

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
STATION WDFX-DT (FACILITY ID 32851)
OZARK, ALABAMA

NOVEMBER 2, 2004

CH 33 15 KW (MAX-DA) 151 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of digital television broadcast station WDFX-DT at Ozark, Alabama. Station WDFX-DT is authorized for operation on channel 33 with a directional antenna maximum effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 170 meters (BPCDT-19991018AAK).

The proposed facility will not result in any extension of the allotted or authorized noise-limited contour as shown in Figure 3. Therefore, the proposal meets the terms of the FCC Filing Freeze for digital television stations.¹

Proposed Facilities

This “checklist” application proposes to decrease ERP and antenna HAAT, change the directional antenna and correct the site coordinates. There is no proposed change in actual site, channel (33) or city of license (Ozark). The corrected site coordinates are (NAD27): 31-12-28 N, 85-36-49 W. A directional antenna maximum ERP of 15 kW and antenna HAAT of 151 meters are proposed. The FCC antenna structure registration number is 1244456.

¹ See August 2004 Filing Freeze PN, DA 04-2446 (MB released Aug. 3, 2004).

Figure 3 is a map showing the predicted noise-limited (41 dBU) and city-grade (48 dBU) contours for the proposed operation, along with the noise-limited contours for the authorized operation and allotment for WDFX-DT. The Ozark city limits were derived from information contained in the 2000 U.S. Census for Alabama. The proposal complies with the city coverage requirements of Section 73.625(a).

Nearby Broadcast Facilities

There are no known authorized full service AM stations within 3.2 kilometers of the proposed transmitter site. The following is a list of known authorized full service FM and/or TV stations within 16 kilometers (10 miles) of the proposed site.

<u>Station</u>	<u>Channel</u>	<u>Bearing(°True)</u>	<u>Distance(km)</u>
WRWA, Dothan, AL	204C2	319	0.1
WDYF(CP), Dothan, AL	212C2	5	13.0
WDYF, Dothan, AL	212C3	5	13.1
WXUS, Fort Rucker, AL	263A	8	13.4

Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed WDFX-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed antenna is located 144 meters above ground level with a maximum ERP of 15 kW. A conservative relative field value of 0.1 was assumed for the antenna's downward radiation (see Figure 2C). The calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0002 mW/cm². This is less than 0.1 % of the FCC's recommended limit of 0.39 mW/cm² for channel 33 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. 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.

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.

