### TECHNICAL EXHIBIT MINOR MODIFICATION APPLICATION STATION WFXL-DT (FACILITY ID 70815) ALBANY, GEORGIA

**SEPTEMBER 19, 2006** 

CH 12 60 KW (MAX-DA) 253 M

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# TECHNICAL EXHIBIT MINOR MODIFICATION APPLICATION STATION WFXL-DT (FACILITY ID 70815) ALBANY, GEORGIA CH 12 60 KW (MAX-DA) 253 M

#### **Technical Narrative**

This Technical Exhibit supports a minor modification application for digital television station WFXL-DT on channel 12 at Albany, Georgia. Station WFXL-DT is authorized to operate with a directional antenna maximum effective radiated power (ERP) of 60 kW and an antenna height above average terrain (HAAT) of 287 meters (BPCDT-20000427ABX). WFXL's broadcast tower was dismantled due to damage sustained from a helicopter accident. WFXL is currently are operating under special temporary authority (STA) from a tower at station WALB's studio location.

#### **Proposed Facilities**

A new broadcast tower is proposed for WFXL, which will be shared with station WALB. This application proposes a new directional antenna, no change in maximum ERP and a reduction in antenna height from the currently authorized operation. The transmitter site coordinates are (NAD27): 31-19-52 N, 83-51-43 W. A directional antenna maximum ERP of 60 kW and antenna HAAT of 253 meters is proposed (FCC tower registration no. 1255221).

Figure 2 is a map showing the predicted City Grade (48 dBu) and Noise-Limited (41 dBu) contours for the proposed operation. The WFXL licensed data was used for determining the average HAAT. The Albany city limits were derived from information

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contained in the 2000 U.S. Census for Georgia. The proposal complies with the city coverage requirements of Section 73.685(a).

It is noted that the proposed 41 dBu contour results in some minor extension of service beyond the currently authorized 41 dBu. The power reduction necessary to avoid any noise-limited contour extension is 3.5 dB (an ERP of 27 kW). This significant reduction is due to the different null regions of the directional patterns. This reduced 27 kW ERP facility to be in compliance with the Freeze will result in the creation of digital (NBC) Network white area in the amount of 1,050 square kilometers and population of 17,100 persons. It will also result in an overall loss of 3,700 square kilometers of coverage and population of 119,900 persons from the digital service. Due to the unforeseen circumstances of the collapse of both towers in the area (the adjacent WALB tower unexpectedly collapsed during demolition of the WFXL tower), WFXL-DT is now tasked with constructing a new broadcast facility. WFXL-DT will be sharing a supporting structure with WALB with no change in location. WFXL-DT is requesting to operate with the same directional ERP as authorized (800 kW), a 2-meter reduction in antenna height above mean sea level and a coordinate change of 1 second in longitude. Thus, a waiver of the FCC Filing Freeze for television stations is respectfully requested for the proposed WFXL-DT operation.

#### **Allocation Considerations**

The proposed WFXL-DT operation meets the FCC's interference standards to pertinent analog (NTSC) and DTV assignments using the procedures outlined in the FCC's OET-69 Bulletin and a 2 kilometer grid. The proposed WFXL-DT operation complies with the FCC's "de minimis" interference policy with respect to pertinent NTSC/DTV/Class A TV assignments. If necessary, a waiver of the FCC rules is requested with respect to use of the OET-69 interference procedures.

#### Radiofrequency Electromagnetic Field Exposure

The proposed WFXL-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The

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radiation center for the proposed DTV antenna is located 245 meters above ground level with a maximum ERP of 60 kW. A conservative relative field value of 0.5 was assumed for the antenna calculation (see Figure 3). The calculated power density at a point 2 meters above ground level will be 0.0085 mW/cm<sup>2</sup>. This is less than 5% of the FCC's recommended limit of 0.2 mW/cm<sup>2</sup> for channel 12 for an "uncontrolled" environment.

