



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION TO MODIFY
CONSTRUCTION PERMIT BPCDT-19991229AAM
WFGX-DT- FORT WALTON BEACH, FLORIDA
DTV - CH. 50 - 1000 kW - 221.0 M HAAT**

Prepared for: Television Fit-For-Life, Inc.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a registered Professional Engineer in the Commonwealth of Virginia, Registration No. 7418, and in the State of New York, Registration No. 63418.

GENERAL

This office has been authorized by Television Fit-For-Life, Inc., permittee of WFGX-DT, channel 25, Fort Walton Beach, Florida, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of this application to modify its current authorization, construction permit BPCDT-19991229AAM, to substitute DTV channel 50 for DTV channel 25 currently authorized, and change the transmitter site. The instant application is in response to the Report and Order¹ released on November 19, 2003 amending the DTV Table of Allotments, Section 73.622(b) of the Commission's Rules, as of January 5, 2004 to substitute DTV channel 50 for DTV channel 25 with respect to Fort Walton Beach, Florida. The permittee is instructed to, within 45 days of the effective date

¹ See Report and Order in MM Docket No. 00-233, RM-9996, 68 FR 67378 (2003)

of this *Order*, submit to the Commission a minor change application for a construction permit specifying DTV Channel 50 in lieu of DTV Channel 25 for station WFGX-DT. The instant "checklist" application is submitted to fulfill that requirement.

The permittee is herein proposing, except for one minor change, the technical specifications set forth in the *Order*. The geographic coordinates contained in the *Order* specify the location of a tower owned by Pinnacle Towers, Inc., FCC registration No. 1058824. The permittee proposes to utilize another tower, FCC registration No. 1029918, located 977 meters from the tower specified in the allotment *Order*. The proposed tower's geographic coordinates are: 30E 23' 46" North latitude, 86E 59' 13" West longitude, North American Datum 1927. Since the distance from the allotment site to the antenna site herein proposed is less than 5 km, the application's "checklist" status is preserved. No other changes to the specifications set forth in the *Order* are herein proposed.

PROPOSED OMNI-DIRECTIONAL ANTENNA

It is proposed to install a new Dielectric model TFU-16GBH-R O4 omni-directional antenna at a centerline height of 215.7 meters Above Ground Level (AGL) and 223.3 meters Above Mean Sea Level (AMSL). The antenna centerline Height Above Average Terrain (HAAT) is proposed to be 221.0 meters. The proposed antenna shall employ an electrical beam tilt of 0.50 degrees below the horizontal plane. The manufacturer's vertical plane elevation radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibits 2A and 2B, and tabulated in Exhibit 3. A vertical plan antenna sketch is shown in Exhibit 1.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.684 of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The predicted principal community (48 dBu) service contour completely encompasses Fort Walton Beach, Florida, the principal community of license, shown in Exhibit 4, as required by Section 73.625(a) of the Commission's rules. The predicted 41 dBu noise limited service contour is also shown in Exhibit 4.

ALLOCATION CONSIDERATIONS

NTSC Allocation Considerations

The instant application qualifies for "checklist" status, and the Commission stated in the allotment *Order*: "...we find that WFGX's proposal meets all of the Commission's technical requirements, ...", and, "..., we find that this channel is acceptable under the 2 percent criterion for *de minimis* impact that is applied in evaluating requests for modification of initial DTV allotments ...". Even so, an interference study was performed, using the Commission's application analysis program, tv_process, to ensure that the proposed DTV facility, as slightly modified herein, remains in compliance with the

Commission's *de minimis* interference requirement contained in Section 73.623(c)(2) of the Commission's rules. The study showed that the DTV facility proposed herein is predicted to cause no increase in the interference population in excess of the Commission's *de minimis* criteria to any authorized NTSC television facility, or relevant pending application.

DTV Allocation Considerations

The same study was evaluated to determine if the 977 meter site relocation proposed herein would be predicted to cause any level of new prohibited interference to other authorized DTV facilities, including other authorized DTV stations, DTV expansion construction permits, DTV allotments (including checklist CPs), or pending DTV applications. The study results indicate that the instant proposal is predicted to cause no unacceptable level of new interference to the populations served by any other relevant DTV facility, and thereby is in compliance with the *de minimis* interference criteria contained in Section 73.623(c)(2) of the Commission's Rules.

Class A Television Allocation Considerations

As required in Section 73.623(c)(5) of the FCC's Rules, a study of interference contour overlap was performed to establish compliance with the protection requirements specified therein. The study shows that there are no class A LPTV stations potentially affected by the instant proposal to modify the subject construction permit.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of both broadcast and non-broadcast facilities are located within 10 km of WFGX-DT's proposed site. The permittee recognizes its responsibility to investigate and

remedy complaints of interference which might be created by this proposal in accordance with applicable Rules.

ENVIRONMENTAL CONSIDERATIONS

RADIO FREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted new guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. The guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations that apply in cases that affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with guideline limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The FCC's Maximum Permitted Exposure (MPE) level for "uncontrolled" environments is 0.2 milliwatts per centimeter squared (mW/cm^2) when applied to broadcast

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facilities operating between 30 MHz and 300 MHz, and for broadcast facilities operating between 300 MHz and 1500 MHz, primarily UHF TV stations, is derived from the formula, $(\text{frequency}/1500)$. The MPE level for "controlled" environments is 1.0 milliwatts per centimeter squared (mW/cm^2) for operations between 30 MHz and 300 MHz, and for broadcast stations operating between 300 MHz and 1500 MHz is derived from the formula, $(\text{frequency}/300)$. The predicted emissions of WFGX-DT, channel 50, must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For WFGX-DT, which will operate on television Channel 50 (686-692 MHz), the MPE is 0.459 milliwatts per centimeter squared (mW/cm^2) in an "uncontrolled" environment and 2.295 mW/cm^2 in a "controlled" environment. The proposed WFGX-DT facility will operate with a maximum ERP of 1000 kW from a horizontally polarized omni-directional transmitting antenna with a centerline height of 223.7 meters above ground level (AGL). Considering the relevant conservative vertical plane relative field factor of 0.3, the WFGX-DT facility is predicted to produce a power density at two meters above ground level of 0.06626 mW/cm^2 , which is 14.42% of the FCC guideline value for "uncontrolled" environments, and 2.88% of the FCC guideline value for "controlled" environments (see Appendix A). The total percentage of the ANSI value at the proposed site, considering the cumulative radiation of all stations to be located at the site is only 14.48% of the limit for "uncontrolled" environments, and 2.90% of the limit for "controlled" environments.

OCCUPATIONAL SAFETY

The permittee of WFGX-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the antenna. The permittee is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection to personnel. In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

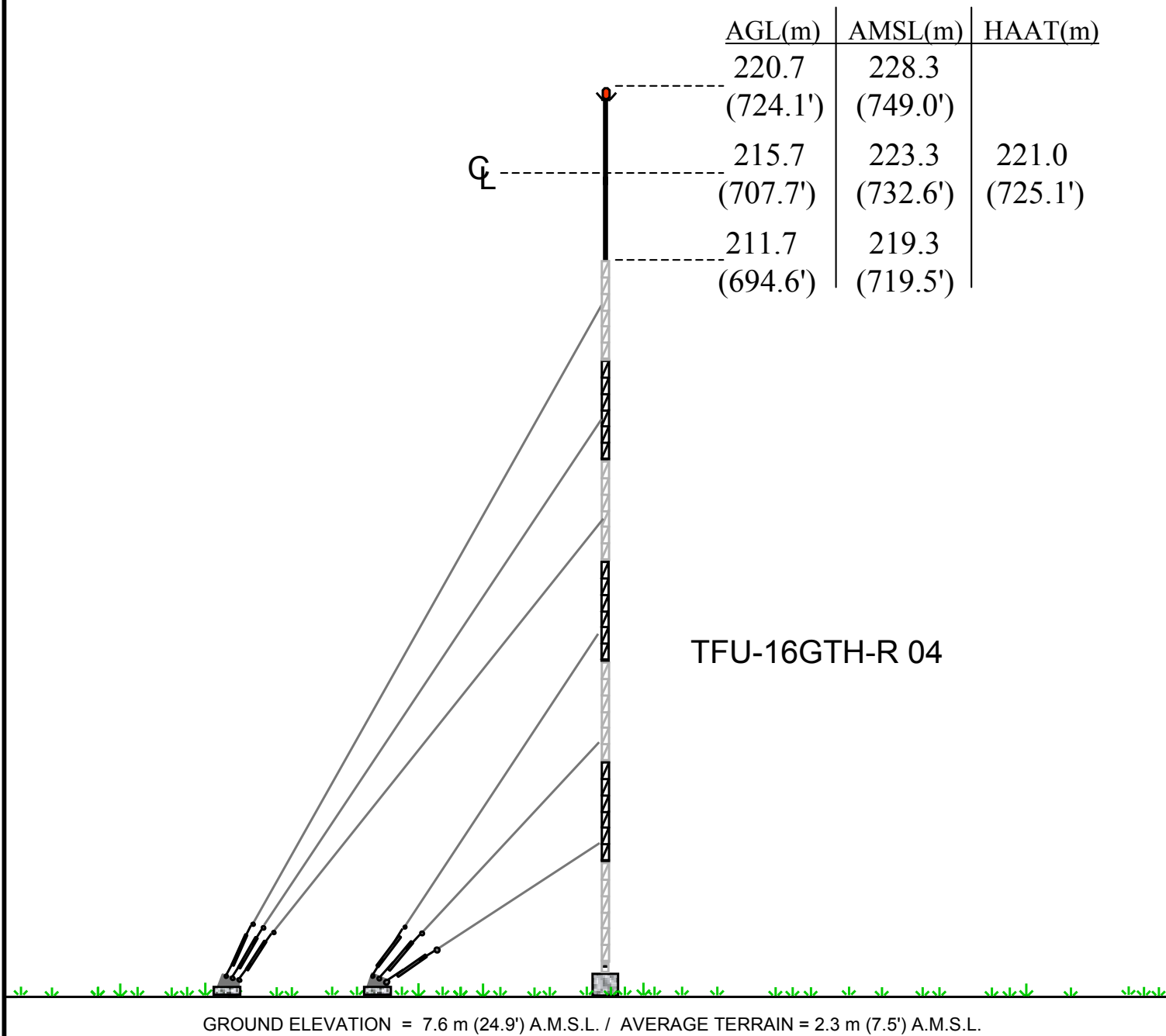
It is submitted that the instant proposal to modify WFGX-DT's construction permit, BPCDT-19991229AAM, as described herein, complies with the Rules, Regulations and Policies of the Federal Communications Commission. This statement, FCC Form 301, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: January 30, 2004


John E. Hidle, P.E.



COORDINATES NAD-27
NORTH LATITUDE: 30° 23' 46"
WEST LONGITUDE: 86° 59' 13"



VERTICAL PLAN ANTENNA SKETCH
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
WFGX-DT - FT WALTON BEACH, FLORIDA
Ch. 50 - 1000 kW - 221.0 m HAAT
JANUARY, 2004

CARL T. JONES
CORPORATION

NOTE : NOT DRAWN TO SCALE

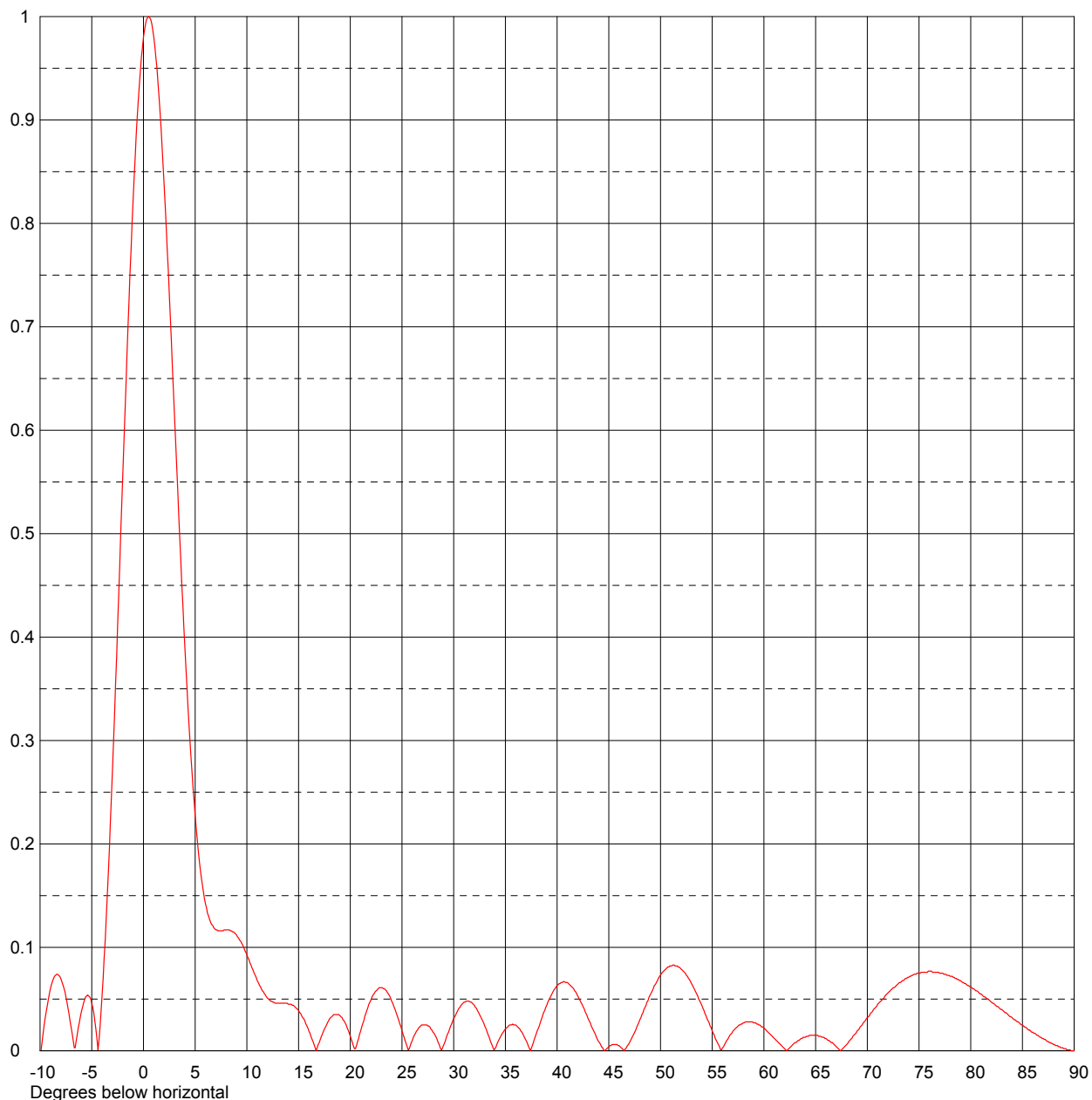


Exhibit No.
TWO-A

Date	27 Jan 2004		
Call Letters	WFGX-DT	Channel	50
Location	Fort Walton Beach, FL		
Customer	Television Fit-For-Life		
Antenna Type	TFU-16GTH-R 04		

ELEVATION PATTERN

RMS Gain at Main Lobe	14.0 (11.46 dB)	Beam Tilt	0.50 Degrees
RMS Gain at Horizontal	13.4 (11.27 dB)	Frequency	689.00 MHz
Calculated / Measured	Calculated	Drawing #	16G140050-90



Remarks:



Exhibit No.
TWO-B

Date
Call Letters
Location
Customer
Antenna Type

27 Jan 2004
WFGX-DT Channel **50**
Fort Walton Beach, FL
Television Fit-For-Life
TFU-16GTH-R 04

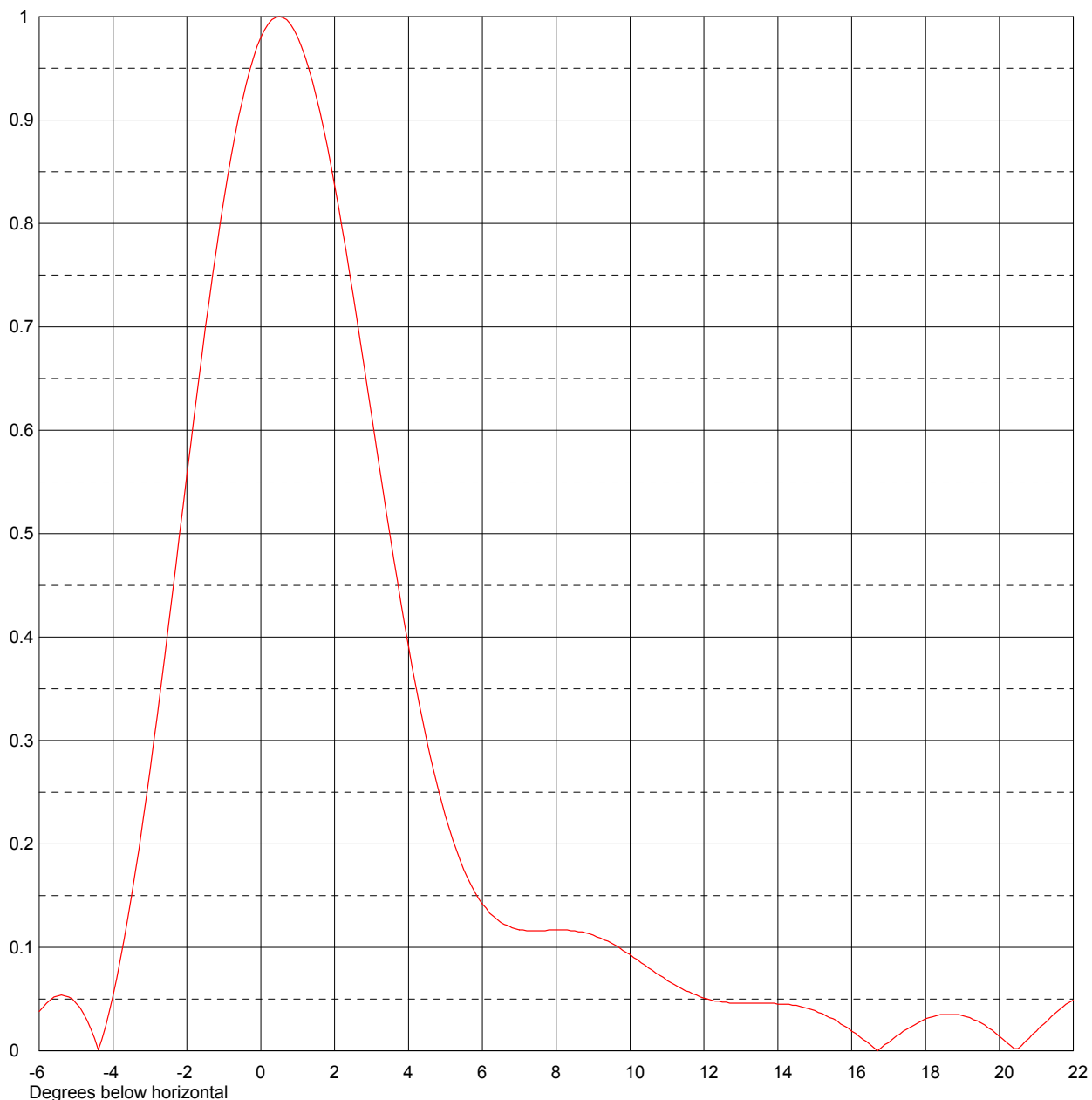
ELEVATION PATTERN

RMS Gain at Main Lobe
RMS Gain at Horizontal
Calculated / Measured

14.0 (11.46 dB)
13.4 (11.27 dB)
Calculated

Beam Tilt
Frequency
Drawing #

0.50 Degrees
689.00 MHz
16G140050



Remarks:



Exhibit No.
THREE

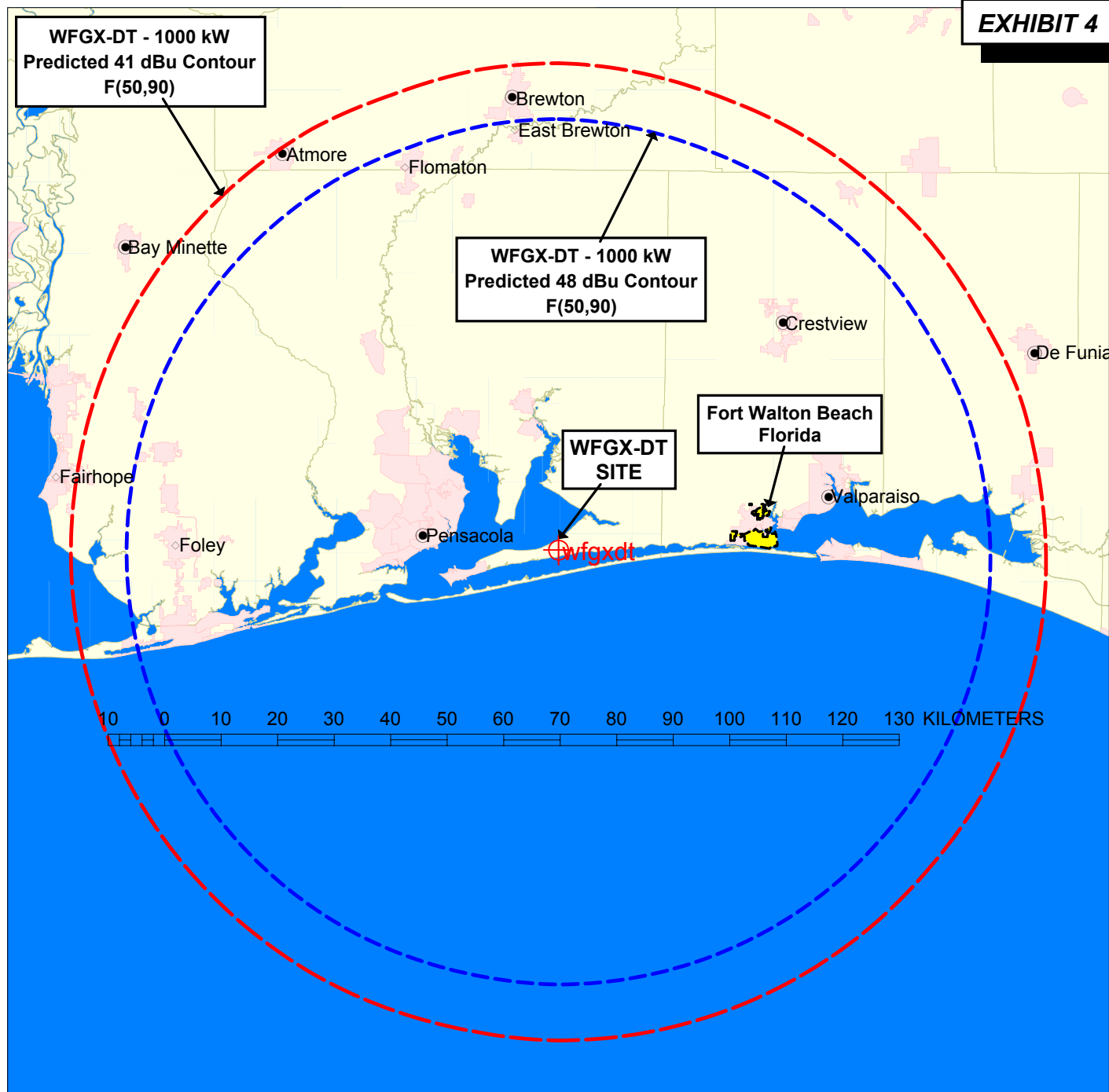
Date **27 Jan 2004**
 Call Letters **WFGX-DT** Channel **50**
 Location **Fort Walton Beach, FL**
 Customer **Television Fit-For-Life**
 Antenna Type **TFU-16GTH-R 04**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **16G140050**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.007	2.4	0.753	10.6	0.078	30.5	0.041	51.0	0.082	71.5	0.050
-9.5	0.032	2.6	0.708	10.8	0.073	31.0	0.047	51.5	0.082	72.0	0.056
-9.0	0.060	2.8	0.661	11.0	0.068	31.5	0.048	52.0	0.079	72.5	0.061
-8.5	0.073	3.0	0.614	11.5	0.058	32.0	0.044	52.5	0.073	73.0	0.065
-8.0	0.070	3.2	0.567	12.0	0.051	32.5	0.035	53.0	0.065	73.5	0.068
-7.5	0.052	3.4	0.521	12.5	0.047	33.0	0.024	53.5	0.055	74.0	0.071
-7.0	0.023	3.6	0.476	13.0	0.046	33.5	0.011	54.0	0.044	74.5	0.074
-6.5	0.010	3.8	0.432	13.5	0.046	34.0	0.002	54.5	0.031	75.0	0.075
-6.0	0.038	4.0	0.391	14.0	0.045	34.5	0.013	55.0	0.019	75.5	0.076
-5.5	0.053	4.2	0.352	14.5	0.044	35.0	0.021	55.5	0.008	76.0	0.077
-5.0	0.046	4.4	0.316	15.0	0.039	35.5	0.025	56.0	0.003	76.5	0.076
-4.5	0.012	4.6	0.283	15.5	0.031	36.0	0.025	56.5	0.011	77.0	0.075
-4.0	0.054	4.8	0.254	16.0	0.019	36.5	0.019	57.0	0.019	77.5	0.074
-3.5	0.150	5.0	0.227	16.5	0.006	37.0	0.010	57.5	0.024	78.0	0.072
-3.0	0.271	5.2	0.204	17.0	0.008	37.5	0.002	58.0	0.027	78.5	0.070
-2.8	0.325	5.4	0.184	17.5	0.021	38.0	0.017	58.5	0.028	79.0	0.068
-2.6	0.382	5.6	0.167	18.0	0.031	38.5	0.031	59.0	0.027	79.5	0.065
-2.4	0.440	5.8	0.153	18.5	0.035	39.0	0.044	59.5	0.025	80.0	0.062
-2.2	0.499	6.0	0.142	19.0	0.034	39.5	0.055	60.0	0.022	80.5	0.058
-2.0	0.557	6.2	0.133	19.5	0.027	40.0	0.063	60.5	0.017	81.0	0.055
-1.8	0.615	6.4	0.127	20.0	0.014	40.5	0.066	61.0	0.012	81.5	0.051
-1.6	0.671	6.6	0.122	20.5	0.002	41.0	0.066	61.5	0.007	82.0	0.047
-1.4	0.725	6.8	0.119	21.0	0.019	41.5	0.061	62.0	0.002	82.5	0.043
-1.2	0.776	7.0	0.117	21.5	0.036	42.0	0.053	62.5	0.003	83.0	0.040
-1.0	0.823	7.2	0.116	22.0	0.049	42.5	0.043	63.0	0.008	83.5	0.036
