

TECHNICAL EXHIBIT
REQUEST FOR SPECIAL TEMPORARY
AUTHORITY
TELEVISION STATION WORO-DT (STA)
FAJARDO, PUERTO RICO

April 12, 2006

CHANNEL 33 6 KW (MAX-DA) 844 M

TECHNICAL EXHIBIT
REQUEST FOR SPECIAL TEMPORARY AUTHORITY
TELEVISION STATION WORO-DT (STA)
FAJARDO, PUERTO RICO
CHANNEL 33 6 KW (MAX-DA) 844 M

Table of Contents

| | |
|----------|--|
| | Technical Statement |
| Figure 1 | Predicted Coverage Contours |
| Appendix | Transmitting Antenna Manufacturer's Azimuthal Plane and Vertical Plane Pattern Data |

TECHNICAL EXHIBIT
REQUEST FOR SPECIAL TEMPORARY AUTHORITY
TELEVISION STATION WORO-DT (STA)
FAJARDO, PUERTO RICO
CHANNEL 33 6 KW (MAX-DA) 844 M

Technical Statement

This Technical Statement was prepared on behalf of WORO-DT concerning a request for Special Temporary Authority (STA) for WORO-DT, Fajardo, Puerto Rico (Channel 33). This request is made pursuant to the DTV STA provisions outlined in the FCC *Memorandum Opinion and Order on Reconsideration, In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MM Docket No. 00-39, Released: November 15, 2001.

The proposed WORO-DT STA facility is to operate with a transmitting antenna side-mounted on the existing WORO-TV tower. The maximum directional effective radiated power of the WORO-DT STA facility is 6.0 kW with an antenna radiation center height above average terrain of 844 m. The details and specifications of the proposed operation are summarized in the table below:

| Parameter | Proposed |
|---|------------------------|
| Channel | 33 |
| Location | El Yunque Peak |
| FCC ASRN | 1011469 |
| Geographic coordinates (NAD27) | 18-18-36N / 065-47-41W |
| Site elevation | 1004.7 m AMSL |
| Overall structure height (with all appurtenances) | 79 m |

| Parameter | Proposed |
|---|---------------------------|
| Antenna radiation center height above ground | 45 m |
| Antenna radiation center height above mean sea level | 1050 m |
| Antenna radiation center height above average terrain | 844 m |
| Transmission line, make and model | Andrew, HJ8-50B |
| Transmission line length | 76 m |
| Antenna, make and model | Dielectric, TFU-8DSB-M(C) |
| Antenna type | Directional |
| Antenna Gain at Channel 33 | 15.2 dB |
| Maximum ERP | 7.78 dBk (6.0 kW) |
| Proposed Operation | |
| Transmitter power output | -3.04 dBk (0.50 kW) |
| Total transmission loss | 1.00 dB |
| Antenna input power | -4.04 dBk |
| Antenna gain | 11.82 dB |
| Maximum effective radiated power | 7.78 dBk (6.0 kW) |

There will be no change in the overall height of the existing registered antenna structure as a result of the proposed operation.

The 41 dBu, f(50,90) noise limited contour of the proposed WORO-DT STA facility is well within the predicted 41 dBu, f(50,90) noise limited contour of the authorized WORO-DT facility. See FCC File No. BPCDT-19991101AGY. * Figure 1 is a map illustrating the predicted coverage contours for the proposed WORO-DT operation and the authorized construction permit facility of WORO-DT.† Also as indicated in Figure 1, the predicted 48 dBu, f(50,90) contour fully encompasses the city limits of Fajardo, as required.

There are other broadcast and non-broadcast facilities located in proximity to the proposed facility. No adverse electromagnetic impact is expected with respect to these facilities. However, the applicant recognizes its responsibility to correct objectionable electromagnetic interference problems that result from its proposed operation.

With respect to the potential for human exposure to radio frequency (RF) radiation, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground‡ based on the following conservative assumptions, with the following results:

| Call Sign | Channel | Peak Visual ERP or Average ERP (kW) | Aural ERP (kW) | Relative Field Factor§ | FCC Limit** (mW/cm ²) | Percentage of Limit |
|-------------|---------|-------------------------------------|----------------|------------------------|-----------------------------------|---------------------|
| WORO-DT STA | 33 | 6.0 | -- | 0.20 | 0.389 | 1.1% |

* WORO-DT is authorized for operation on Channel 33 with a nominal non-directional effective radiated power of 280 kW and an antenna height above average terrain of 869 m.

† Figure 1 was originally prepared in November 2001. There are no changes since that time.

‡ The radiation center height above ground is 45 m.

§ This is a worst-case estimate of the relative field factor in the downward direction.

** for general population/uncontrolled environments

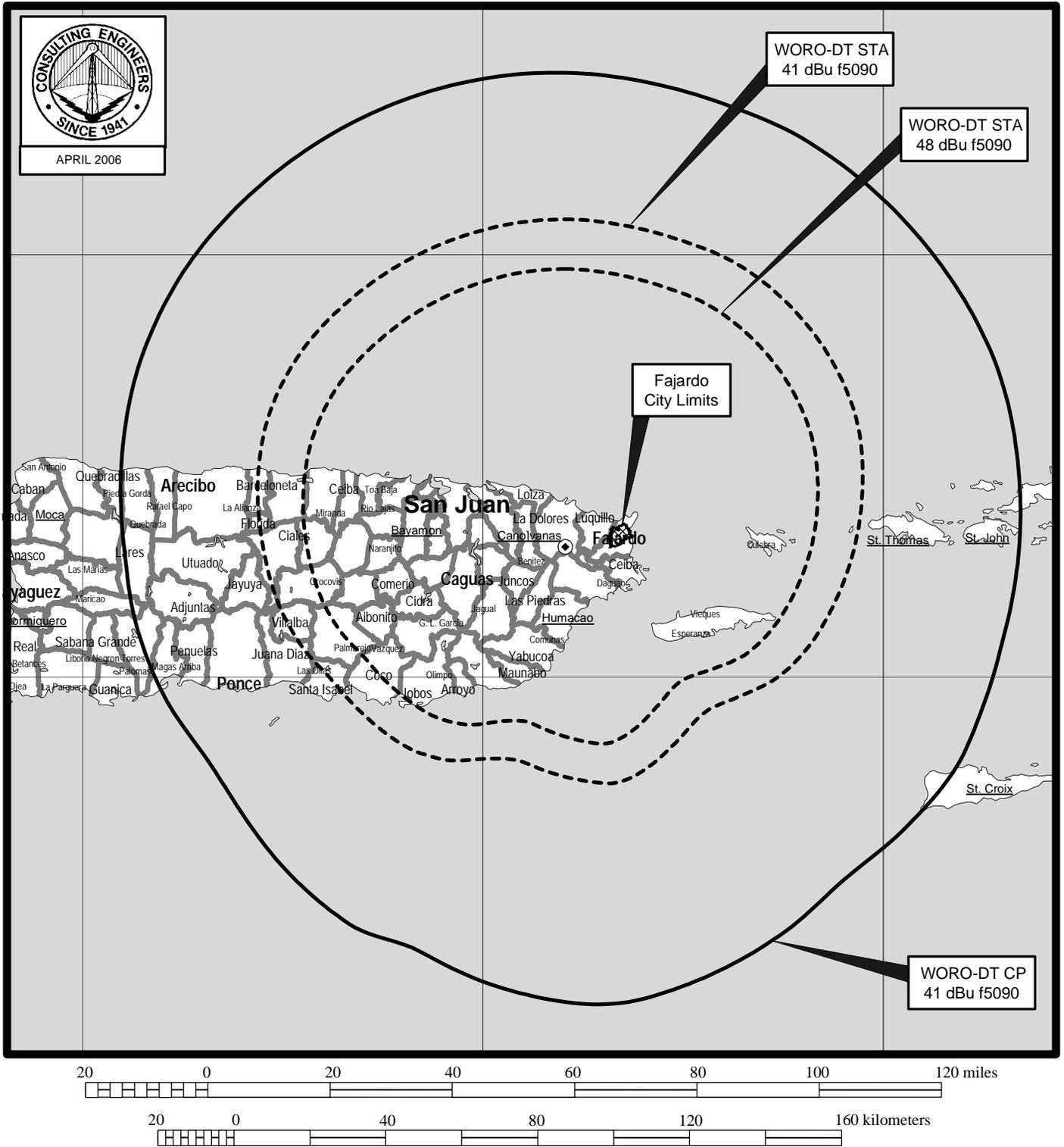
As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 1.1% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing. The applicant, in coordination with any other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the WORO-DT tower or antenna from radio frequency radiation in excess of the FCC guidelines.



Louis Robert du Treil, Jr., P.E.

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

April 12, 2006



PREDICTED COVERAGE CONTOURS

TELEVISION STATION WORO-DT (STA)
 FAJARDO, PUERTO RICO
 CHANNEL 33 6 KW (MAX-DA) 844 M

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

TECHNICAL EXHIBIT
REQUEST FOR SPECIAL TEMPORARY AUTHORITY
TELEVISION STATION WORO-DT (STA)
FAJARDO, PUERTO RICO
CHANNEL 33 6 KW (MAX-DA) 844 M

Transmitting Antenna Manufacturer's
Azimuthal Plane and Vertical Plane Pattern Data

(four pages follow)



Date **29 Nov 2001**
Call Letters
Location **FAJARDO, PUERTO RICO**
Customer
Antenna Type **TFU-8DSB-M (C)**

Channel **33**

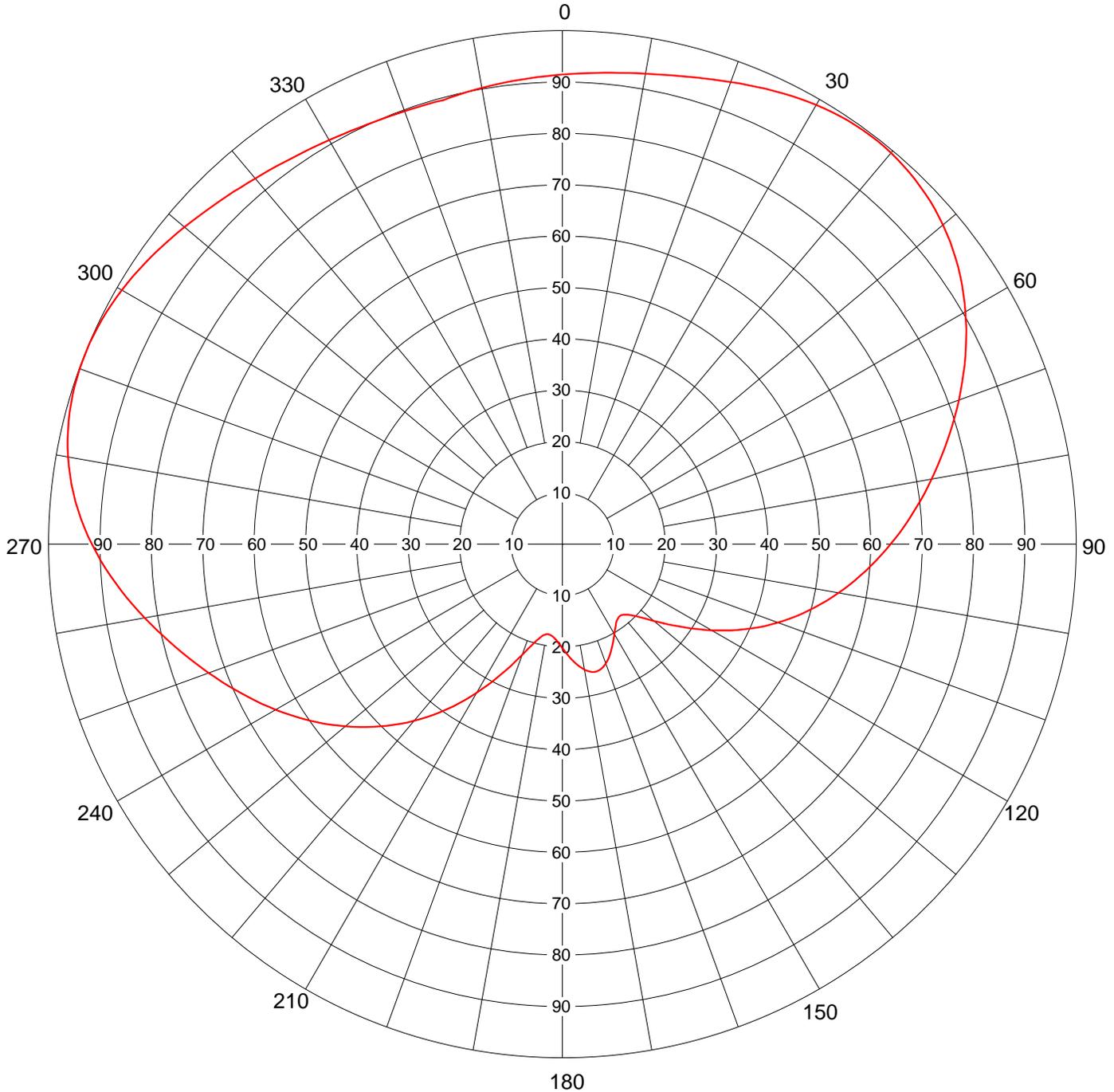
AZIMUTH PATTERN

RMS Gain at Main Lobe
Calculated / Measured

1.90
Calculated

Frequency
Drawing #

587 MHz
DSB-M



Remarks:



Exhibit No.

Date **29 Nov 2001**
 Call Letters **Channel 33**
 Location **FAJARDO, PUERTO RICO**
 Customer
 Antenna Type **TFU-8DSB-M (C)**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **DSB-M**

| Angle | Field | ERP (kW) | ERP (dBk) |
|-------|-------|----------|-----------|
| 0 | 0.914 | 5.0 | 7.00 |
| 10 | 0.930 | 5.2 | 7.15 |
| 20 | 0.958 | 5.5 | 7.41 |
| 30 | 0.988 | 5.9 | 7.68 |
| 40 | 0.995 | 5.9 | 7.74 |
| 50 | 0.967 | 5.6 | 7.49 |
| 60 | 0.906 | 4.9 | 6.92 |
| 70 | 0.821 | 4.0 | 6.07 |
| 80 | 0.730 | 3.2 | 5.05 |
| 90 | 0.639 | 2.4 | 3.89 |
| 100 | 0.546 | 1.8 | 2.53 |
| 110 | 0.446 | 1.2 | 0.77 |
| 120 | 0.335 | 0.7 | -1.72 |
| 130 | 0.232 | 0.3 | -4.91 |
| 140 | 0.180 | 0.2 | -7.11 |
| 150 | 0.202 | 0.2 | -6.11 |
| 160 | 0.247 | 0.4 | -4.36 |
| 170 | 0.248 | 0.4 | -4.33 |
| 180 | 0.202 | 0.2 | -6.11 |
| 190 | 0.178 | 0.2 | -7.21 |
| 200 | 0.229 | 0.3 | -5.02 |
| 210 | 0.334 | 0.7 | -1.74 |
| 220 | 0.449 | 1.2 | 0.83 |
| 230 | 0.552 | 1.8 | 2.62 |
| 240 | 0.644 | 2.5 | 3.96 |
| 250 | 0.733 | 3.2 | 5.08 |
| 260 | 0.826 | 4.1 | 6.12 |
| 270 | 0.916 | 5.0 | 7.02 |
| 280 | 0.977 | 5.7 | 7.58 |
| 290 | 1.000 | 6.0 | 7.78 |
| 300 | 0.990 | 5.9 | 7.69 |
| 310 | 0.960 | 5.5 | 7.43 |
| 320 | 0.930 | 5.2 | 7.15 |
| 330 | 0.908 | 4.9 | 6.94 |
| 340 | 0.897 | 4.8 | 6.84 |
| 350 | 0.902 | 4.9 | 6.89 |

Maxima

| Angle | Field | ERP (kW) | ERP (dBk) |
|-------|-------|----------|-----------|
| 37 | 0.996 | 6.0 | 7.75 |
| 165 | 0.257 | 0.4 | -4.02 |
| 292 | 1.000 | 6.0 | 7.78 |

Minima

| Angle | Field | ERP (kW) | ERP (dBk) |
|-------|-------|----------|-----------|
| 141 | 0.179 | 0.2 | -7.16 |
| 189 | 0.178 | 0.2 | -7.21 |
| 345 | 0.895 | 4.8 | 6.82 |

Remarks:



Date

29 Nov 2001

Call Letters

Channel 33

Location

FAJARDO, PUERTO RICO

Customer

Antenna Type

TFU-8DSB-M (C)

ELEVATION PATTERN

RMS Gain at Main Lobe

8.0 (9.03 dB)

Beam Tilt

1.00 Degrees

RMS Gain at Horizontal

7.4 (8.69 dB)

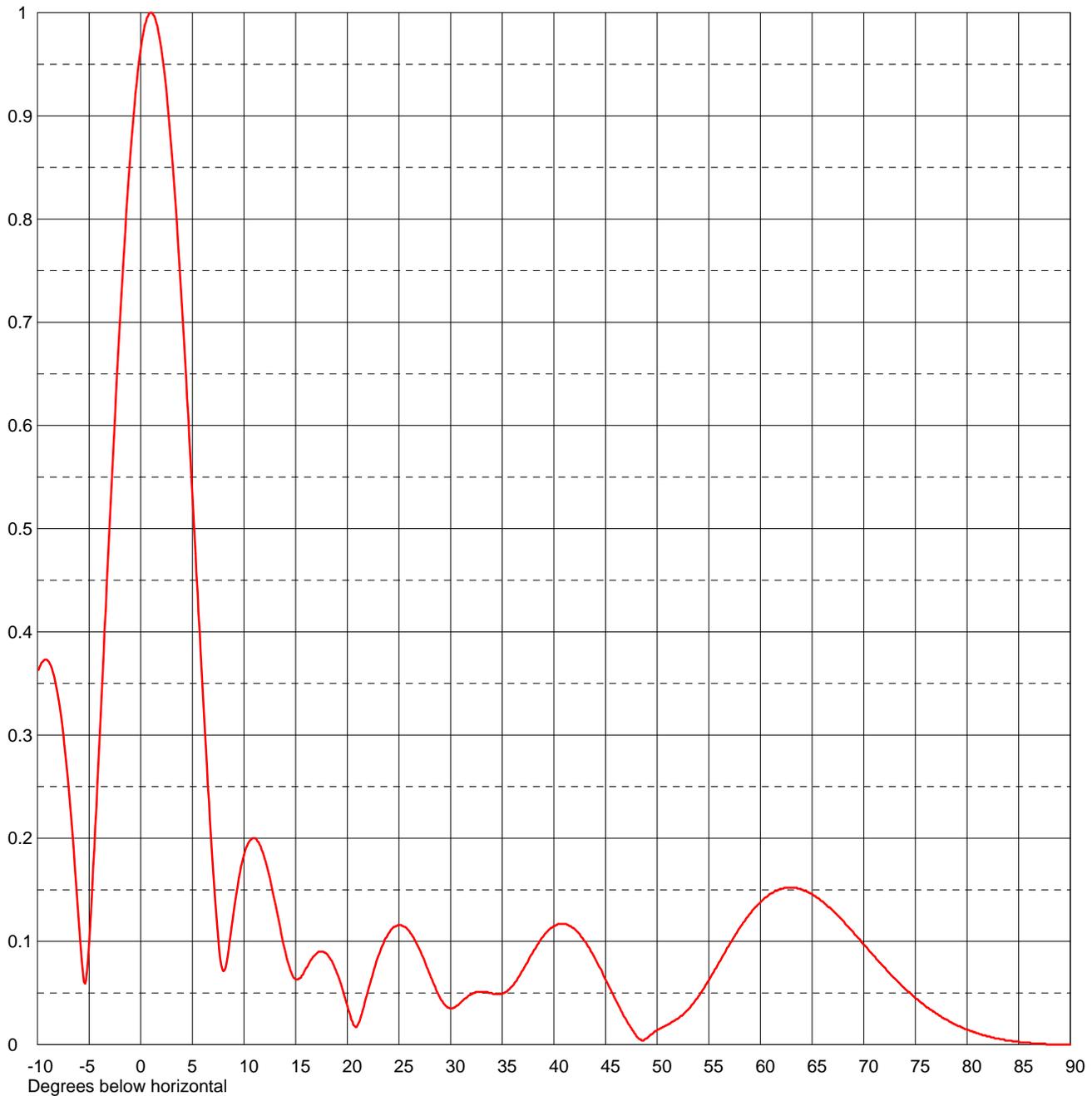
Frequency

587.00 MHz

Calculated / Measured

Calculated

Drawing #

08B080100-90

Remarks:



Date **29 Nov 2001**
 Call Letters Channel **33**
 Location **FAJARDO, PUERTO RICO**
 Customer
 Antenna Type **TFU-8DSB-M (C)**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **08B080100-90**

| Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.360 | 2.4 | 0.932 | 10.6 | 0.198 | 30.5 | 0.037 | 51.0 | 0.019 | 71.5 | 0.080 |
| -9.5 | 0.371 | 2.6 | 0.912 | 10.8 | 0.200 | 31.0 | 0.041 | 51.5 | 0.022 | 72.0 | 0.075 |
| -9.0 | 0.372 | 2.8 | 0.889 | 11.0 | 0.200 | 31.5 | 0.045 | 52.0 | 0.025 | 72.5 | 0.069 |
| -8.5 | 0.361 | 3.0 | 0.865 | 11.5 | 0.194 | 32.0 | 0.049 | 52.5 | 0.029 | 73.0 | 0.064 |
| -8.0 | 0.337 | 3.2 | 0.838 | 12.0 | 0.180 | 32.5 | 0.051 | 53.0 | 0.034 | 73.5 | 0.059 |
| -7.5 | 0.300 | 3.4 | 0.810 | 12.5 | 0.161 | 33.0 | 0.051 | 53.5 | 0.040 | 74.0 | 0.054 |
| -7.0 | 0.251 | 3.6 | 0.780 | 13.0 | 0.138 | 33.5 | 0.051 | 54.0 | 0.047 | 74.5 | 0.050 |
| -6.5 | 0.189 | 3.8 | 0.748 | 13.5 | 0.113 | 34.0 | 0.050 | 54.5 | 0.054 | 75.0 | 0.045 |
| -6.0 | 0.119 | 4.0 | 0.714 | 14.0 | 0.090 | 34.5 | 0.049 | 55.0 | 0.062 | 75.5 | 0.041 |
| -5.5 | 0.061 | 4.2 | 0.680 | 14.5 | 0.072 | 35.0 | 0.049 | 55.5 | 0.071 | 76.0 | 0.037 |
| -5.0 | 0.098 | 4.4 | 0.644 | 15.0 | 0.063 | 35.5 | 0.052 | 56.0 | 0.080 | 76.5 | 0.034 |
| -4.5 | 0.191 | 4.6 | 0.608 | 15.5 | 0.065 | 36.0 | 0.057 | 56.5 | 0.088 | 77.0 | 0.030 |
| -4.0 | 0.294 | 4.8 | 0.571 | 16.0 | 0.074 | 36.5 | 0.064 | 57.0 | 0.097 | 77.5 | 0.027 |
| -3.5 | 0.401 | 5.0 | 0.533 | 16.5 | 0.082 | 37.0 | 0.072 | 57.5 | 0.105 | 78.0 | 0.024 |
| -3.0 | 0.507 | 5.2 | 0.495 | 17.0 | 0.088 | 37.5 | 0.081 | 58.0 | 0.113 | 78.5 | 0.021 |
| -2.8 | 0.548 | 5.4 | 0.457 | 17.5 | 0.090 | 38.0 | 0.090 | 58.5 | 0.120 | 79.0 | 0.019 |
| -2.6 | 0.589 | 5.6 | 0.418 | 18.0 | 0.088 | 38.5 | 0.098 | 59.0 | 0.127 | 79.5 | 0.017 |
| -2.4 | 0.628 | 5.8 | 0.381 | 18.5 | 0.081 | 39.0 | 0.105 | 59.5 | 0.133 | 80.0 | 0.015 |
| -2.2 | 0.667 | 6.0 | 0.343 | 19.0 | 0.069 | 39.5 | 0.111 | 60.0 | 0.138 | 80.5 | 0.013 |
| -2.0 | 0.704 | 6.2 | 0.306 | 19.5 | 0.055 | 40.0 | 0.115 | 60.5 | 0.143 | 81.0 | 0.011 |
| -1.8 | 0.739 | 6.4 | 0.270 | 20.0 | 0.038 | 40.5 | 0.117 | 61.0 | 0.146 | 81.5 | 0.009 |
| -1.6 | 0.773 | 6.6 | 0.235 | 20.5 | 0.022 | 41.0 | 0.117 | 61.5 | 0.149 | 82.0 | 0.008 |
| -1.4 | 0.805 | 6.8 | 0.202 | 21.0 | 0.019 | 41.5 | 0.115 | 62.0 | 0.151 | 82.5 | 0.007 |
| -1.2 | 0.835 | 7.0 | 0.170 | 21.5 | 0.033 | 42.0 | 0.112 | 62.5 | 0.152 | 83.0 | 0.006 |
| -1.0 | 0.863 | 7.2 | 0.140 | 22.0 | 0.052 | 42.5 | 0.107 | 63.0 | 0.152 | 83.5 | 0.005 |
| -0.8 | 0.888 | 7.4 | 0.114 | 22.5 | 0.070 | 43.0 | 0.100 | 63.5 | 0.152 | 84.0 | 0.004 |
| -0.6 | 0.911 | 7.6 | 0.092 | 23.0 | 0.086 | 43.5 | 0.092 | 64.0 | 0.150 | 84.5 | 0.003 |
| -0.4 | 0.932 | 7.8 | 0.077 | 23.5 | 0.098 | 44.0 | 0.083 | 64.5 | 0.148 | 85.0 | 0.003 |
| -0.2 | 0.950 | 8.0 | 0.071 | 24.0 | 0.108 | 44.5 | 0.074 | 65.0 | 0.146 | 85.5 | 0.002 |
| 0.0 | 0.965 | 8.2 | 0.074 | 24.5 | 0.114 | 45.0 | 0.063 | 65.5 | 0.142 | 86.0 | 0.002 |
| 0.2 | 0.978 | 8.4 | 0.085 | 25.0 | 0.116 | 45.5 | 0.053 | 66.0 | 0.139 | 86.5 | 0.001 |
| 0.4 | 0.988 | 8.6 | 0.099 | 25.5 | 0.114 | 46.0 | 0.043 | 66.5 | 0.134 | 87.0 | 0.001 |
| 0.6 | 0.995 | 8.8 | 0.114 | 26.0 | 0.110 | 46.5 | 0.033 | 67.0 | 0.130 | 87.5 | 0.001 |
| 0.8 | 0.999 | 9.0 | 0.129 | 26.5 | 0.102 | 47.0 | 0.024 | 67.5 | 0.125 | 88.0 | 0.000 |
| 1.0 | 1.000 | 9.2 | 0.143 | 27.0 | 0.092 | 47.5 | 0.016 | 68.0 | 0.120 | 88.5 | 0.000 |
| 1.2 | 0.998 | 9.4 | 0.155 | 27.5 | 0.080 | 48.0 | 0.008 | 68.5 | 0.114 | 89.0 | 0.000 |
| 1.4 | 0.994 | 9.6 | 0.167 | 28.0 | 0.068 | 48.5 | 0.004 | 69.0 | 0.109 | 89.5 | 0.000 |
| 1.6 | 0.987 | 9.8 | 0.176 | 28.5 | 0.056 | 49.0 | 0.006 | 69.5 | 0.103 | 90.0 | 0.000 |
| 1.8 | 0.977 | 10.0 | 0.184 | 29.0 | 0.045 | 49.5 | 0.010 | 70.0 | 0.097 | | |
| 2.0 | 0.965 | 10.2 | 0.191 | 29.5 | 0.038 | 50.0 | 0.014 | 70.5 | 0.091 | | |
| 2.2 | 0.949 | 10.4 | 0.195 | 30.0 | 0.035 | 50.5 | 0.017 | 71.0 | 0.086 | | |