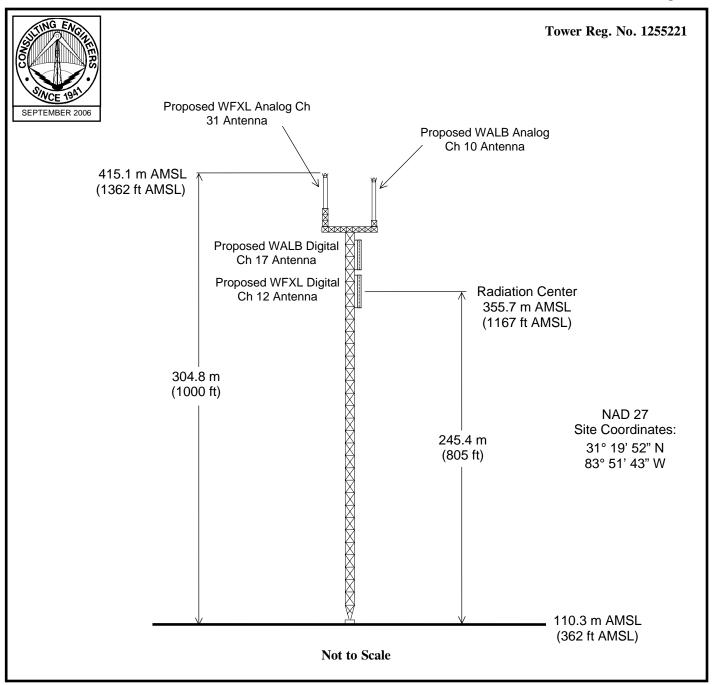
Access to the transmitting site will be restricted and appropriately marked with warning signs. As this will be a multi-user site, an agreement among the stations will control site access. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed WFXL-DT operation appears to be otherwise categorically excluded from environmental processing. It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

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du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237 (941) 329-6000

September 19, 2006

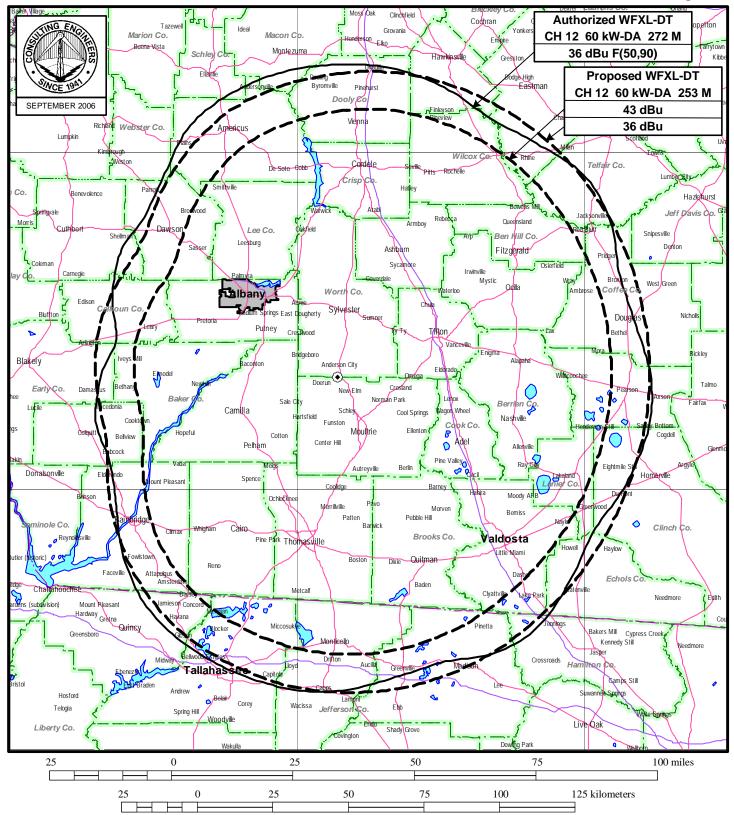
<sup>&</sup>lt;sup>1</sup> See August 2004 Filing Freeze PN, DA 04-2446 (MB rel. Aug. 3, 2004).