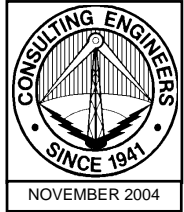


Jonathan N. Edwards

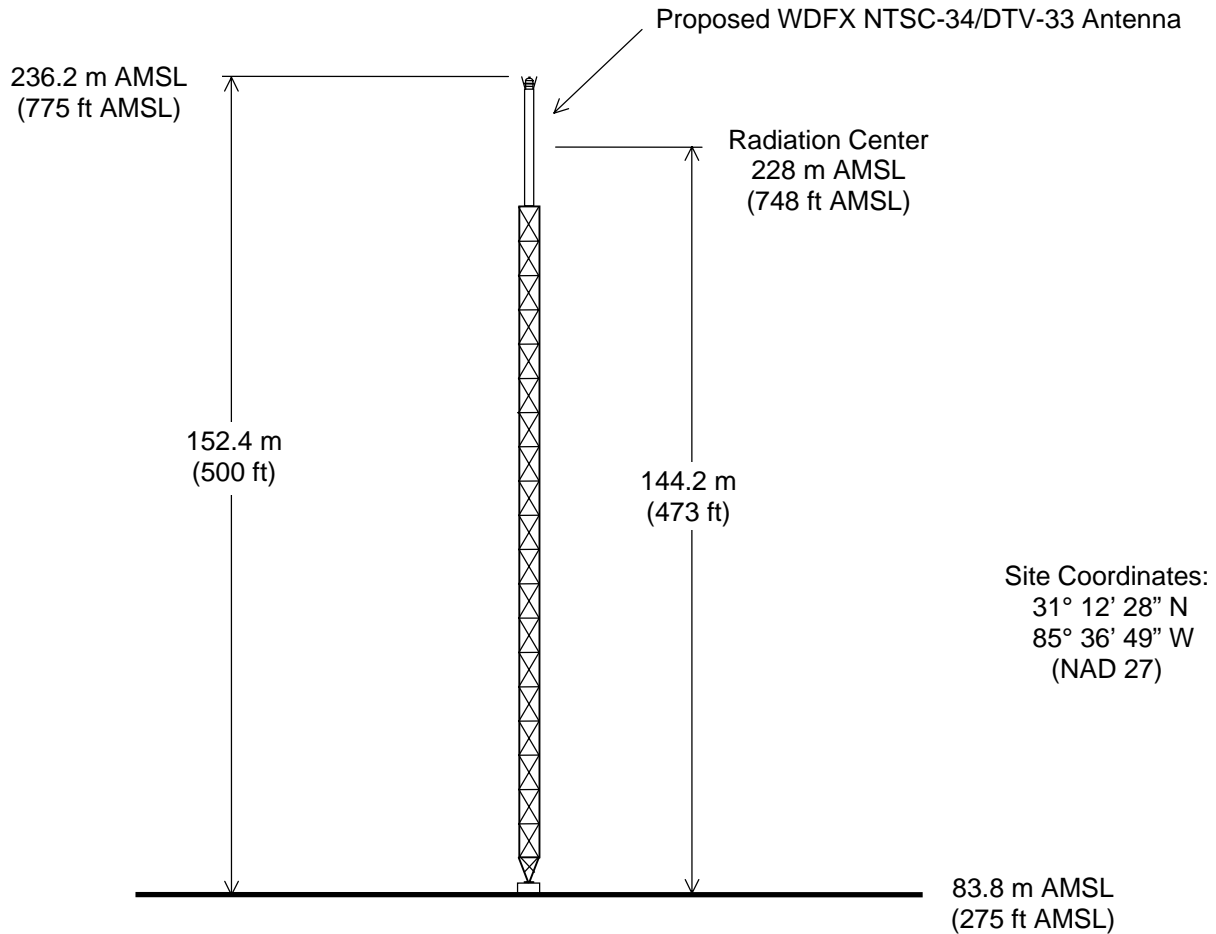
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

November 2, 2004

Figure 1



Tower Reg. No. 1244456



Not to Scale

ANTENNA AND SUPPORTING STRUCTURE

STATION WDFX-DT

OZARK, ALABAMA

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



Figure 2A

Proposal Number

DCA-10434

Revision:

1

Date

2-Nov-04

Call Letters

WDFX-DT

Channel

33

Location

Ozark, AL

Customer

Raycom

Antenna Type

TFU-28ETT-R 4C190 DC

AZIMUTH PATTERN

Gain

1.90

(2.79 dB)

Frequency

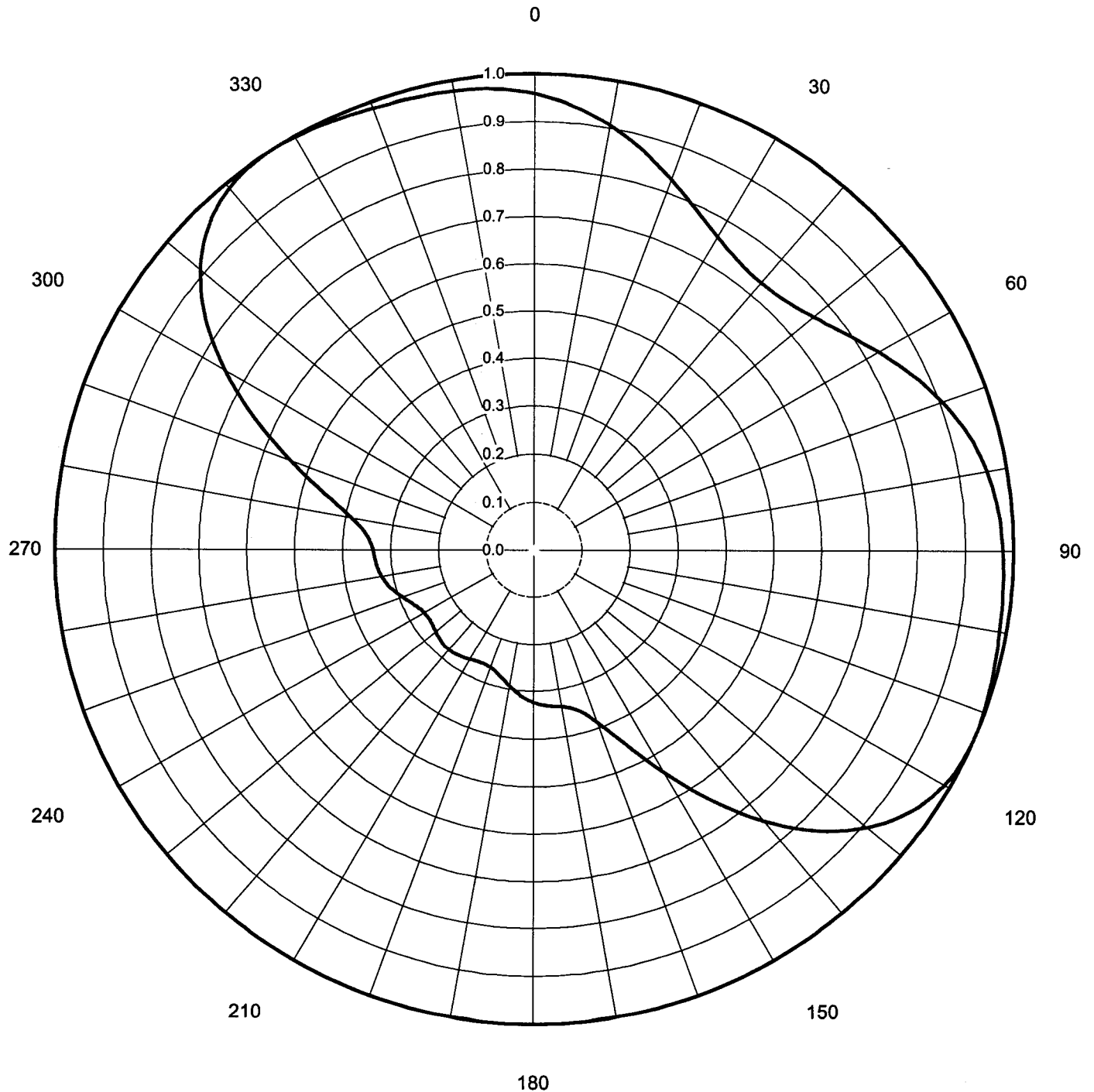
587.00 MHz

Calculated / Measured

Calculated

Drawing #

TFU-4C190-33



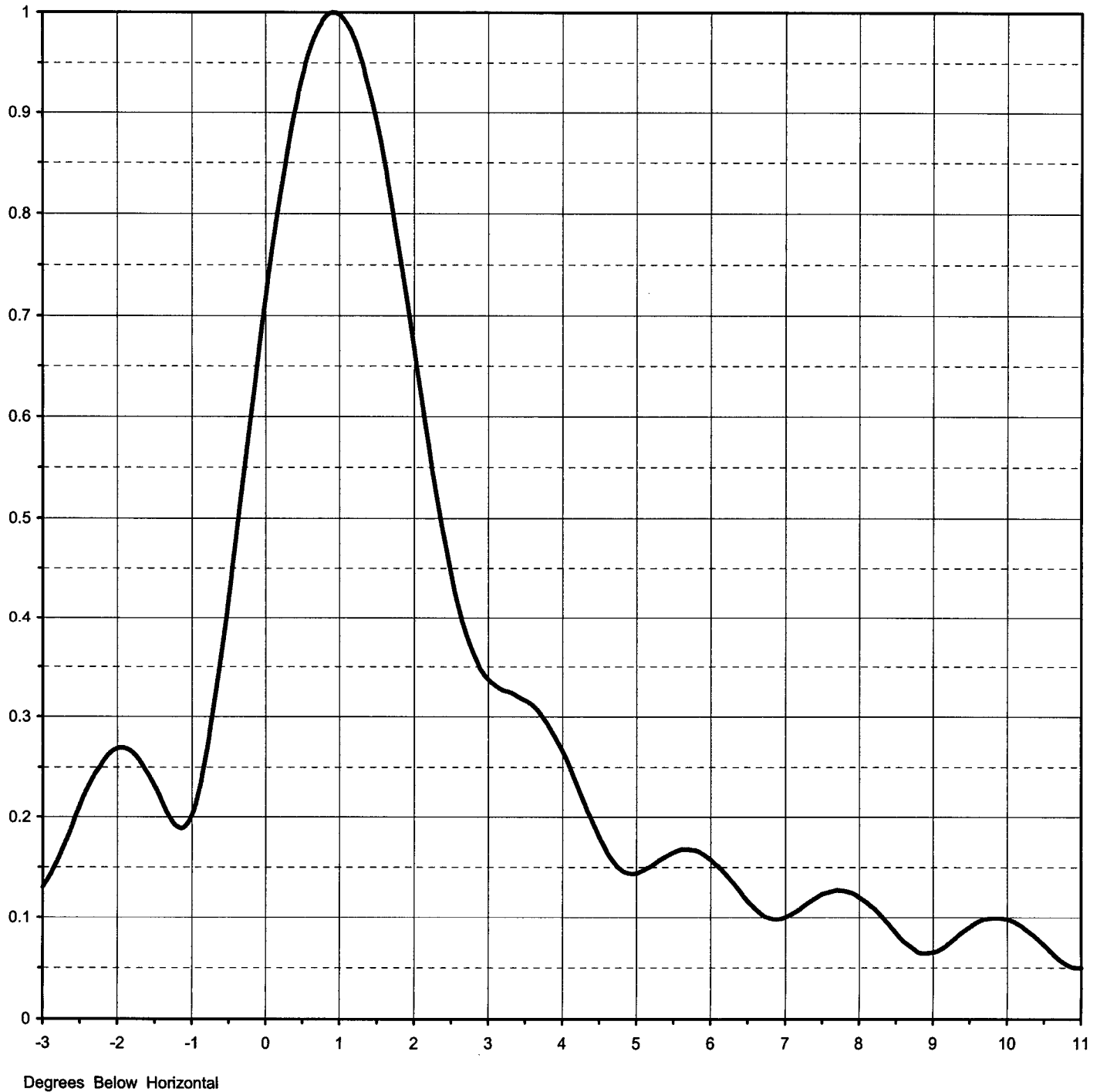


Proposal Number	DCA-10434	Revision:	1
Date	2-Nov-04		
Call Letters	WDFX-DT	Channel	33
Location	Ozark, AL		
Customer	Raycom		
Antenna Type	TFU-28ETT-R 4C190 DC		

ELEVATION PATTERN

RMS Gain at Main Lobe	24.50 (13.89 dB)
RMS Gain at Horizontal	12.60 (11.00 dB)
Calculated / Measured	Calculated

Beam Tilt	0.90 deg
Frequency	587.00 MHz
Drawing #	28E245090

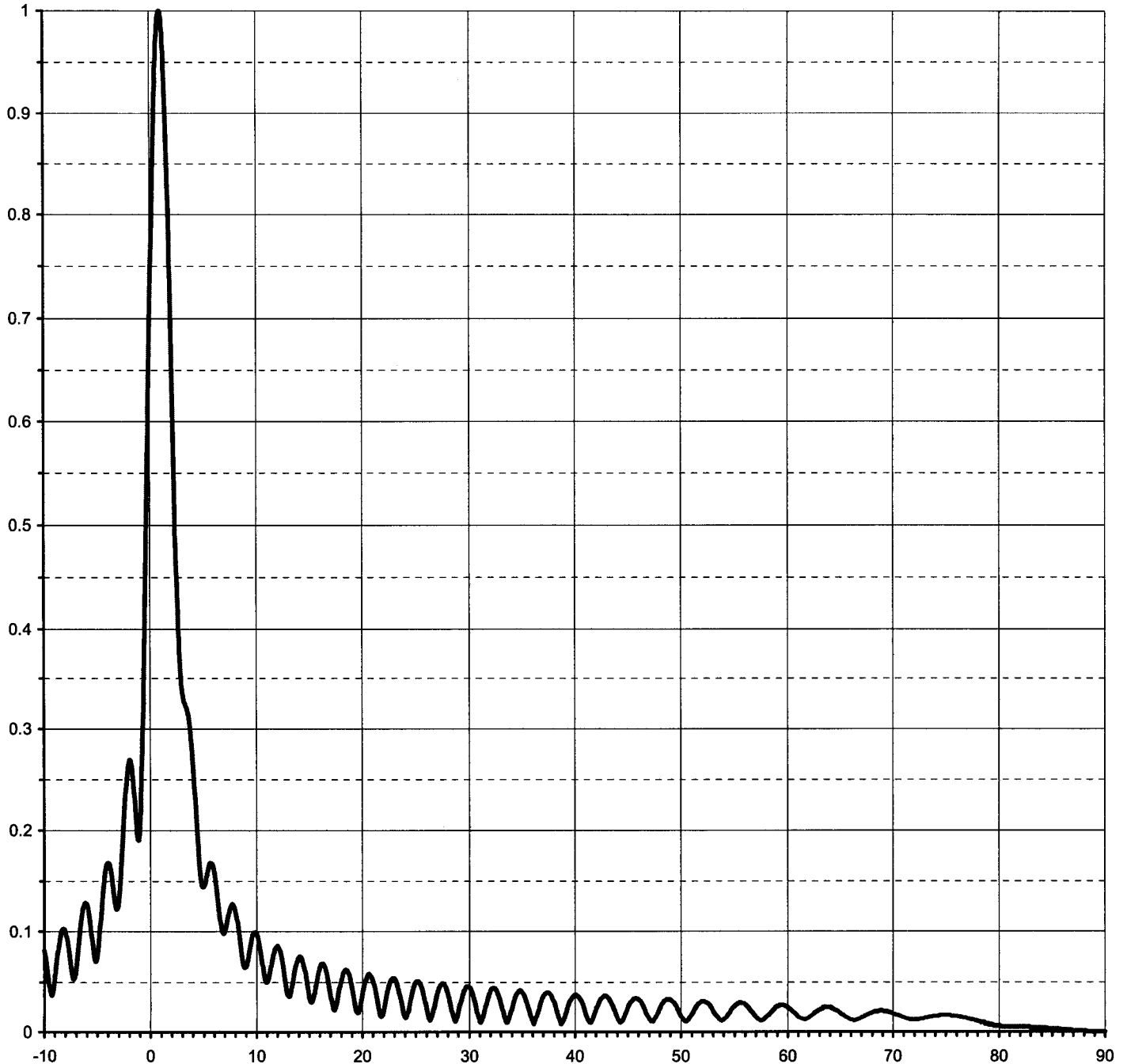




Proposal Number	DCA-10434	Revision:	1
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Call Letters	WDFX-DT	Channel	33
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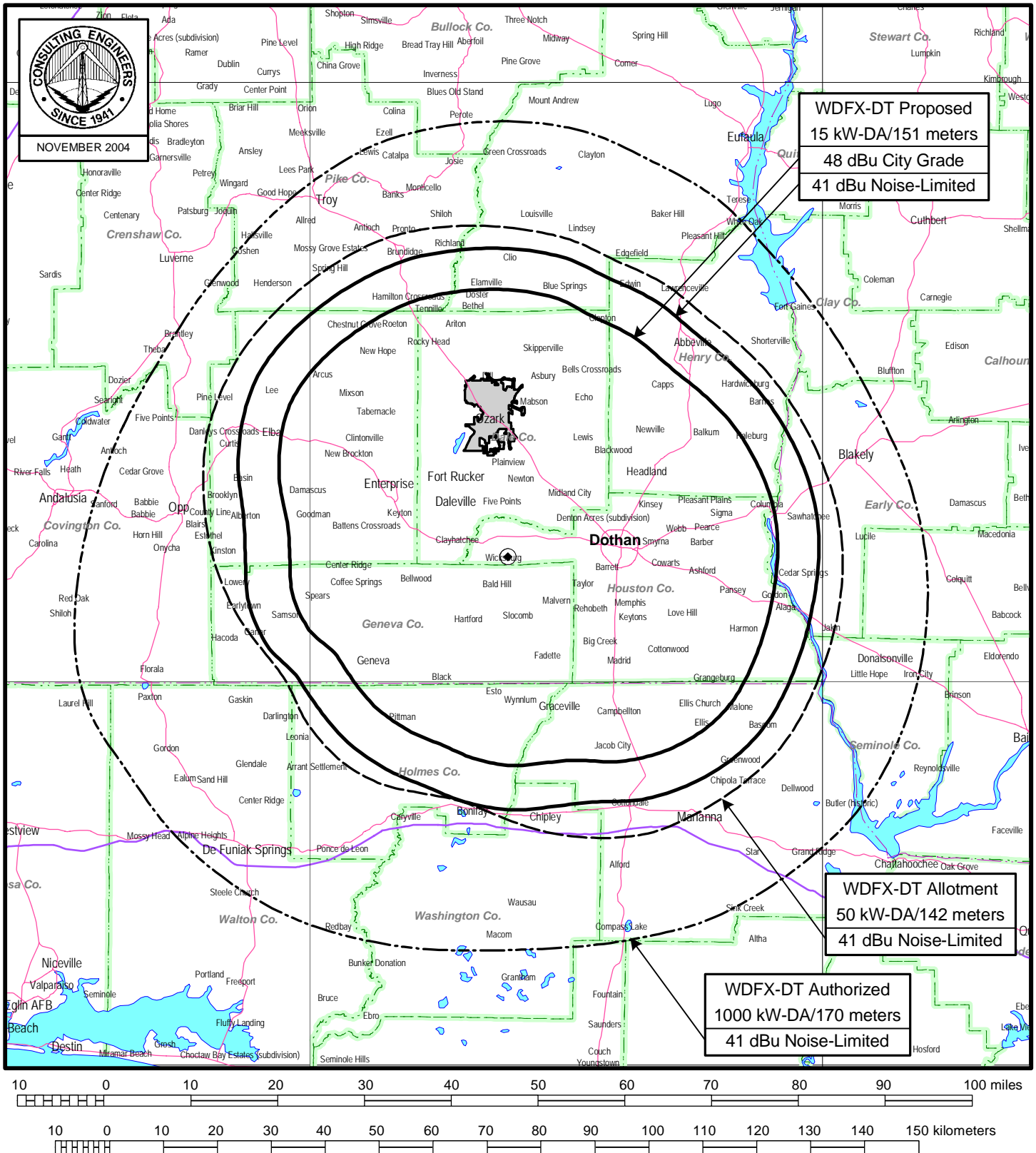
ELEVATION PATTERN

RMS Gain at Main Lobe	24.50 (13.89 dB)	Beam Tilt	0.90 deg
RMS Gain at Horizontal	12.60 (11.00 dB)	Frequency	587.00 MHz
Calculated / Measured	Calculated	Drawing #	28E245090-90



Degrees Below Horizontal

Figure 3



PREDICTED COVERAGE CONTOURS

STATION WDFX-DT

OZARK, ALABAMA

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du Treil, Lundin & Rackley, Inc Sarasota, Florida