

STATEMENT OF JOHN E. HIDLE JR.
IN SUPPORT OF AN APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
BPCDT-19991019ABT
WCHS-DT – CHARLESTON, WEST VIRGINIA
DT – CH. 41 – 500 KW ERP – 504.5 M HAAT

JULY, 2003

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Prepared for: WCHS Licensee, L.L.C.

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, L.L.C., 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 Application for Modification of Construction Permit to relocate the WCHS-DT facility to the replacement tower to be constructed at the existing site of WVAH-TV, Charleston, West Virginia, at 38° 25' 15" NL, 081° 55' 27" WL. The proposed new structure will replace the WVAH-TV structure that collapsed during a winter storm in February, 2003, and will be designed to accommodate the television facilities of both the DTV and NTSC facilities of WCHS-TV and WVAH-TV, which will serve to lessen the effects of the "receive antenna

orientation problem that results when television transmission systems are scattered in multiple locations within a television market area. The WVAH-TV site is located approximately 2.31 km from the existing WCHS-TV site at an azimuth of 309° True North.

PROPOSED NON-DIRECTIONAL ANTENNA

The applicant proposes to utilize a Dielectric model TUC-O5-10/50H-1-B non-directional "panel" type transmitting antenna, which will be shared with the digital facility of WVAH-DT channel 19, and which is proposed to support the separate transmitting antennas of WVAH-TV channel 11, and WCHS-TV channel 8, in a stacked configuration, top-mounted on the new WVAH-TV tower. A Vertical Plan Antenna Sketch showing the various elevations at the proposed site is provided in Exhibit 1. Elevation patterns for the proposed antenna are provided in Exhibits 2A and 2B, and tabulated in Exhibit 3.

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), power, and antenna height above average terrain as determined in each profile radial. The average terrain, antenna site elevation, and coordinates at the WVAH site were obtained from the existing WVAH-TV license, file number BLCT-19880421KF. Exhibit 4 shows the principal community of license

Charleston, West Virginia, is completely encompassed by the predicted 48 dBu coverage contour of the proposed facility of WCHS-DT.

ALLOCATION CONSIDERATIONS

Full Service Television Considerations

A study was performed using the FCC's Longley-Rice program "TV-Process" to determine if the facility proposed herein would cause any interference to any full service NTSC or DTV station beyond acceptable *de minimis* levels. TV-Process indicated no unacceptable interference to the authorized or requested facility of any full service NTSC or DTV station.

Class A Television Considerations

As required in Section 73.623 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. The protection requirement is based on a showing that a proposal for a new or modified facility does not create prohibited contour overlap. However, a DTV station is allowed contour overlap to a Class A station that already exists based upon the requested facility of the DTV station filed on or before December 31, 1999, or filed between December 31, 1999 and April 30, 2000, pursuant to a letter of intent to maximize submitted on or before December 31, 1999. A full service UHF DTV 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 Section 73.699, to the protected 74 dBu F(50,50) contour of a UHF co-channel Class A station.

Therefore, the 40 dBu F(50,10) "interference contour" of a full service DTV station may not overlap the 74 dBu F(50,50) "protected contour" of a Class A television station.

Results of the contour overlap study, provided as Exhibit 5 herein, indicated that the instant proposal would reduce existing contour overlap as compared to the WCHS-DT facility authorized in its Application for Construction Permit accepted for filing on October 19, 1999, and granted on May 7, 2001. A comparison of TV-Process studies confirmed the requested facility reduces contour overlap in excess of the required 34 dB desired to undesired ratio. Therefore, the instant proposal complies with the FCC's Rules regarding protection of Class A Television.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed WCHS-DT Transmitter 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, Inc. (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 as well as "uncontrolled" situations that apply in cases that affect the general public. The FCC's Office of Engineering and Technology (OET) has issued a revised technical bulletin (OET Bulletin No. 65) entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), to aid in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. The Bulletin contains updated and additional technical information for evaluating compliance with FCC policies and guidelines.