# PROPOSED ANTENNA AND SUPPORTING STRUCTURE

STATION WFXL-DT ALBANY, GEORGIA CH 12 60 KW (MAX-DA) 253 M

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



## PREDICTED COVERAGE CONTOURS

STATION WFXL-DT ALBANY, GEORGIA CH 12 60 KW (MAX-DA) 253 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida



Date
Call Letters
Location
Customer

05 Mar 2005 WFXL-DT Albany, GA

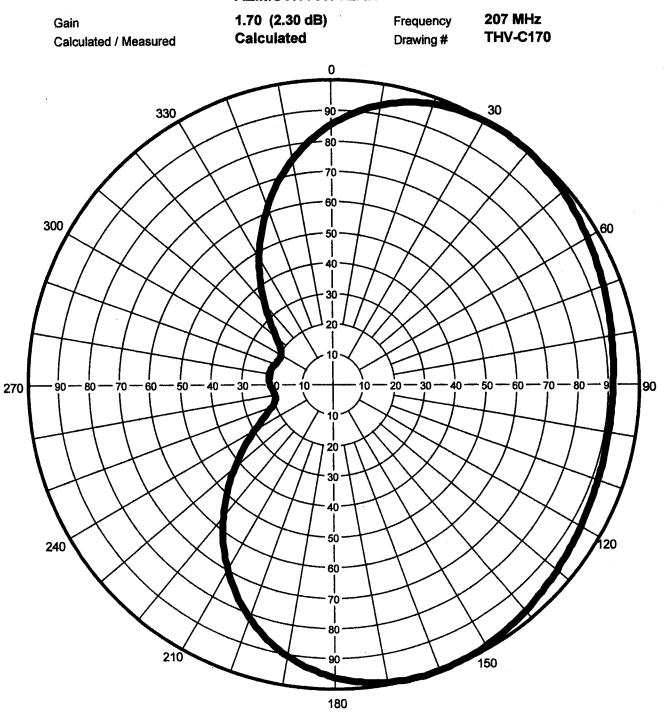
Channel

12

Antenna Type

THV-12A12-R C170

#### **AZIMUTH PATTERN**



Remarks:



Date
Call Letters
Location
Customer

Antenna Type

05 Mar 2005 WFXL-DT

Channel

12

Albany, GA

THV-12A12-R C170

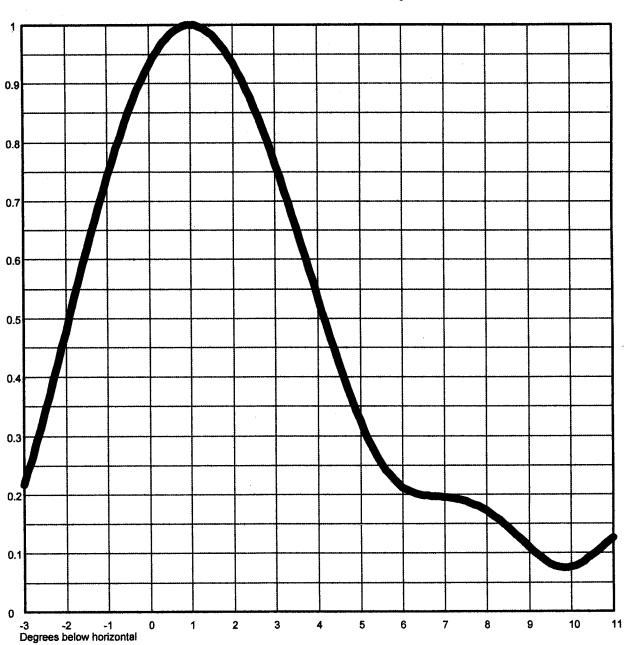
#### **ELEVATION PATTERN**

RMS Gain at Main Lobe RMS Gain at Horizontal Calculated / Measured 12.0 (10.79 dB) 10.4 (10.17 dB)

(10.17 dB) Frequ

Calculated

Beam Tilt Frequency Drawing # 1.00 Degrees 207.00 MHz 12V120100



Remarks: