

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
STATION WPGX-DT (FACILITY ID 2942)
PANAMA CITY, FLORIDA

OCTOBER 26, 2004

CH 9 2.3 KW (MAX-DA) 142 M

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
STATION WPGX-DT (FACILITY ID 2942)
PANAMA CITY, FLORIDA
CH 9 2.3 KW (MAX-DA) 142 M

Table of Contents

Technical Narrative

Figure 1	Antenna and Supporting Structure
Figure 2	Antenna Patterns
Figure 3	Coverage Map

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
STATION WPGX-DT (FACILITY ID 2942)
PANAMA CITY, FLORIDA
CH 9 2.3 KW (MAX-DA) 142 M

Technical Narrative

This Technical Exhibit was prepared on behalf of digital television broadcast station WPGX-DT at Panama City, Florida. Station WPGX-DT is authorized for operation on channel 9 with a directional antenna maximum effective radiated power (ERP) of 130 kW and an antenna height above average terrain (HAAT) of 264 meters (BMPCDT-20011003AAK).

The proposed facility will not result in any extension of the 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 application proposes to decrease ERP and antenna HAAT, change directional antenna and relocate to the analog transmitter site (same as DTV STA site). There is no proposed change in channel (9) or city of license (Panama City). The proposed site coordinates are (NAD27): 30-23-42 N, 85-32-02 W. A directional antenna maximum ERP of 2.3 kW and antenna HAAT of 142 meters are proposed. The FCC antenna structure registration number is 1030678.

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 (36 dBU) and city-grade (43 dBU) contours for the proposed operation, along with the noise-limited contours for the authorized and allotted WPGX-DT operations. The Panama City limits were derived from information contained in the 2000 U.S. Census for Florida. 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 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>
WPFM-FM, Panama City, FL	300C1	70	12.3
WPAP-FM, Panama City, FL	223C1	18	13.6
WYYX, Bonifay, FL	249C1	18	13.6
WFSY, Panama City, FL	253C0	18	13.6
WPAP-FM(CP)	223C1	19	13.7
WFSY(CP)	253C0	19	13.7
WPGX, Panama City, FL	28	0	0.0
WJHG-TV, Panama City, FL	7	70	12.3
WJHG-DT(CP), Panama City, FL	8	70	12.3
WBIF, Marianna, FL	51	19	13.7
WMBB-DT(CP), Panama City, FL	19	109	14.5
WMBB, Panama City, FL	13	109	14.6

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

Allocation Considerations

Interference calculations have been made using the procedures outlined in the FCC's OET-69 bulletin, using a 2 kilometer grid spacing. The proposed WPGX-DT operation does not cause excessive (greater than 2%, up to 10% total) calculated interference to any analog or DTV assignment. Below is the list of stations considered in the OET-69 analysis.

From the above list of stations considered, the table below shows the calculated interference caused to each station. Only stations that are predicted to receive interference from the proposed WPGX-DT operation are shown in the interference table.

Study Station	Baseline	Net Population Change/Interference
48 WRJM-DT TROY AL (CP)	429,742	0 (0.0%) New Interference
49 WAFF-DT HUNTSVILLE AL (PLN)	816,493	112 (0.0%) New Interference
49 WTLH AUGUSTA GA (LIC)	741,197	3,560 (0.5%) New Interference

The proposed WPGX-DT operation does not cause calculated interference to any other analog or DTV station. Therefore, it is believed the proposal complies with the FCC's "de minimis" interference policy.

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.613 of the FCC Rules. The analysis reveals no potential impact to any Class A station.

Radiofrequency Electromagnetic Field Exposure

The proposed WPGX-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 135 meters above ground level with a maximum ERP of 2.3 kW. A conservative relative field value of 0.3 was assumed for the antenna's downward radiation (see Figure 2). The calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0004 mW/cm². This is less than 1.0 % of the FCC's recommended limit of 0.2 mW/cm² for channel 9 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

October 26, 2004



Tower Reg. No. 1030678

259.2 m AMSL
(850 ft AMSL)

230.7 m
(757 ft)

Proposed WPGX DTV-9 Antenna

Radiation Center
163.8 m AMSL
(537 ft AMSL)

135.3 m
(444 ft)

Site Coordinates:
30° 23' 42" N
85° 32' 02" W
(NAD 27)

28.5 m AMSL
(94 ft AMSL)

Not to Scale

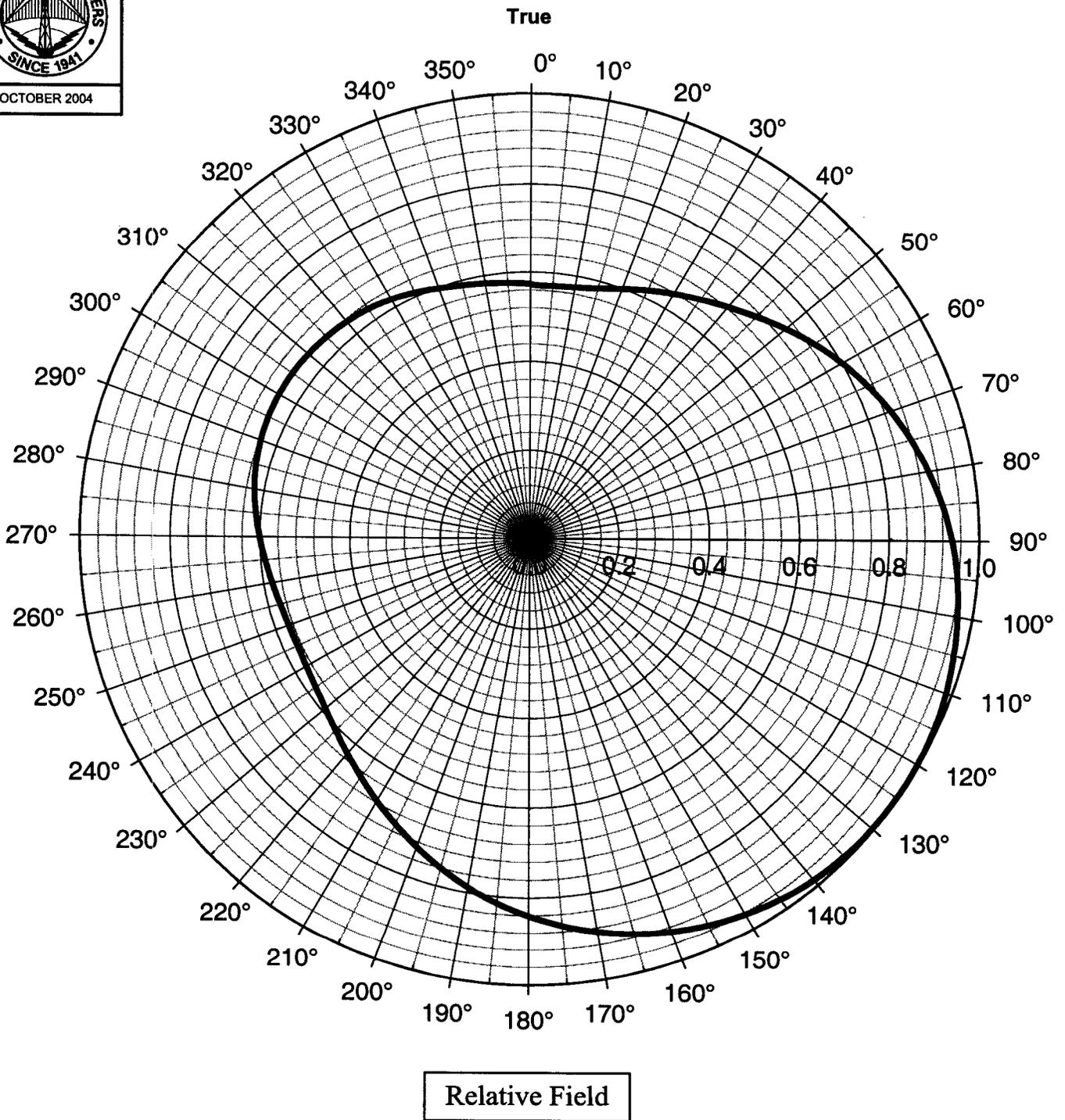
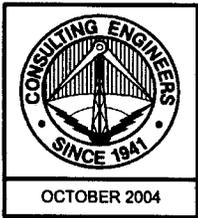
ANTENNA AND SUPPORTING STRUCTURE

