



**ENGINEERING STATEMENT OF JOHN E. HIDLE, JR.
IN SUPPORT OF AN AMENDMENT TO
AN APPLICATION FOR CONSTRUCTION PERMIT
IN RESPONSE TO A FCC LETTER
WMYA-DT - ANDERSON, SOUTH CAROLINA
DTV - CH. 14, 360 kW, ERP; 286.6 M HAAT**

Prepared for: ANDERSON (WFBC-TV) LICENSEE, INC.

DECEMBER, 2007

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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

Anderson (WFBC-TV) Licensee, Inc., licensee of WMYA-TV, Channel 40, Anderson, South Carolina, and permittee of the paired Digital Television Allotment for WMYA-DT, Channel 14, has authorized this office to prepare this statement, and associated exhibits as part of an Amendment of an Application to Modify a Construction Permit, FCC File Number BMPCDT-20060629ACU, in response to an FCC Letter concerning interference requirements. It is requested herein to reduce the requested effective radiated power (ERP) for WMYA-DT from 430 kW to 360 kW based upon an appropriate interference analysis utilizing year 1990 U.S. Census data.

TECHNICAL FACILITY OF WMYA-DT AS REFLECTED IN THE
DTV TABLE OF ALLOTMENTS

The Seventh Report and Order and Eighth Further NPRM (MB Docket 87-268) includes the recently adopted DTV Table of Allotments, that identifies the specific technical facilities at which the Commission has proposed to allow DTV stations to operate after the DTV transition. The facilities included in the DTV Table of Allotments are those for which broadcasters were required by the Commission to certify a specific coverage area based upon their ability to “build out” to the level of checklist or maximized facilities as reflected in their FCC authorizations. WMYA Licensee, LLC understands its obligations under the Commission’s policy that broadcasters’ final facilities must cover their certified coverage area as approved by the Commission. Further, the Licensee of WMYA-DT wishes to avoid loss of coverage area of its digital or analog facilities as a result of a conflict in antenna location on its existing support structure.

WMYA-DT, Anderson, South Carolina has an outstanding Construction Permit, FCC File Number BPCDT-19991109ACE, to operate on Channel 14 at 310 kW ERP, 311 m HAAT on a directional transmitting antenna, FCC Antenna Identification Number 30073. However, WMYA-DT’s authorized height of 310 meters above ground level (AGL) as reflected in the DTV Table of Allotments was based upon locating its transmitting antenna at the top of the support structure currently also occupied by its analog facility. The existing analog antenna of WMYA-TV channel 40 currently occupies the position on the tower

authorized for the WMYA-DT antenna. Therefore, to meet its obligations to provide service to its certified coverage area, and to avoid a loss of service to the public that would be caused by removal and reinstallation of the antenna after the completion date for the digital transition, the permittee requested and had been granted Special Temporary Authority from the Commission to operate at a lower height of 285.6 meters AGL, 286.6 meters HAAT on the existing support structure where the antenna can currently be accommodated, and has requested permanent authorization (Application to Modify Construction Permit, FCC File Number BMPCDT-20060629ACU) to operate at this lower height with its ERP increased from 310 kW to 430 kW in order to meet its certified coverage requirement. The requested ERP of 430 kW was determined by this office to meet the required interference criteria set forth in §73.623(c) of the Commission's Rules based upon a showing of non-interference using the Commission's evaluation software "TV-Process" considering the use of current year 2000 baseline U.S. Census data, based upon the belief that use of current U.S. Census data would provide the most accurate and realistic results regarding any increase in predicted interference to the service areas of other facilities WMYA-DT is required to protect. However, the Commission has sent a letter requesting reevaluation, indicating that the requested facility does not meet the criteria of §73.623(c), presumably because the Commission performed its interference evaluation based upon the use of 1990 U.S. Census data.

Based upon further study of interference based on 1990 U.S. Census data, the

permittee of WMYA-DT herein requests to amend its currently outstanding Application to Modify Construction Permit, FCC File Number BMPCDT-20060629ACU, to request a reduced ERP of 360 kW at its proposed permanent HAAT of 286.6 meters.

