

ENGINEERING TECHNICAL STATEMENT PREPARED BY RYAN WILHOUR OF THE
FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS
CONSULTING ENGINEERS IN CONNECTION WITH A MINOR MODIFICATION OF
A CONSTRUCTION PERMITTED FACILITY

FILE NUMBER BPEDT-20000501AHS

WMAU-DT

BUDE, MISSISSIPPI

DISCUSSION

Mississippi Authority for Educational TV (“MAET”) currently has a construction permit (FCC File No.: BPEDT-20000501AHS) to operate WMAU-TV on Channel 18 with an ERP of 1000 kW, since the grant of the construction permit, WMAU-DT has been operating via STA’s at a much reduced ERP. It is herein proposed to make the following modifications:

- Reduce the ERP from 1000 kW to 682 kW
- Change the antenna from a Dielectric TFU-24GTH-R 04 DC to a Dielectric TFU-28GTH 04 DC
- Reduce the Center of Radiation Height from 315m to 314m AGL

Exhibit E1 demonstrates the WMAU-DT green proposed, dark blue permitted, and black STA coverage contours relative to the WMAU-TV red licensed analog contour. The proposed facility produces a noise limited coverage contour which expands well beyond the analog and digital STA facilities and falls approximately 4km short of the 1MW permitted contour. The proposed population loss relative to Appendix B of the Seventh Report and Order in MB Docket No. 87-268 is greater than five percent. Mississippi Authority for Educational Television is a state wide network whose primary goal and mission is to serve the residence of

the state of Mississippi. Exhibit E2 demonstrates the loss areas between the red and blue contours relative to other full service digital permitted or licensed stations that belong to the instant applicant. The green area demonstrates coverage by the instant application and other applicant owned stations that provide redundant coverage within the Appendix B red contour. Exhibit E2 shows that the green areas within the red appendix B contour serve all of the areas within the state of Mississippi, except for a miniscule triangular red area due east of the proposed transmitter site which contains 95 people according to the 2000 census. The yellow area indicates lost coverage where other applicant owned facilities do not cover. As shown, the entire yellow area lies within the state of Louisiana and is thus outside the mission of the applicant.

Allocation studies for proof of interference compliance have not been included since the power reduction, antenna height reduction, and change in antenna will not cause any new interference to marketing stations.

ENVIRONMENTAL IMPACT/RFR HAZARD ANALYSIS

An analysis has been made of the human exposure to RFR using the calculation methodology described in OET Bulletin 65, Edition, 97-01. Exhibit E2 is a RFR study demonstrating compliance within 5% of the most restrictive permissible exposure at any location 2 meters above the ground. Exhibit E2 calculations were made using a frequency of 494 MHz, which is the lower edge of the proposed channel. To account for ground reflections, a coefficient of 1.6 was included in the calculations.

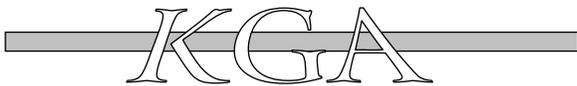
Pursuant to OET Bulletin 65 concerning multiple-user transmitter sites only those licenses whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation is well within 5% of the most permissible exposure at any location 2 meters above the ground, it is not

considered a significant contributor to RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of WMAU-DT were not taken into account. The instant proposal complies with the FCC limits for human exposure to RF radiation and thus is excluded from further environmental processing.

A chain link fence shall encompass the WMAU-DT support structure if it is not already. The applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off in order to protect maintenance workers on the tower.

