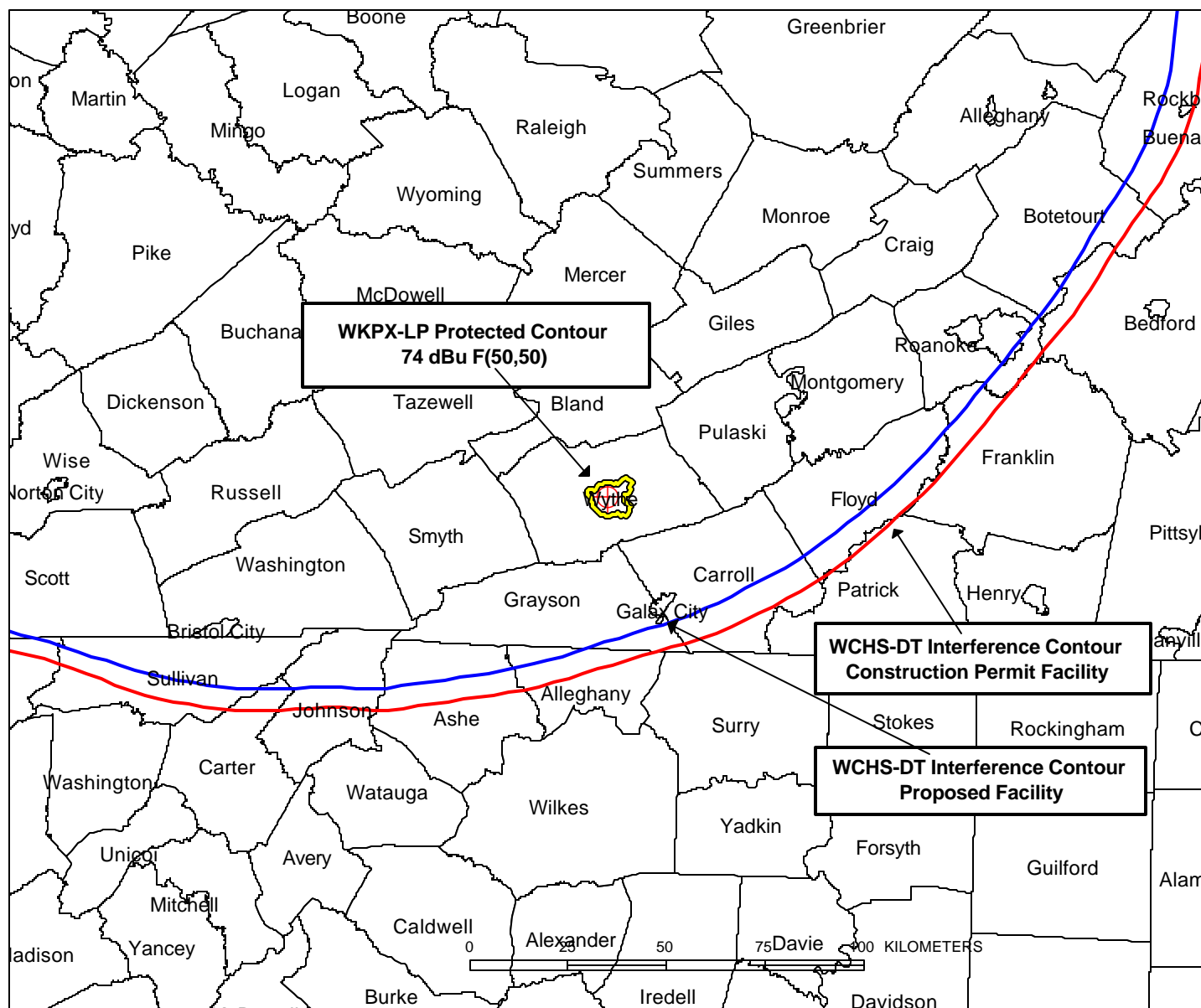
CH. 41, 475.0 kW - 514.1 m HAAT

December, 2003

 Predicted Principal Community Contour
F(50,90) - 48 dBu

 Predicted Grade "B" Contour
F(50,90) - 41 dBu


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INTERFERENCE CONTOURS INTO CLASS A TELEVISION

**WCHS-DT, CHARLESTON, WEST VIRGINIA
CH. 41, 475.0 kW ERP; 514.1 M HAAT**

**Into WKPZ-LP, Wytheville, Virginia
CH. 41+, 0.698 kW ERP; 405.2 M HAAT
December, 2003**

 **Interference Contour of CP Facility
40 dBu F(50,10)**

 **Interference Contour of Proposed Facility
40 dBu F(50,10)**

**CARL T. JONES
CORPORATION**

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**

WCHS-DT, CHARLESTON, WEST VIRGINIA
CHANNEL 41, 475.0 kW ERP, 514.1 m HAAT
DECEMBER, 2003

<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>
WCHS-TV	TV	8	183	H	448.2	49.6	0.300	0.00037	0.200	0.19%
WCHS-DT	DT	41	635	H	430.1	475.0	0.300	0.00772	0.423	1.82%
WVAH-TV	TV	11	201	H	439.5	52.4	0.300	0.00041	0.200	0.20%
WVAH-DT	DT	19	503	H	430.1	475.0	0.300	0.00772	0.335	2.30%

TOTAL PERCENTAGE OF ANSI VALUE= 4.51%

*** 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.*