

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
RADIO STATION WTSU(FM) (AUXILIARY)  
MONTGOMERY-TROY, ALABAMA

February 17, 2005

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Technical Statement

This Technical Statement was prepared on behalf of radio station WTSU(FM), Montgomery-Troy, Alabama, in support of an application for construction permit for an auxiliary antenna. WTSU(FM) is authorized for operation on Channel 210C1 with a nominal effective radiated power (ERP) of 46 kW and antenna height above average terrain (HAAT) of 234 m. The proposed auxiliary antenna will employ a tower located in Pine Level, Alabama, with a nominal ERP of 53 kW and with an antenna HAAT of 207 m. This facility is to be co-located with the existing licensed main facility of WTSU(FM). However, due to a correction in antenna structure registration coordinates, the site coordinates differ from what is licensed for WTSU(FM).<sup>\*</sup> An application will be filed to correct the coordinates of the WTSU(FM) main facility as part of an application for modification of construction permit for WTSU(FM).

Proposed Facilities

An ERI, 6-bay full-wave spaced rototiller-type transmitting antenna will be employed with a center of radiation located at 175 m AGL (336 m AMSL). The antenna radiation center HAAT is calculated to be 207 m.

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<sup>\*</sup> See application for modification of antenna structure registration number 1221821 (FCC File No. A0429481) granted February 17, 2005.

No adverse electromagnetic impact is expected with respect to any of the other broadcast facilities located in the vicinity of the proposed antenna. However, the applicant recognizes its responsibility to correct objectionable electromagnetic interference problems that result from its proposed operation.

#### Tower Registration

The antenna structure registration number is 1221821. There will be no change in the overall height of the structure as a result of the proposal.

#### Predicted Coverage Contours

The predicted 60 dBu coverage contours for the authorized and proposed facilities were calculated in accordance the FCC Rules using 72 evenly-spaced radials. The 3-16 km terrain data were obtained through use of the U.S.G.S. 3-second computer database. The predicted coverage contours are projected on a map included herein as Figure 1.

#### Environmental Considerations

The proposed facility is categorically excluded from environmental processing pursuant to Section 1.1306 of the FCC Rules. An analysis of the RF exposure at 2-m above ground level<sup>†</sup> indicates that the proposed WTSU auxiliary facility would contribute no greater than 7.2% of the general population/uncontrolled environment

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<sup>†</sup> The antenna height above ground is 175 m.

standard for RF exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing. The applicant shall reduce power or cease operation as necessary to protect persons having access to the tower from RF energy in excess of the FCC guidelines.

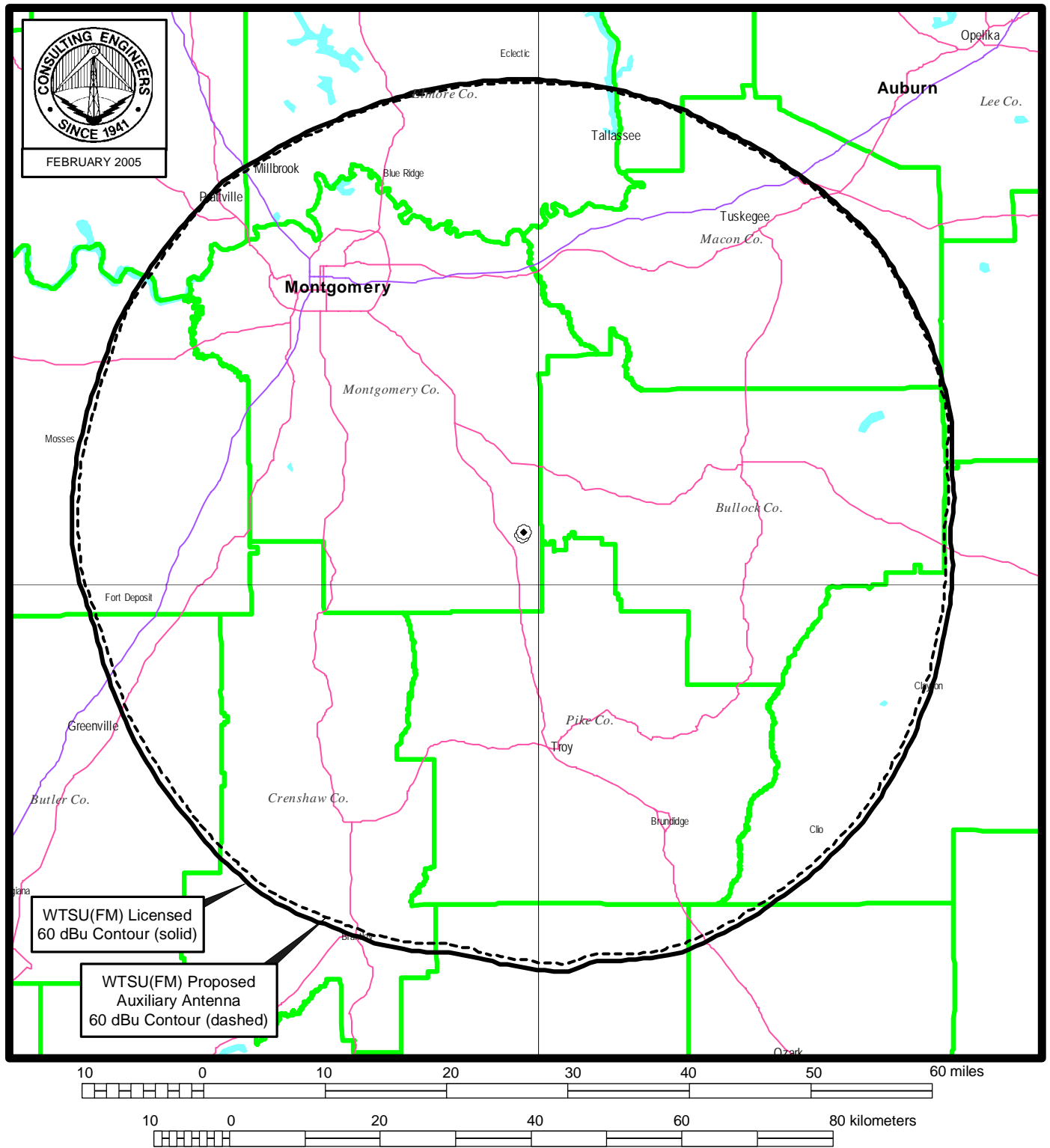
A handwritten signature in black ink, appearing to read "Louis R. du Treil, Jr.", written in a cursive style.

Louis Robert du Treil, Jr.

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Ave.  
Sarasota, FL 34237

February 17, 2005

Figure 1



## PREDICTED COVERAGE COMPARISON

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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Transmitting Antenna  
Manufacturer's Vertical Plane Pattern

(one page follows)

ELECTRONICS RESEARCH, INC.  
108 MARKET STREET  
NEWBURGH, IN. 47630

-----THEORETICAL-----  
VERTICAL PLANE RELATIVE FIELD

5 ERI TYPE SHP, SHPX, LP, OR LPX ELEMENTS  
0 DEGREE(S) BEAM TILT  
0 PERCENT FIRST NULL FILL  
0 PERCENT SECOND NULL FILL

MAY 24, 1993  
ELEMENT SPACING:  
1.0 WAVELENGTH

FIGURE F6

POWER GAIN IS 3.303 IN THE HORIZONTAL PLANE(3.303 IN THE MAX.)

