

TECHNICAL EXHIBIT  
APPLICATION FOR DTV MAXIMIZATION  
STATION WPGX(DT) (FACILITY ID 2942)  
PANAMA CITY, FLORIDA  
CH 9 34 KW (MAX-DA) 225 M

Technical Narrative

This Technical Exhibit supports an application for digital television (DTV) station WPGX(DT) to maximize its post-transition facility. This application requests a construction permit (CP) for a digital television operation on channel 9, using an existing directional transmitting antenna.

Proposed Facilities

Station WPGX(DT) proposes to operate DTV channel 9 with a directional effective radiated power (ERP) of 34 kilowatts and antenna height above average terrain (HAAT) of 225 meters. The transmitter site coordinates are:

30° 23' 42" North Latitude  
85° 32' 02" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. Figure 2 is a map showing the DTV predicted coverage contours. The predicted 43 dBu contour will encompass all of Panama City. The Panama City city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

### Population Served

The herein proposed WPGX(DT) “maximized” facility is predicted to serve 416,826 persons, post-transition, based upon the 2000 Census. WPGX(DT)’s associated Appendix B facility is predicted to serve 238,000 persons. Therefore, the herein proposed WPGX(DT) facility would serve more than 100% of WPGX(DT)’s Appendix B population.

### Allocation Considerations

The proposed WPGX(DT) operation meets the FCC’s 0.5% post-transition interference standards to pertinent Class A and DTV facilities using the procedures outlined in the FCC’s OET-69 Bulletin and a **non-standard 2 kilometer cell size and 0.5 kilometer terrain distance increment**. As indicated, the proposed facility will meet the 0.5% interference criterion outlined in the FCC’s Rules and published guidelines with respect to all considered stations, except to station WTVM(DT), on channel 9 at Columbus, Georgia. An interference agreement with WTVM(DT) has been obtained.

### 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 DTV antenna is located 221 meters above ground level with an ERP of 34 kW. A conservative relative field value of 0.3 was assumed for the calculation (see Figure 3). The calculated power density at a point 2 meters above ground level will not exceed  $0.002 \text{ mW/cm}^2$ . This is less than 5% of the FCC's recommended limit of  $0.2 \text{ mW/cm}^2$  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 station is at reduced power or shut down. The proposed WPGX(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.

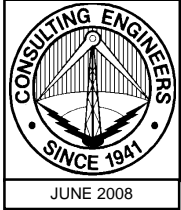


Jonathan N. Edwards

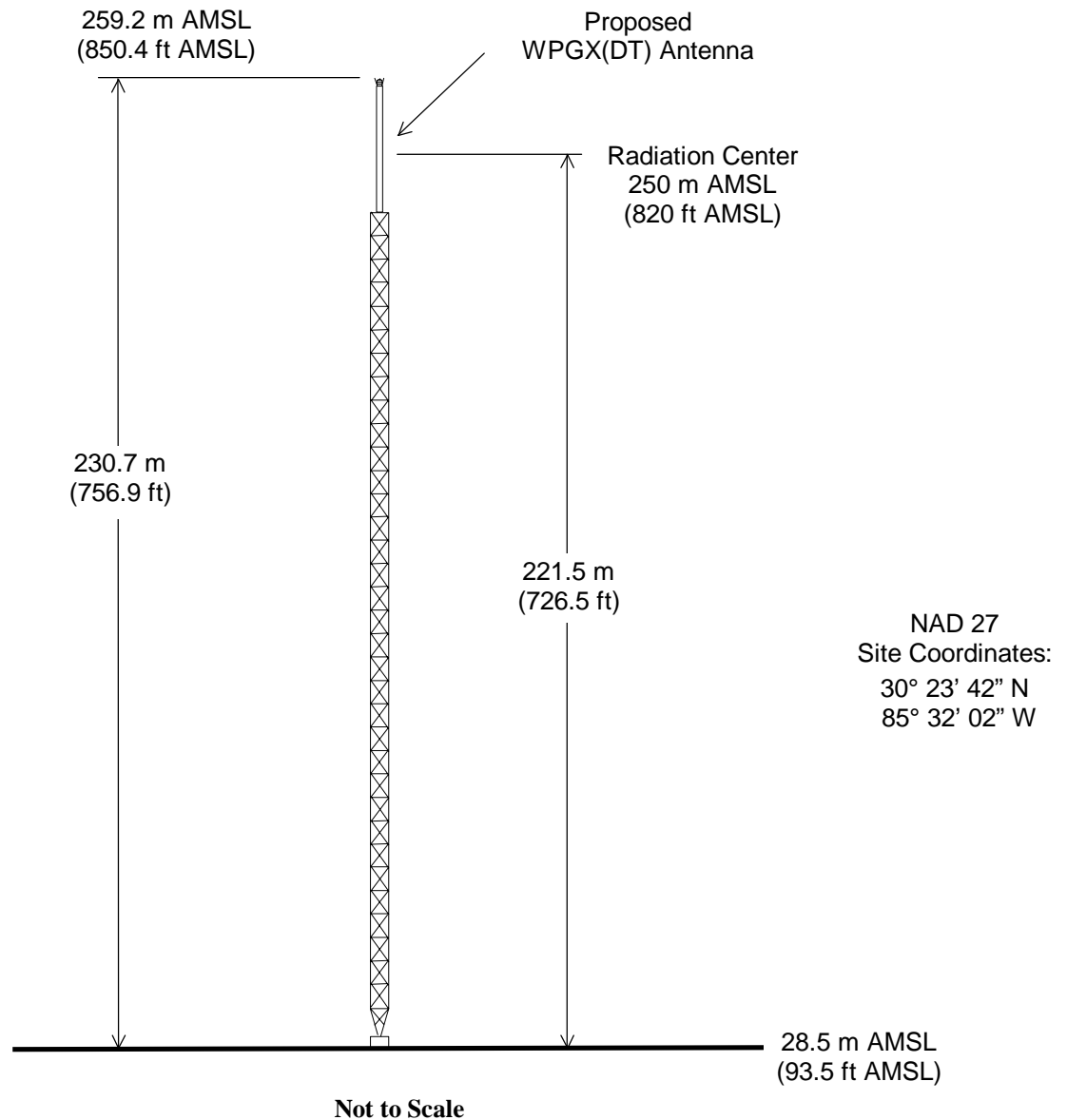
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
(941) 329-6000  
JON@DLR.COM

June 19, 2008

Figure 1



Registration No. 1030678



## ANTENNA AND SUPPORTING STRUCTURE

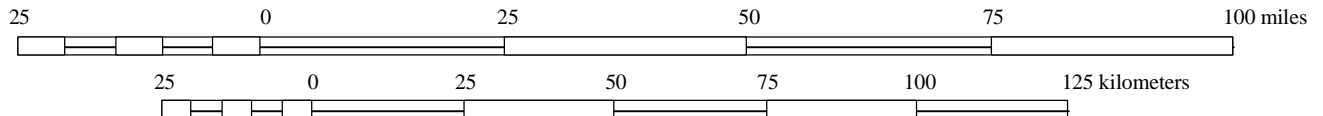
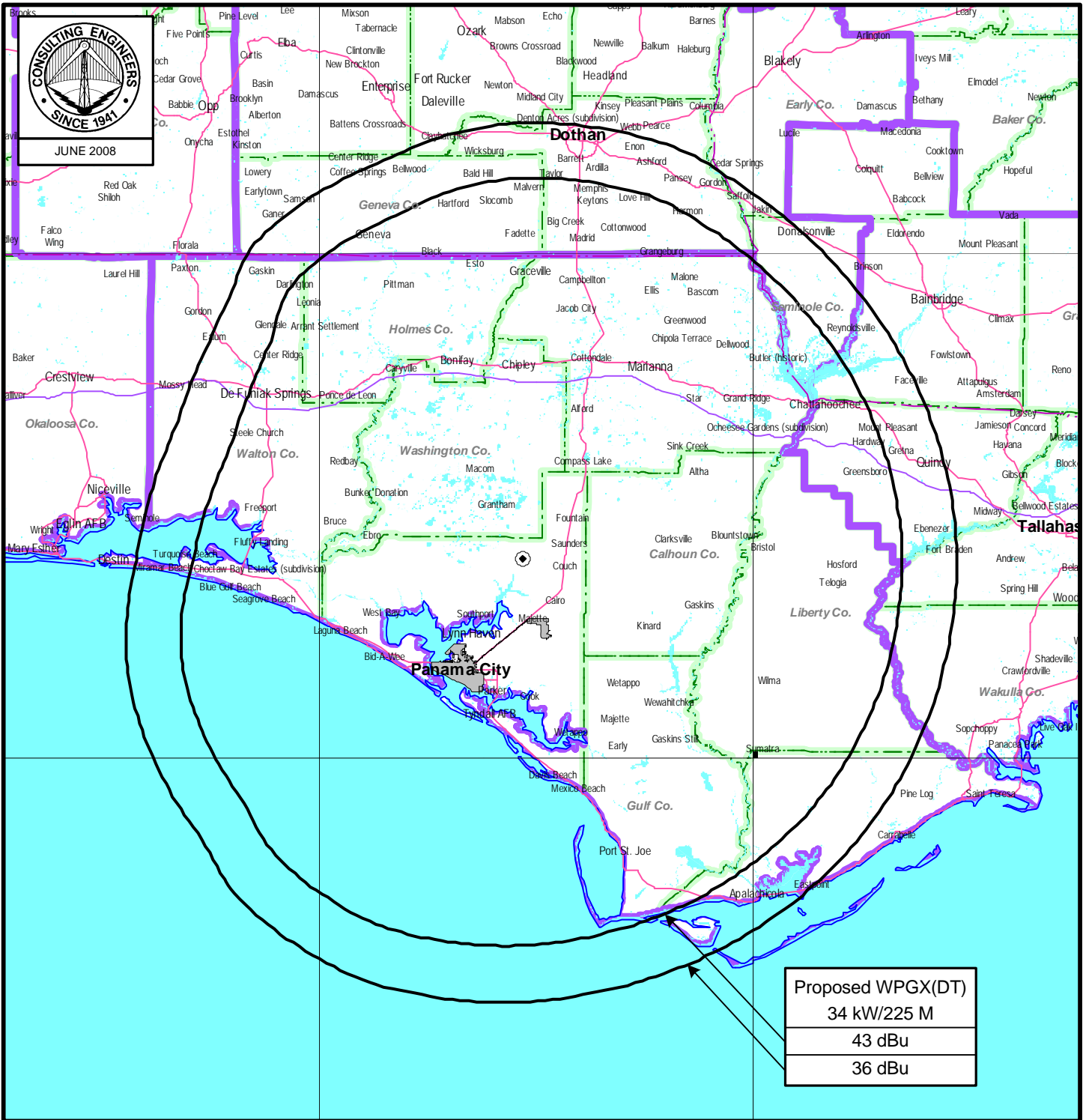
STATION WPGX(DT)

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

Figure 2



## PREDICTED COVERAGE CONTOURS

STATION WPGX(DT)

PANAMA CITY, FLORIDA

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du Treil, Lundin & Rackley, Inc Sarasota, Florida

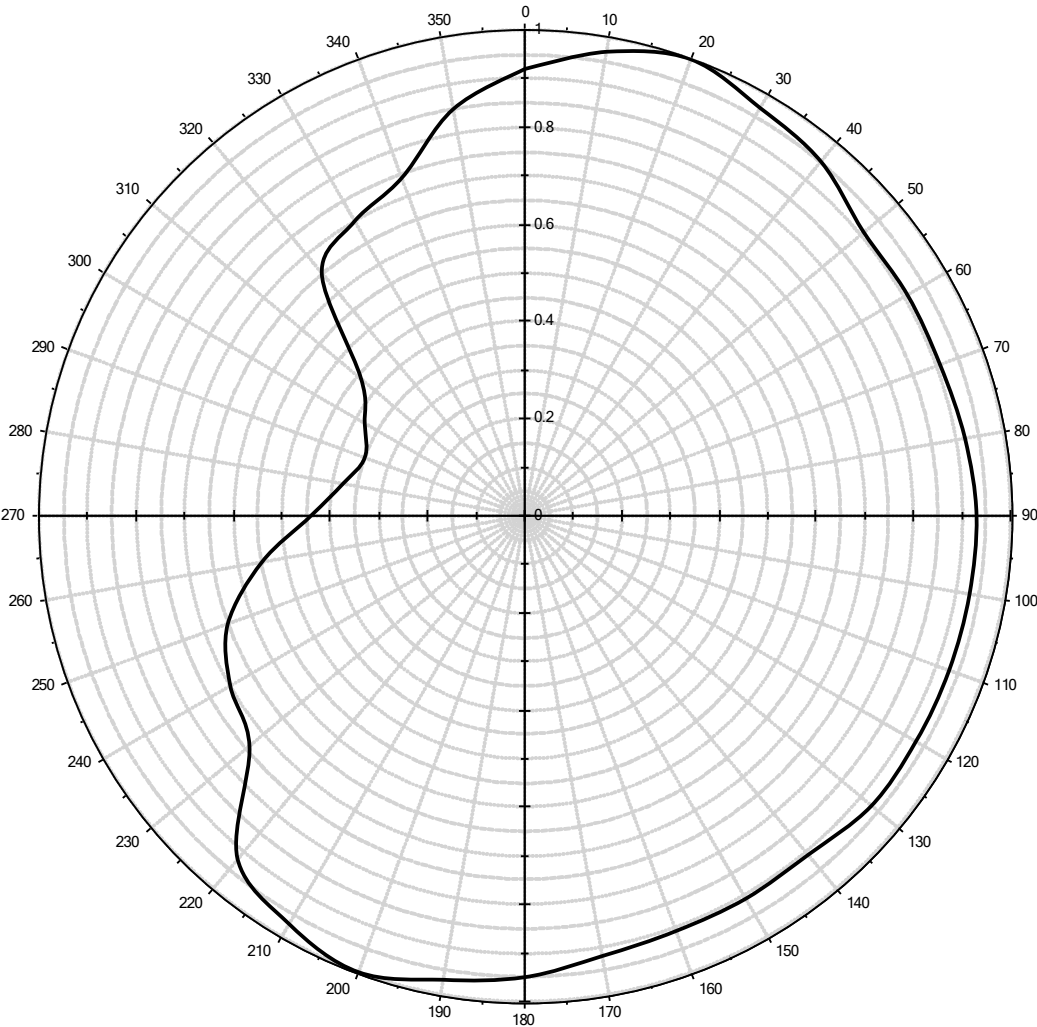
Figure 3



# DA Inquiry

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

**Antenna Pattern:** Antenna ID: 18025



**Note:** display reflects rotation of 0.00°

**Antenna Details:**

0°	0.920	60°	0.910	120°	0.930	180°	0.950	240°	0.700	300°	0.380
10°	0.970	70°	0.910	130°	0.930	190°	0.970	250°	0.650	310°	0.440
20°	1.000	80°	0.920	140°	0.910	200°	1.000	260°	0.550	320°	0.650
30°	0.970	90°	0.930	150°	0.910	210°	0.970	270°	0.440	330°	0.700
40°	0.950	100°	0.930	160°	0.910	220°	0.920	280°	0.380	340°	0.740
50°	0.910	110°	0.930	170°	0.920	230°	0.740	290°	0.350	350°	0.850

**Antenna Make:** BAS

**Standard Pattern:**

**Antenna Model:** SW-30-DA

**Last Change Date:** 8/9/2006