The FCC's 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 TV 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 UHF stations in a "controlled" environment is derived from the formula, $(\text{frequency}/300)$. For WCHS-DT, which operates on television Channel 41 (635 MHz), the MPE is 0.423 milliwatts per centimeter squared (mW/cm^2) in an "uncontrolled" environment and 2.115 mW/cm^2 in a "controlled" environment.

The proposed WCHS-DT facility will operate with a maximum ERP of 500 kW from a horizontally polarized non-directional transmitting antenna with a centerline height of 447.9 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 $.01571 \text{ mW/cm}^2$, which is 3.58% of the new FCC guideline value for "uncontrolled" environments, and 0.716% of the new FCC guideline value for "controlled" environments (for a detailed list of all stations, see Appendix A).

The total percentage of the ANSI value at the proposed site, considering the cumulative radiation of all stations at the site, is only 6.72% of the limit for "uncontrolled" environments, and 1.344% of the limit for "controlled" environments.

OCCUPATIONAL SAFETY

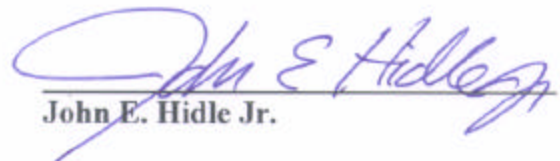
The licensee of WCHS-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WCHS-DT antenna. The applicant is committed to entering into an agreement with the other stations that will utilize the proposed antenna to reduce power and/or cease operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection to personnel.

In light of the above, the proposed 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, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: July 3, 2003

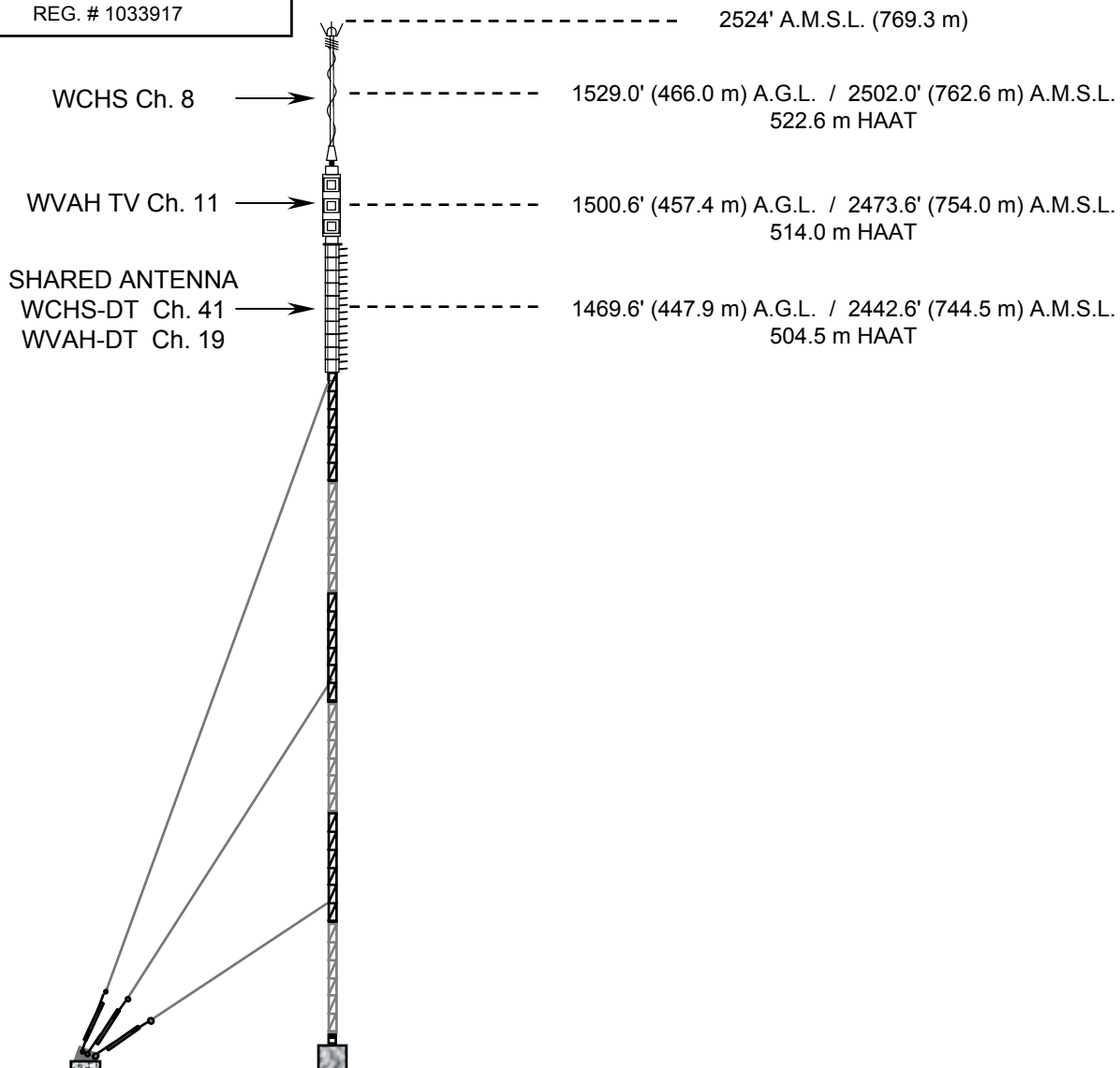


John E. Hidle Jr.

COORDINATES NAD-27

NORTH LATITUDE: 38° 25' 15.0"
WEST LONGITUDE: 81° 55' 27.0"
REG. # 1033917

EXHIBIT 1



VERTICAL PLAN ANTENNA SKETCH
WCHS-DT - CHARLESTON, WEST VIRGINIA
Ch. 41 - 500 kW ERP - 504.5 m HAAT
AT WVAH TOWER SITE
JULY, 2003

CARL T. JONES
CORPORATION

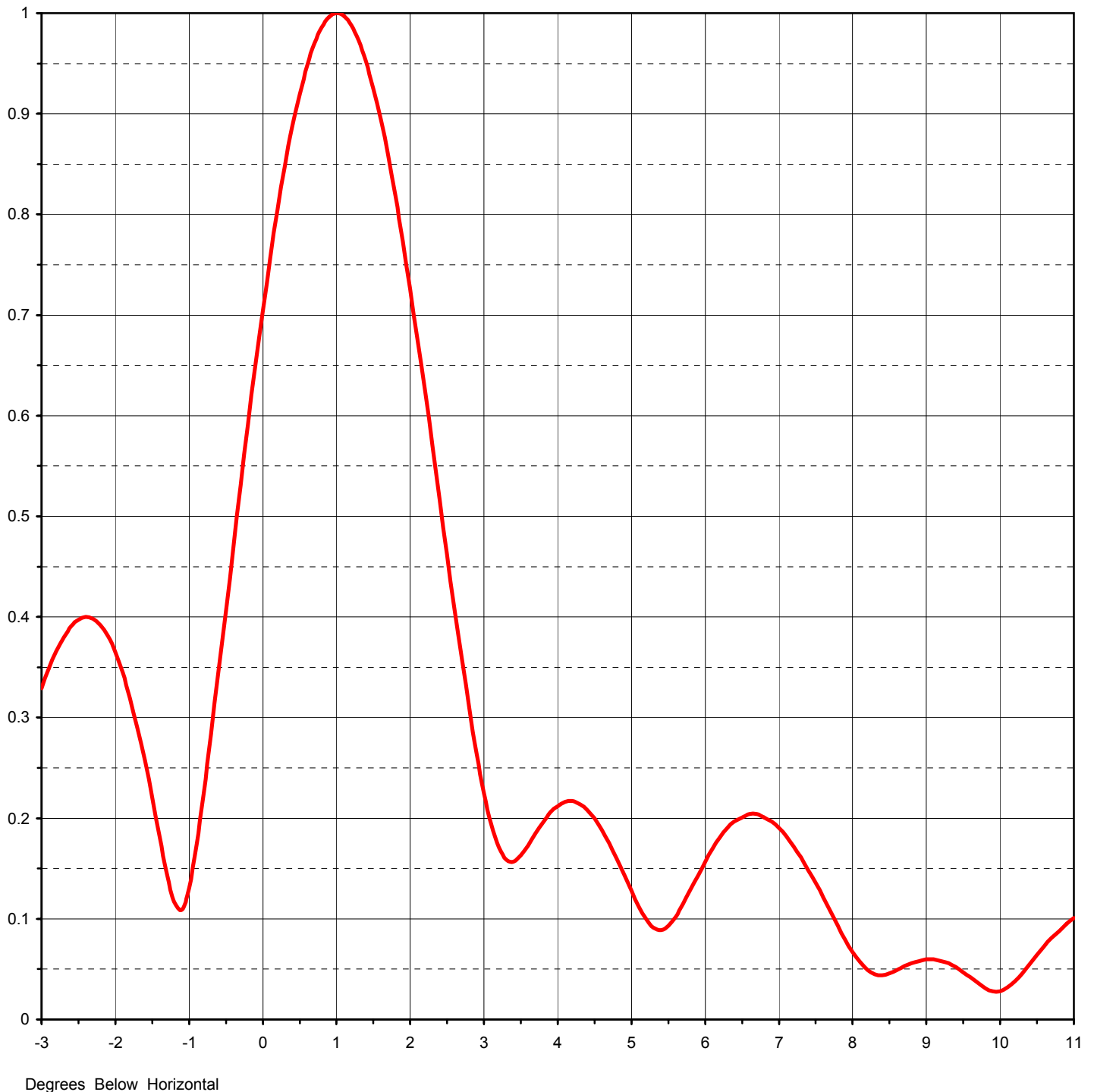
NOTE : NOT DRAWN TO SCALE



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

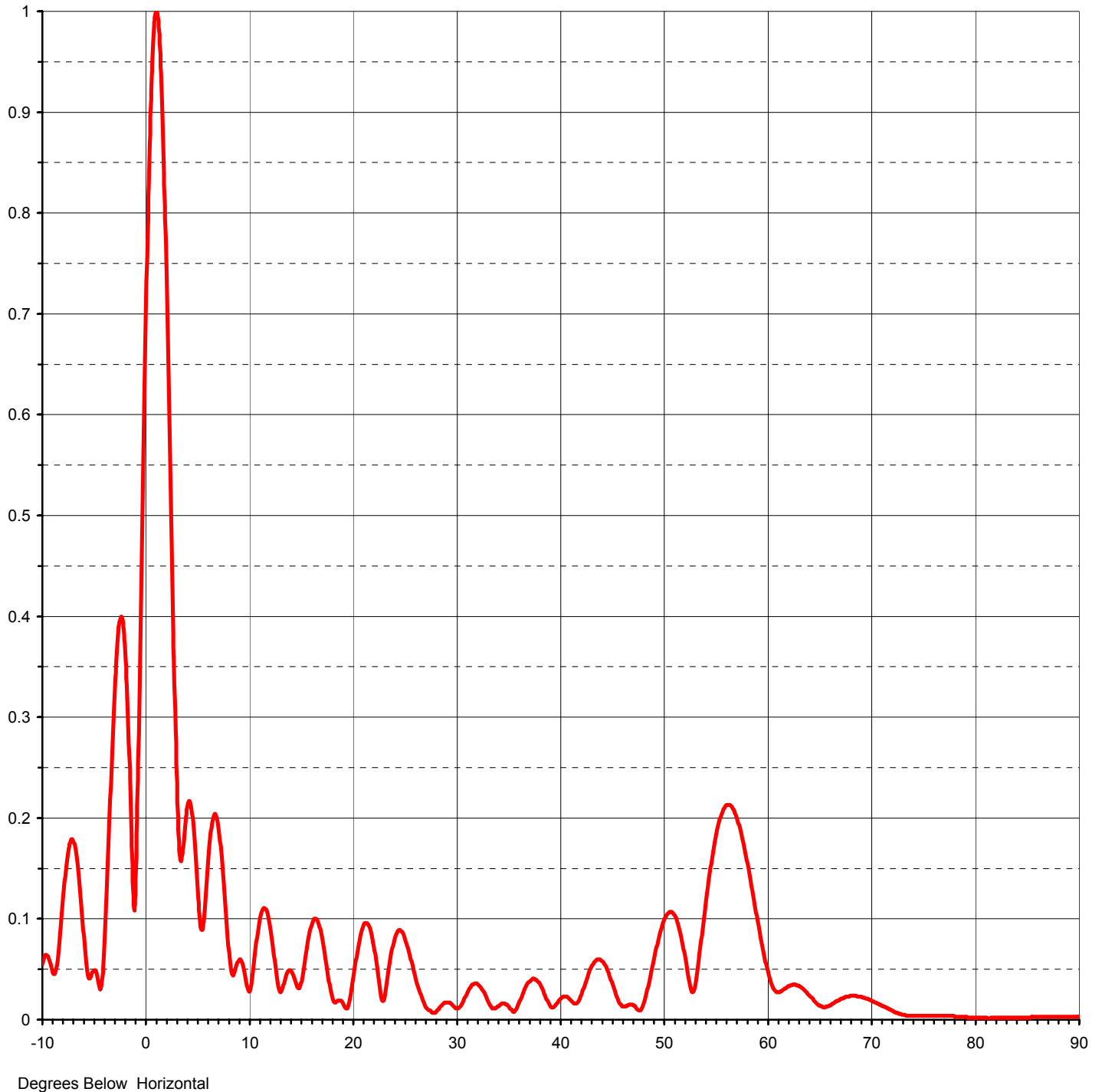




Proposal Number	DCA-10186	Exhibit 2B
Date	4-Mar-03	
Call Letters	WCHS-DT	Channel 41
Location	Charleston, WV	
Customer	Sinclair	
Antenna Type	TUC-O5-10/50H-1-B	

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**

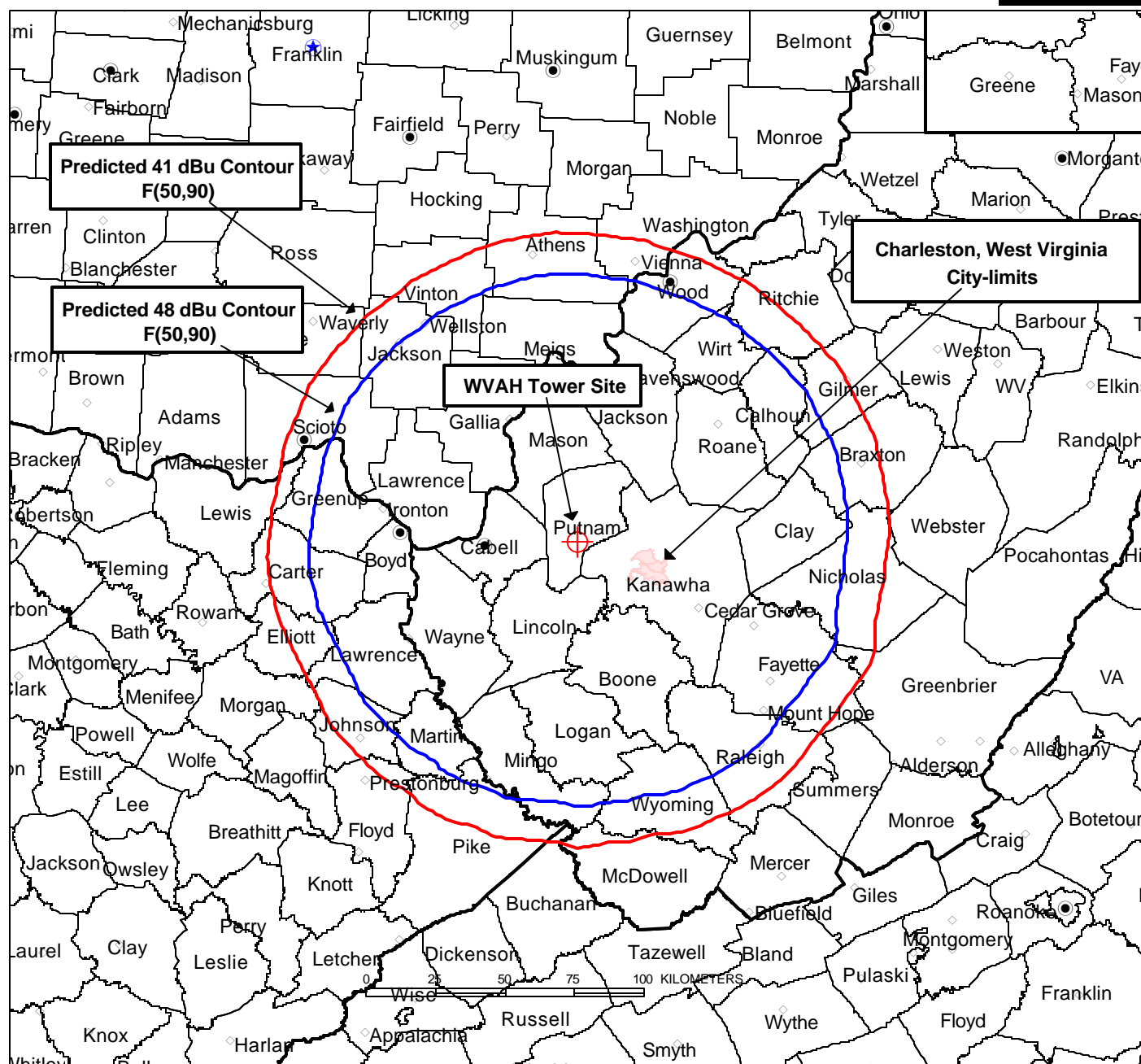
Customer **Sinclair**

Antenna Type **TUC-O5-10/50H-1-B**

TABULATION OF ELEVATION PATTERN

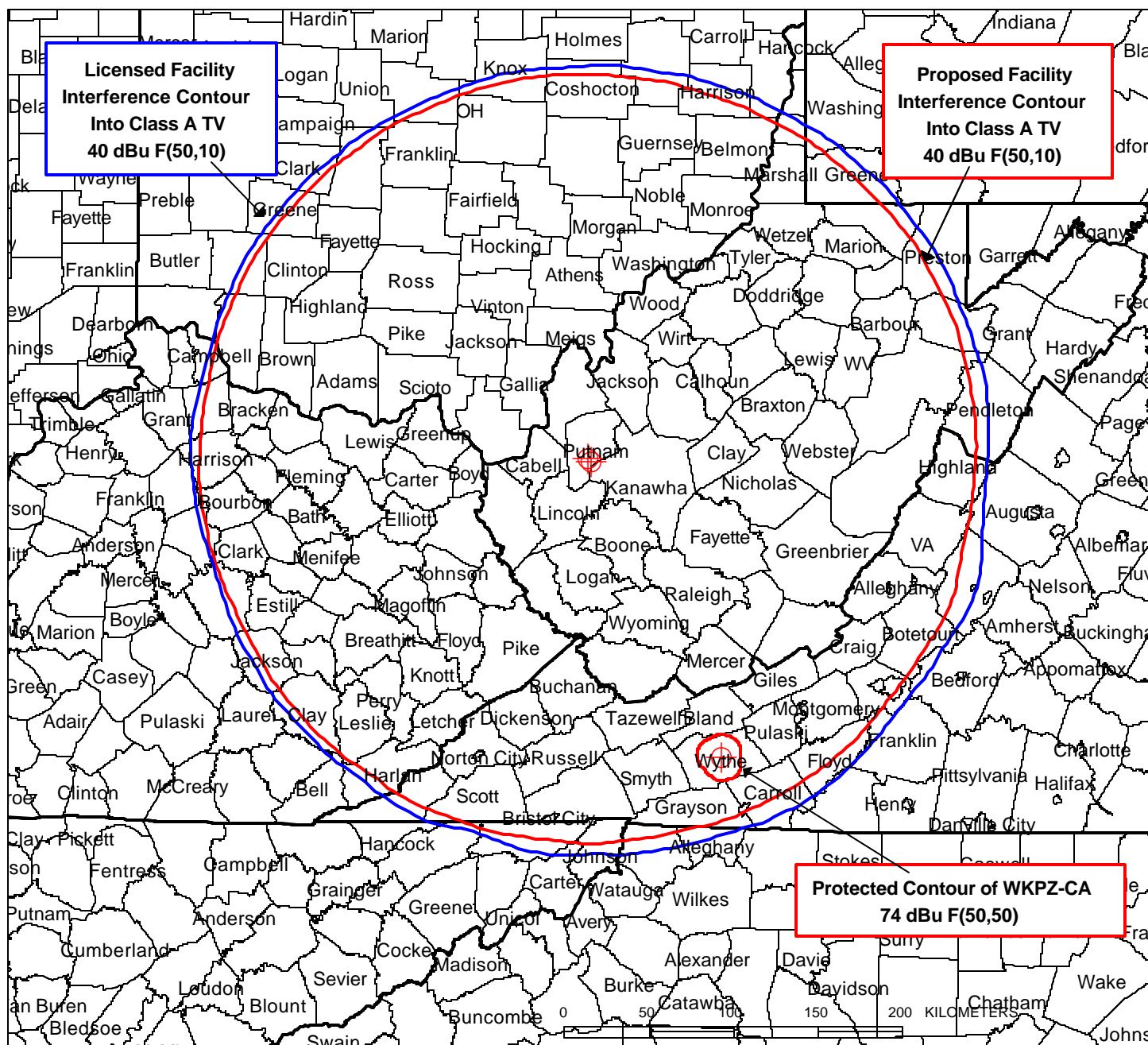
Elevation Pattern Drawing #: **10U216100-90**

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
PROPOSED FACILITY AT WVAH SITE
CH. 41, 500.0 kW ERP, 504.5 m HAAT
JULY, 2003**



**PREDICTED INTERFERENCE CONTOURS
 INTO CLASS A TELEVISION
 WCHS-DT, CHARLESTON, WEST VIRGINIA
 PROPOSED FACILITY AT WVAH SITE
 CH. 41, 500.0 kW ERP, 504.5 m HAAT
 JULY, 2003**

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
WCHS-DT, CHARLESTON, WEST VIRGINIA
CHANNEL 41, 500 kW ERP, 504.5 m HAAT
JULY, 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-DT	DT	41	635	H	445.9	500.000	0.300	0.01571	0.423	3.58%
WVAH-DT	DT	19	503	H	445.9	475.000	0.300	0.00718	0.335	2.14%
WCHS-TV	TV	8	183	H	464	52.700	0.300	0.00037	0.200	0.18%
WVAH-TV	TV	11	201	H	455.4	55.700	0.300	0.00040	0.200	0.20%
WKLC-FM	FM	286	105.1	H & V	442	3.600	1.000	0.00123	0.200	0.62%

TOTAL PERCENTAGE OF ANSI VALUE= 6.72%

*** 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.*