CERTIFICATION

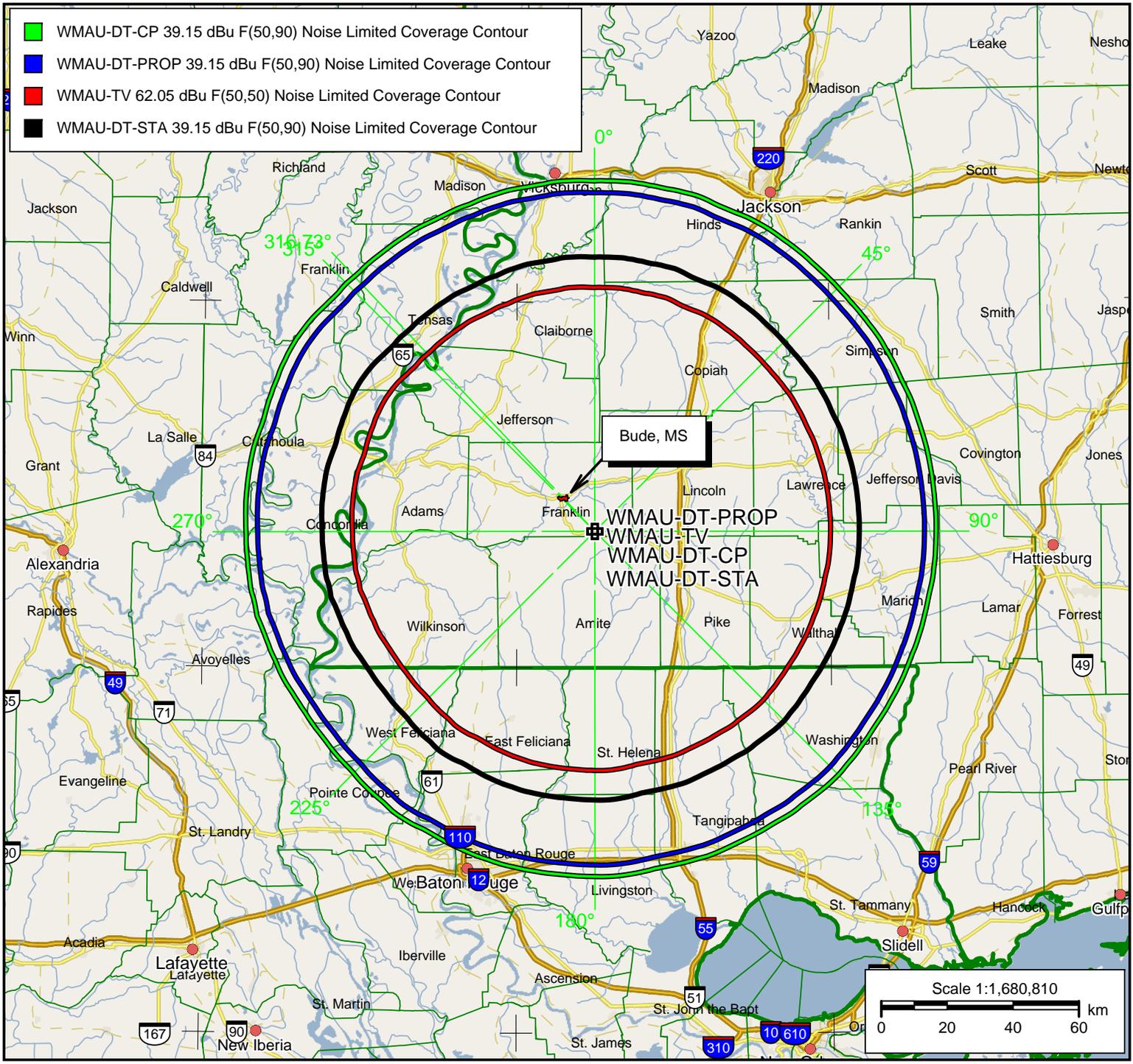
I, Ryan Wilhour, am an associate of Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and have been working in the field of radio and television broadcast consulting since 1996. I am a graduate of the University of Florida with a Bachelor of Science degree in electrical engineering. The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on January 12, 2009.



Ryan Wilhour

A handwritten signature in blue ink that reads 'Ryan Wilhour'. The signature is written in a cursive, flowing style.

Consulting Engineer



WMAU-DT-PROP
PROPOSED
 Latitude: 31-22-22 N
 Longitude: 090-45-04 W
 ERP: 682.00 kW
 Channel: 18
 Frequency: 497.0 MHz
 AMSL Height: 462.0 m
 Elevation: 148.0 m
 Horiz. Pattern: Omni
 Vert. Pattern: Yes
 Elec Tilt: 0.5
 Prop Model: None

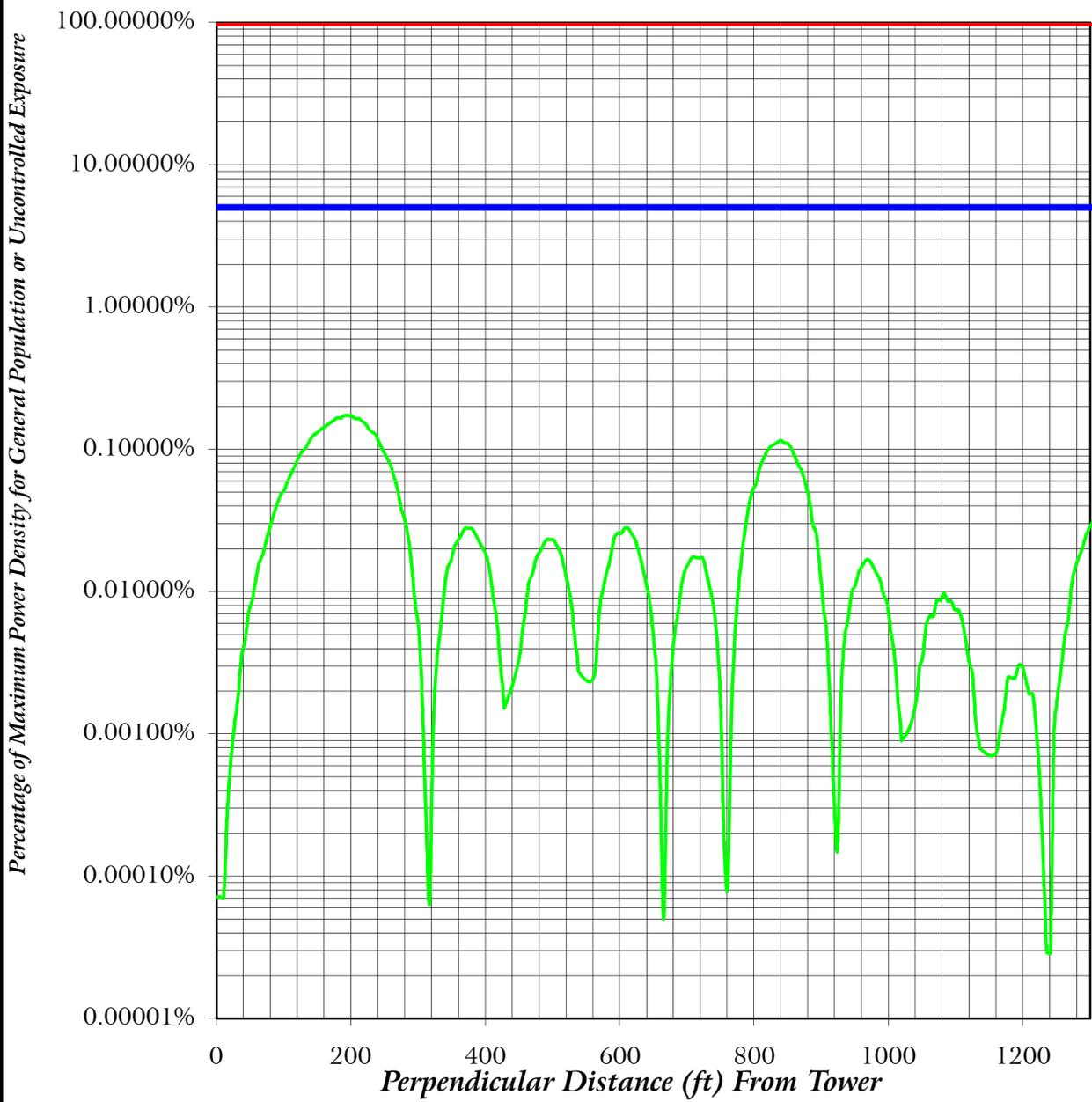
WMAU-DT-CP
 BPEDT20000501AHS
 * Permitted Digital Facility

WMAU-TV
 BMLET20030108AAO
 * Licensed Analog Facility

WMAU-DT-STA
 BMDSTA20040917AJL
 * STA

Exhibit E1

FAR FIELD EXPOSURE TO RF EMISSIONS



- Maximum Allowable General Population or Uncontrolled Exposure
- 5 % of Maximum General Population or Uncontrolled Exposure
- Percentage of Maximum General Population or Uncontrolled Exposure

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20090112

EXHIBIT E3

METHODOLOGY AND EXPLANATION OF
ENVIRONMENTAL IMPACT / RADIO FREQUENCY RADIATION
HAZARD ANALYSIS

A theoretical analysis has been conducted of the human exposure to radio frequency radiation (“RFR”) using the calculation methodology described in *OET Bulletin 65, Edition 97-01*. The RFR analysis is conducted pursuant to the following methodology:

Terrain¹ extraction is compiled from the proposed tower site to radial lengths of 0.25 miles in 0.001 mile increments for 360 radials. The power density is calculated for each terrain point at 6 feet above ground level using the elevation and azimuth pattern of the proposed broadcast antenna. The power density calculations are conducted using the lower edge of the proposed channel frequency. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

The resulting cylindrical polar analysis is then summarized into a coordinate plane graph using the following methodology:

Starting from the origin the maximum calculated RFR value is determined among the 360 degree radials for each 0.001 mile increment, the value is then converted into a percentage of the maximum allowable general population or uncontrolled exposure and plotted as a function of perpendicular distance from the tower.

¹ Terrain extraction is based upon a 3 arc second point spacing terrain database.