PROPOSED TECHNICAL FACILITIES

The DTV Table of Allotments reflects the post-transition operation of the technical facilities of WMYA-DT on Channel 14 at 310 kW ERP, 311 m HAAT utilizing a directional transmitting antenna. WMYA-DT's outstanding Application to Modify Construction Permit, FCC File Number BMPCDT-20060629ACU, requested a reduced HAAT of 286.6 meters based on the technical infeasibility of locating its antenna at its presently authorized height on the authorized support structure, and an increased ERP of 430 kW to compensate for a reduction in coverage area predicted to result from the reduced antenna height. It is proposed herein to Amend the outstanding Application and DTV Table of Allotments to reflect an ERP of 360 kW at 286.6 meters HAAT to meet the interference requirements of §73.623(c) considering an interference evaluation based on 1990 U.S. Census data. The existing directional antenna is presently mounted on the antenna support structure, FCC antenna structure registration number 1045371, with the radiation centerline at 285.6 meters above ground level (AGL), 286.6 meters HAAT. A vertical plan antenna sketch is attached hereto as Exhibit 1.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625 of the FCC's 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 those reflected in FCC antenna structure registration number 1057874. As shown in Exhibit 2, the predicted 48 dBu, (F50,90) principal community contour completely encompasses the principal community of license as required by the Commission's rules. The predicted 41 dBu (F 50,90) "protected coverage contour" is also shown in Exhibit 2.

ALLOCATION CONSIDERATIONS

An interference study was performed using the Commission's application analysis program, "TV-Process," to ensure that the proposed DTV facility is in compliance with the Commission's *de minimis* interference requirement contained in Section 73.623(c)(2) of the Commission's rules. The TV-Process study was performed utilizing 2km squares based on the 1990 U.S. Census.

The TV-Process study was evaluated to determine the level to which WMYA-DT's ERP would need to be decreased in order to meet the requirements of §73.623(c)(2) of the Commission's Rules. Study results indicated that at 360 kW ERP, WMYA-DT's facility is not

predicted to cause any level of prohibited interference to authorized DTV facilities, including DTV stations, DTV expansion construction permits, DTV allotments or pending DTV applications, considering its present directional antenna at 286.6 meters HAAT. The instant proposed ERP of 360 kW is therefore in compliance with the *de minimis* interference criteria contained in Section 73.623(c)(2) of the Commission's Rules.

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, a study of predicted interference contour overlap was performed, based on the WMYA-DT facility proposed herein, to establish compliance with the protection requirements contained therein. Although the contour overlap study predicts contour overlap to WAPG-CA, Channel 14, Greeneville, Tennessee based on the WMYA-DT facility as proposed herein, a study of terrain shielding indicates that such contour overlap is not in fact possible due to intervening terrain (specifically the Smokey Mountain range) as shown in Exhibit 3. No other increase in predicted prohibited contour overlap is predicted to occur with any LPTV stations which have obtained Class A status. Therefore, the instant proposed facility is in compliance with §73.613 of the Commission's Rules.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of broadcast and non-broadcast facilities are located within 10 km of the

proposed WMYA-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.

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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 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 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 WMYA-DT, Channel 14, must be considered, along with the predicted emissions of other facilities also located at the authorized site that will be operating at the time the proposed facility would commence operations. For WMYA-DT, which will operate on Channel 14 (473 MHz), the MPE level for "uncontrolled" environments is 0.315 mW/cm^2 , and for "controlled" environments is 1.575 mW/cm^2 .

The proposed WMYA-DT facility, Channel 14, will operate with a maximum ERP of 360 kW from a horizontally polarized directional transmitting antenna with a centerline height of 285.6 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the WMYA-DT facility produces a predicted power density at two meters above ground level of 0.01345 mW/cm^2 , which is 4.27 % of the FCC guideline value for "uncontrolled" environments, and 0.854% of the FCC guideline value for "controlled" environments.

As shown in Appendix A, the total predicted percentage of the MPE value at WMYA's site, considering the cumulative predicted radiation of all broadcast facilities at the site, is only 90.50% of the limit for "uncontrolled" environments, and 18.100% of the limit for "controlled" environments. The site would therefore be in compliance with the FCC's Maximum Permitted Exposure guidelines.

OCCUPATIONAL SAFETY

The Licensee of WMYA-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WMYA-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 WMYA-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 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.

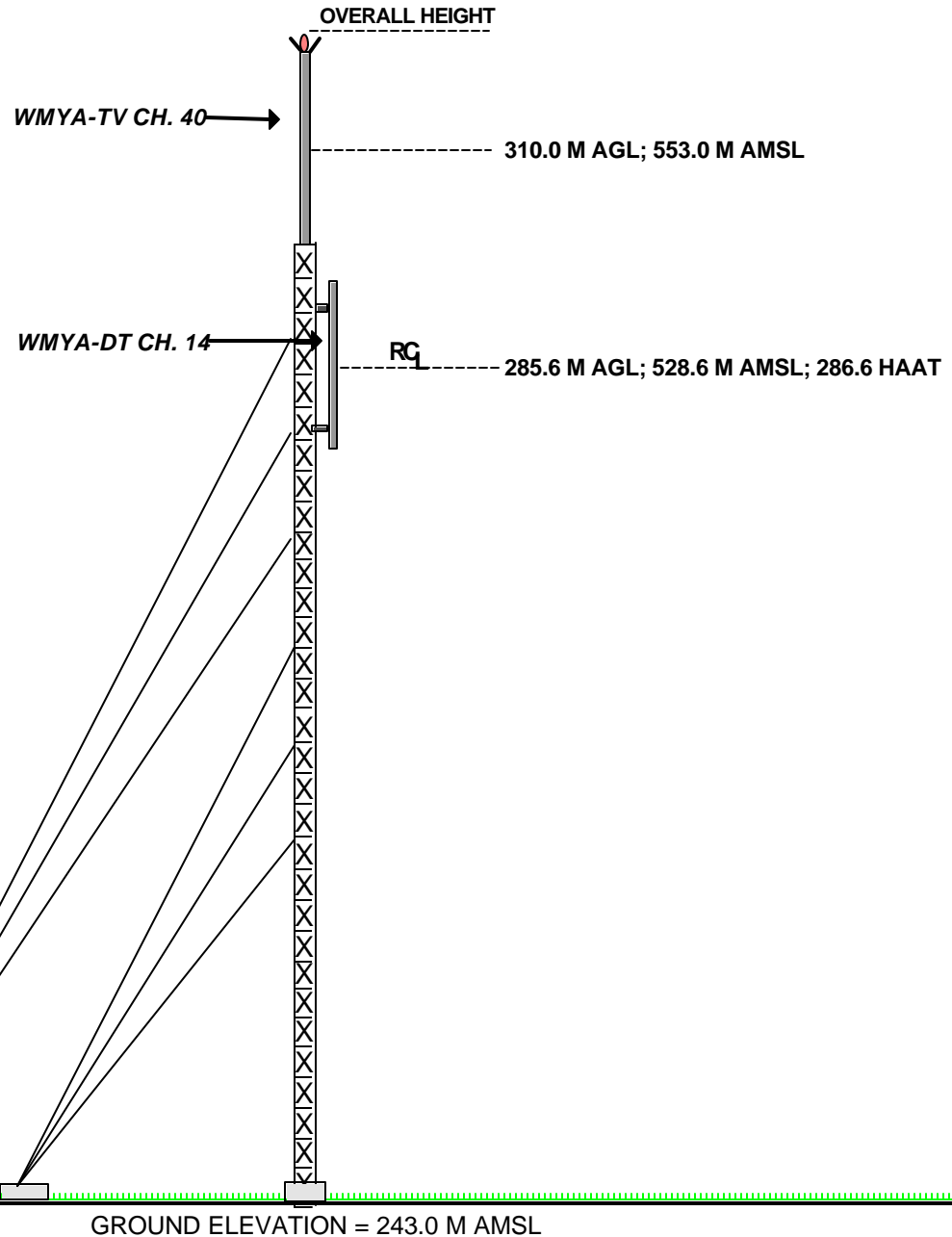
Dated: December 28, 2007



John E. Hidle, Jr.

34° 38' 51" NL
082° 16' 13" WL

EXHIBIT 1



VERTICAL PLAN ANTENNA SKETCH

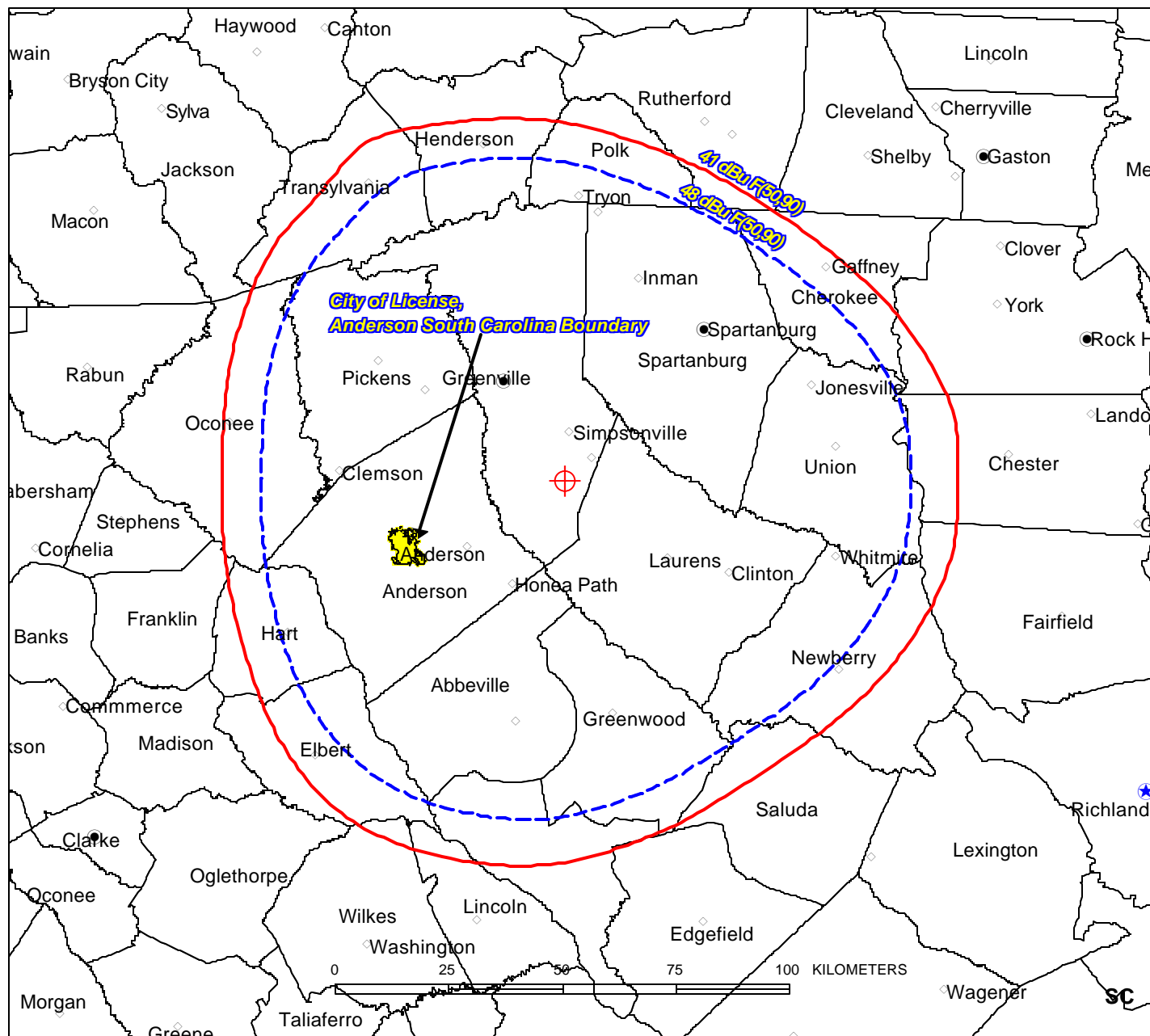
WMYA-DT, ANDERSON, SOUTH CAROLINA

CH. 14, 360 kW - 286.6 m HAAT

DECEMBER, 2007

CARL T. JONES
CORPORATION

NOTE: NOT DRAWN TO SCALE



PREDICTED COVERAGE CONTOURS

WMYA-DT, ANDERSON, SOUTH CAROLINA

PREDICTED COVERAGE CONTOURS

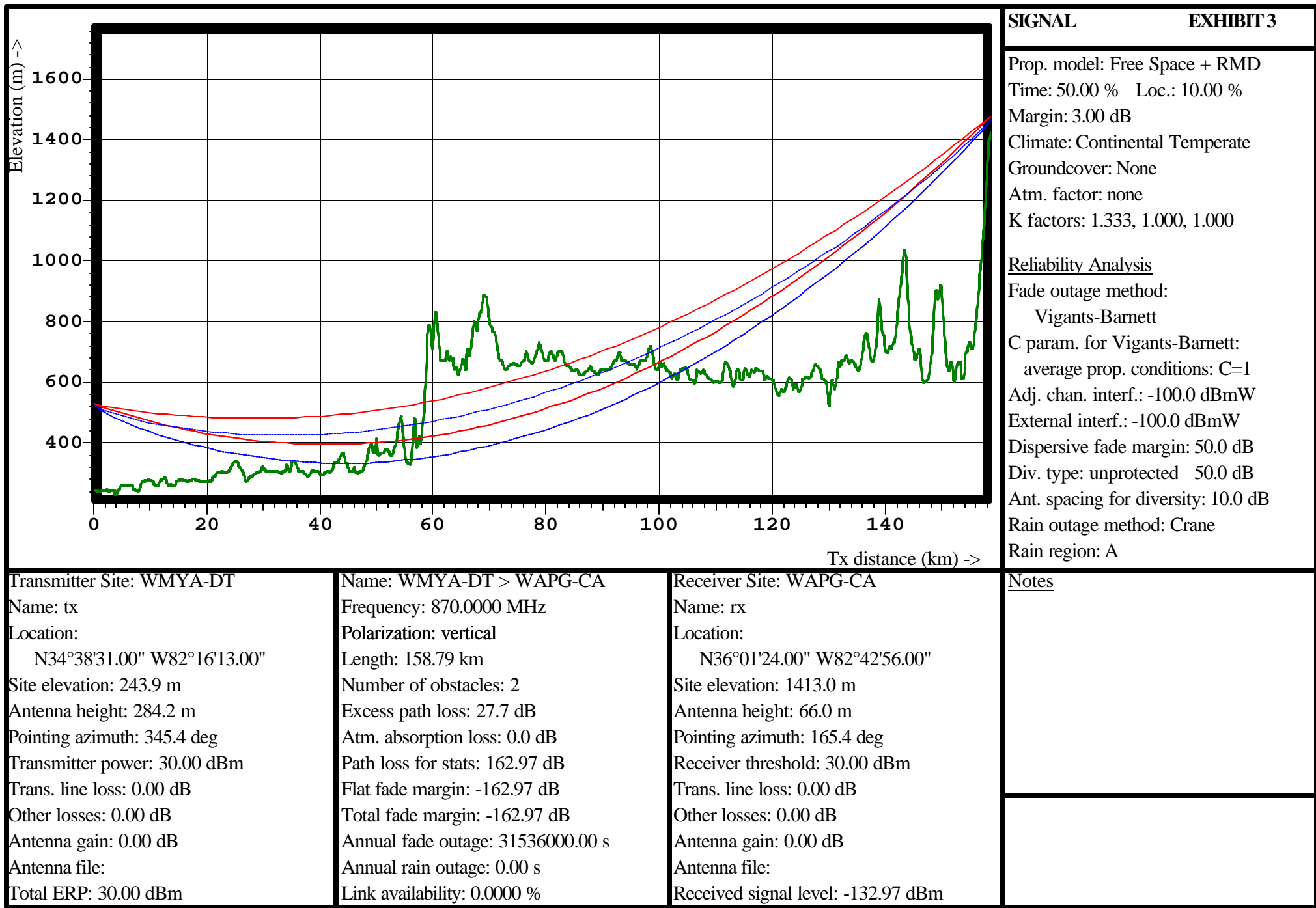
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○ WMYA-DT Channel 14, Proposed Facility
Protected Coverage Contour
360 kW ERP, 286.6 m HAAT, 41 dBu, F(50,90)
Directional Antenna;

○ WMYA-DT Channel 14, Proposed Facility
Community Coverage Contour
360kW ERP, 286.6 m HAAT, 48 dBu, F(50,90)
Directional Antenna

★ Anderson, South Carolina Boundary

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**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
WMYA-DT, ANDERSON, SOUTH CAROLINA
CHANNEL 14, 360 kW ERP, 286.6 m HAAT
DECEMBER, 2007

<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>
WMYA-DT	DT	14	473	H	283.6	360.000	0.300	0.01345	0.315	4.27%
WMYA-TV	TV	40	629	H	308	2570.000	0.300	0.04073	0.419	9.71%
WROQ-FM	FM	266	101.1	H & V	295	100.000	1.000	0.07678	0.200	38.39%
WJMZ-FM	FM	297	107.3	H & V	296	100.000	1.000	0.07626	0.200	38.13%

TOTAL PERCENTAGE OF ANSI VALUE= 90.50%

*** 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.*

****Includes the proposed station and all stations within 315 meters.*