STATION WPGX-DT

PANAMA CITY, FLORIDA

CH 9 2.3 KW (MAX-DA) 142 M

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



DIRECTIONAL ANTENNA AZIMUTH PATTERN

STATION WPGX-FM

PANAMA CITY, FLORIDA

CH 9 2.3 KW (MAX-DA) 142 M

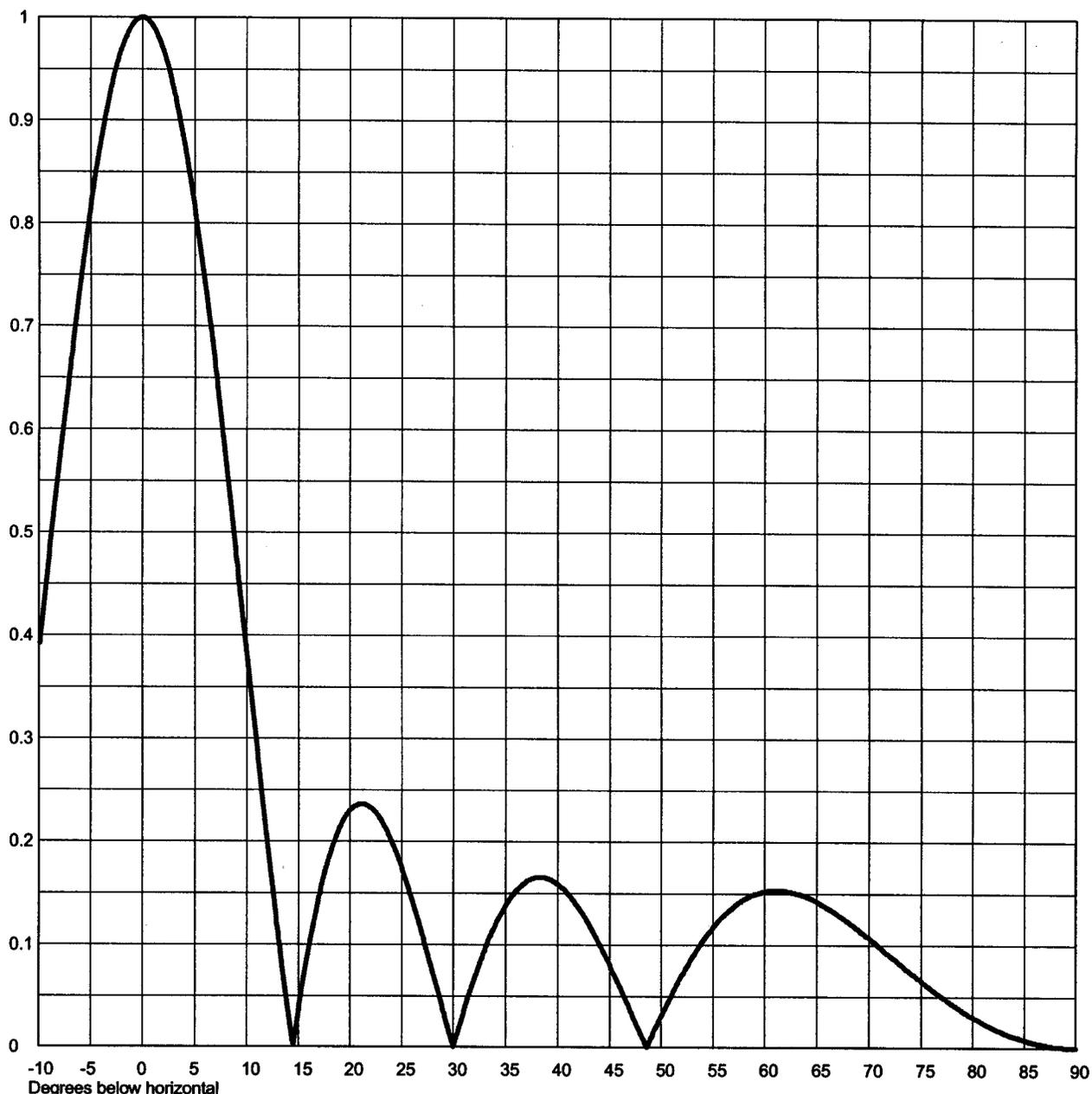
du Treil, Lundin & Rackley, Inc Sarasota, Florida



Proposal Number
Date **26 Oct 2004**
Call Letters **WPGX-DT** Channel **9**
Location **Panama City, FL**
Customer
Antenna Type **TLS-V4**