Remarks:

TECHNICAL EXHIBIT
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT
TELEVISION STATION WORO-DT (STA)
FAJARDO, PUERTO RICO
CHANNEL 33 6 KW (MAX-DA) 844 M

Notification to the National Astronomy and Ionosphere Center

{one sheet follows}



201 Fletcher Ave.
Sarasota, FL 34237-6019
941-329-6000
941-329-6031 FAX

Grafton Olivera
Direct Dial 941-329-6001
e-mail: grifton@dlr.com

June 25, 2006

Via Telefax 787-878-1861

Dr. Sixto A. Gonzalez, Director
Reinaldo Velez, Spectrum Manager
National Astronomy and Ionosphere Center
Arecibo Observatory
HC3 Box 53995
Arecibo, PR 00612

Gentlemen:

On behalf of our client, The Catholic, Apostolic and Roman Church in Puerto Rico, licensee of Television Station WORO, Fajardo, Puerto Rico, in accordance with Section 73.1030 of the FCC Rules, we are hereby notifying you of a proposed modification of an outstanding Construction Permit in the facility of WORO-DT.

WORO-DT proposes to modify its current Construction Permit, which authorizes it to operate on DTV Channel 33 with an ERP of 280 KW to conform to its current STA to operate with similar facilities, but with a reduced ERP of 6 KW. Both the outstanding CP and STA have been cleared with the National Astronomy and Ionosphere Center. The proposed changes in the CP, requesting a modified CP at the significantly reduced power level, we believe should have no adverse effect on your facilities.

Should you find any adverse effect from this proposal, please, communicate so via email (<mailto:Grafton@dlr.com>), telefax (941-329-6030) or regular mail, so appropriate action can be taken.

Very truly yours,

Grafton Olivera, P.E.