-0.8	0.865	7.4	0.116	22.5	0.058	43.0	0.031	63.5	0.011	84.0	0.032
-0.6	0.903	7.6	0.116	23.0	0.061	43.5	0.020	64.0	0.013	84.5	0.028
-0.4	0.934	7.8	0.117	23.5	0.058	44.0	0.009	64.5	0.015	85.0	0.025
-0.2	0.960	8.0	0.117	24.0	0.048	44.5	0.001	65.0	0.015	85.5	0.021
0.0	0.980	8.2	0.117	24.5	0.035	45.0	0.004	65.5	0.014	86.0	0.018
0.2	0.993	8.4	0.116	25.0	0.019	45.5	0.006	66.0	0.012	86.5	0.015
0.4	0.999	8.6	0.115	25.5	0.004	46.0	0.005	66.5	0.008	87.0	0.012
0.6	0.999	8.8	0.114	26.0	0.010	46.5	0.000	67.0	0.004	87.5	0.009
0.8	0.993	9.0	0.112	26.5	0.020	47.0	0.008	67.5	0.001	88.0	0.006
1.0	0.980	9.2	0.109	27.0	0.025	47.5	0.018	68.0	0.006	88.5	0.004
1.2	0.961	9.4	0.106	27.5	0.024	48.0	0.030	68.5	0.012	89.0	0.002
1.4	0.937	9.6	0.102	28.0	0.018	48.5	0.042	69.0	0.019	89.5	0.001
1.6	0.908	9.8	0.097	28.5	0.008	49.0	0.054	69.5	0.025	90.0	0.000
1.8	0.875	10.0	0.093	29.0	0.005	49.5	0.064	70.0	0.032		
2.0	0.837	10.2	0.088	29.5	0.018	50.0	0.073	70.5	0.038		
2.2	0.796	10.4	0.083	30.0	0.031	50.5	0.079	71.0	0.045		

Remarks:



PREDICTED COVERAGE CONTOURS

WFGX-DT - FORT WALTON BEACH, FLORIDA

DTV - MODIFICATION OF CP

CH. 50 - 1000 kW - 221.0 m HAAT

48 dBu - Principal Community Contour

41 dBu - Noise Limited Contour

JANUARY 2004

**CARL T. JONES
CORPORATION**

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
WFGX-DT, FORT WALTON BEACH, FLORIDA
CHANNEL 50, 1000 kW ERP, 221.0 m HAAT
JANUARY, 2004

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT ** mAGL</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>PREDICTED POWER DENSITY (mW/cm²)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm²)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WFGS-DT	DT	50	689	H	213	1000.000	0.300	0.06626	0.459	14.42%
W205AS	FM	205	88.9	H & V	105	0.019	1.000	0.00012	0.200	0.06%
TOTAL PERCENTAGE OF ANSI VALUE=										14.48%

*** The antenna heights indicated above are 2 meters less than the actual antenna heights so that the predicted power densities consider the 2 meter human height allowance.*