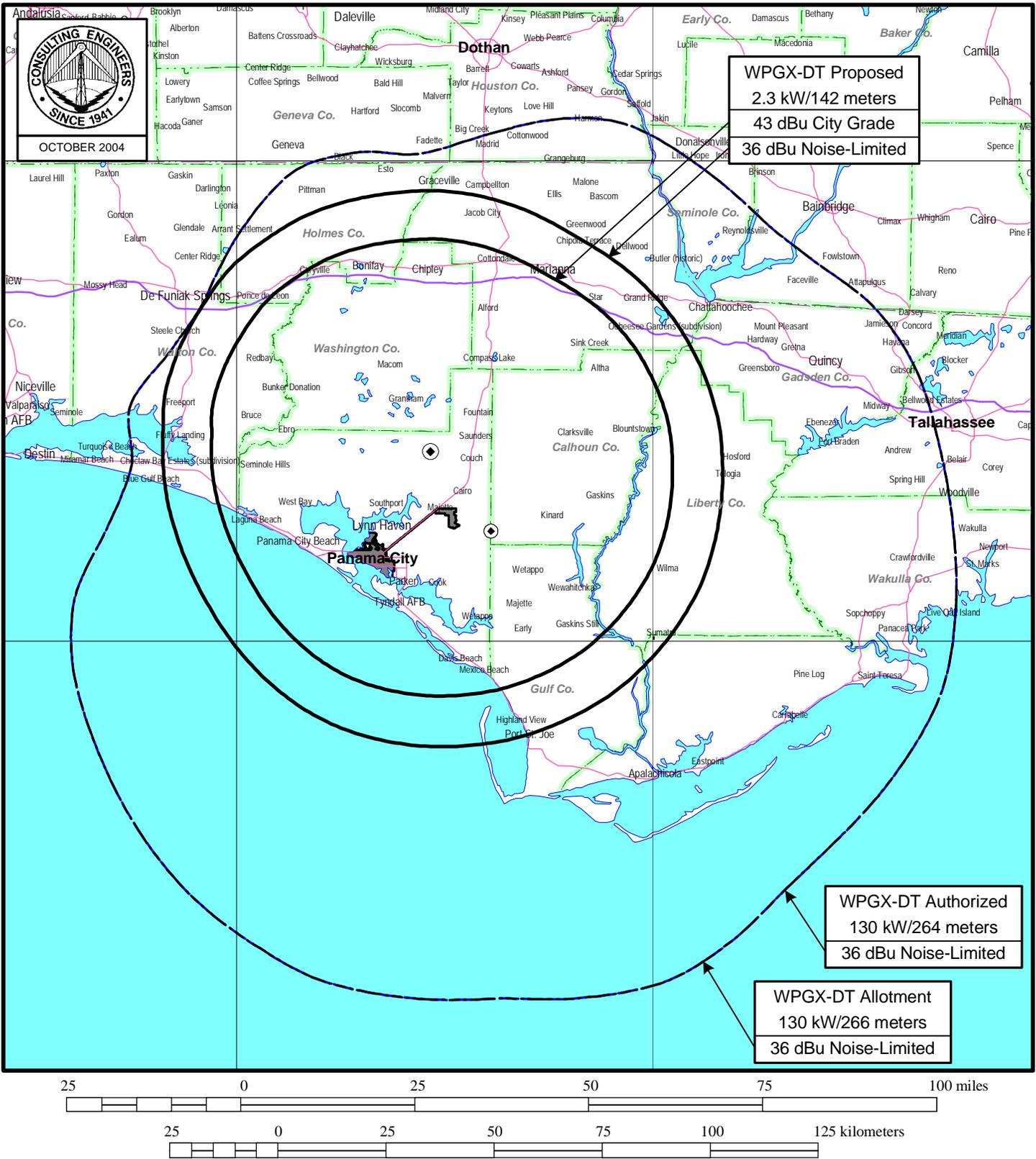
ELEVATION PATTERN

RMS Gain at Main Lobe	4.0 (6.02 dB)	Beam Tilt	0.00 Degrees
RMS Gain at Horizontal	4.0 (6.02 dB)	Frequency	189.00 MHz
Calculated / Measured	Calculated	Drawing #	04S040000-90



Remarks:

Figure 3



PREDICTED F(50,90) COVERAGE CONTOURS

STATION WPGX-DT

PANAMA CITY, FLORIDA

CH 9 2.3 KW (MAX-DA) 142 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida