

**STATEMENT OF JOHN E. HIDLE, JR.
IN SUPPORT OF AN APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
BPCDT-19991022ABR
WTTO-DT HOMEWOOD, ALABAMA
TV - CH. 28 – 765 kW – 427.3 M HAAT**

Prepared for: WTTO LICENSEE, LLC.

OCTOBER, 2004

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Prepared for: WTTO LICENSEE, LLC.

I am an 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.

GENERAL

This office has been authorized by WTTO-TV Licensee, LLC., permittee of WTTO-DT, channel 28, Homewood, Alabama, to prepare this statement, FCC Form 301, Sections III and III-D, and the associated exhibits in support of an Application to Modify WTTO-DT's facility as authorized in its outstanding construction permit, FCC file number BPCDT - 19991022ABR . This Application complies with the Freeze on the Filing of Certain TV and DTV Requests for Allotment and Service Area Changes, FCC Public Notice DA 04-2446, because the instant proposed modifications would not extend the currently licensed service

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area of WTTO-DT in any azimuthal direction. (See Exhibit 7). Therefore, this application is acceptable for filing.

It is proposed herein that the existing Construction Permit of WTTO-DT be modified to authorize the relocation of WTTO-DT's authorized antenna to a new tower at the currently authorized site. The new tower, FCC Antenna Structure Registration Number 1226663, located at 33° 29' 04.8" NL, 086° 48' 25.1" WL, (NAD-83) is necessary to accommodate the weight of antennas for both the NTSC and DTV facilities of WTTO-DT and a number of other stations located at the site. As a result of the required stacking reconfiguration of the antennas on the new tower, this application requests authorization for an increase in antenna centerline height above mean sea level for the WTTO-DT antenna from 601.0 meters to 616.4 meters; an increase of 15.4 meters. The radiation centerline height above average terrain (HAAT) as calculated from the new site increases from 409.0 meters to 427.3 meters, a net decrease of 18.3 meters. Based upon the new HAAT, maintaining the same distance to the 41 dBu F(50,90) (Grade B equivalent) contour will require a decrease in effective radiated power (ERP) from 1000 kW to 765 kW. With the exception of the specification of a new tower structure, the increase in height and the decrease in power, all other characteristics of the authorized WTTO-DT technical facility, including its geographic coordinates and the use of its presently authorized directional transmitting antenna, will remain essentially unchanged.

PROPOSED DIRECTIONAL ANTENNA

The permittee of WTTO-DT requests authorization herein to utilize its authorized directional transmitting antenna, a Dielectric model TFU-24GTH-R 6T160, mounted in a stacked configuration, supported by the transmitting antenna for the analog facilities of WBIQ(TV) channel 10, Birmingham, Alabama. The antenna stack will be located on the newly constructed tower at the existing WTTO-DT coordinates at 33° 29' 04" North Latitude, 086° 48' 25" West Longitude, (NAD-27) Antenna Structure Registration Number 1226663. A vertical plan antenna sketch, detailing the position of the antenna on the tower is attached as Exhibit 1. The antenna manufacturer's horizontal plane radiation pattern is shown in Exhibit 2 and tabulated in Exhibit 3. The antenna manufacturer's vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is shown in Exhibits 4A and 4B, and tabulated in Exhibit 5.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625 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, the antenna site elevation and coordinates were determined from the National Geophysical Data Center Thirty Second

Point Database (TPG-0050) as prescribed in the FCC Rules. Exhibit 6 shows that the predicted 48 dBu F(50,90) principal community contour completely encompasses the principal community of license as required by Section 73.625(1) of the Commission's Rules. The predicted 41 dBu (Grade B equivalent) contour is also shown in Exhibit 6.

ALLOCATION CONSIDERATIONS

Full Service Television Considerations

An interference study was performed, using the Commission's application analysis program, "TV-Process," to ensure that the proposed WTTO-DT facility is in compliance with the Commission's *de minimis* interference requirements in regard to full service NTSC and DTV stations. TV-Process indicated no unacceptable interference to the authorized or requested facility of any full service NTSC or DTV station.

Class A Television Allocation Considerations

As required in Section 73.613 of the FCC's Rules, as established in the Report and Order establishing Class A Television Service, released April 4, 2000, a study of interference contour overlap was performed, based on the WTTO-DT facility proposed herein, to establish compliance with the protection requirements contained therein. Results of the contour overlap study indicate that the instant proposal will result in no increase in prohibited contour overlap of LPTV stations which have obtained Class A status.

BLANKETING AND INTERMODULATION INTERFERENCE

A number of broadcast and non-broadcast facilities are located within 10 km of the proposed WTTO-DT transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference created by this proposal in accordance with applicable Rules.

ENVIRONMENTAL CONSIDERATIONS

RADIO FREQUENCY IMPACT

The Commission's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions were adopted October 15, 1997. 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 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 in a "controlled" environment is derived from the formula, $(\text{frequency}/300)$. The predicted emissions of WTTO-DT channel 28 must be considered, along with the predicted emissions from other proposed and existing stations at the current site. For WTTO-DT, which will operate on channel 23 (527 MHz), the MPE level for "uncontrolled" environments is $0.351 \text{ mW}/\text{cm}^2$, and for "controlled" environments is $1.755 \text{ mW}/\text{cm}^2$.

The proposed WTTO-DT facility, channel 28, will operate with a maximum ERP of 765 kW from a horizontally polarized directional transmitting antenna with a centerline height of 327.7 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the WTTO-DT facility produces a predicted power density at two meters above ground level of $0.02168 \text{ mW}/\text{cm}^2$, which is 5.84% of the FCC guideline value for "uncontrolled" environments, and 1.168% of the FCC guideline value for "controlled" environments.

As shown in Appendix A, the total predicted percentage of the MPE value at the new tower site, considering the cumulative predicted radiation of all of the stations which are located at the site, is only 64.75% of the limit for "uncontrolled" environments, and 12.95% of the limit for "controlled" environments.¹ The site is therefore in compliance with the FCC's Maximum Permitted Exposure guidelines.

OCCUPATIONAL SAFETY

The licensee of WTTO-DT is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WTTO-DT antenna. The applicant 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 modification of the WTTO-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

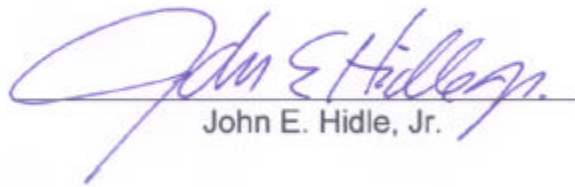
It is submitted that the proposal described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301,

¹ Note: Predicted vertical relative field factor values for WZZK-FM, WENN(FM), and WBPT(FM) were determined based upon documentation submitted by the applicants for these facilities as found in the Commissions files accessible on the "CDBS Public Access" website. Values for other facilities included in the study were determined by assuming very conservative vertical relative field factor values of 0.3 for horizontally polarized analog and digital television antennas, and 1.0 for circularly polarized FM antennas.

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Sections III and III-D, 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: October 26, 2004

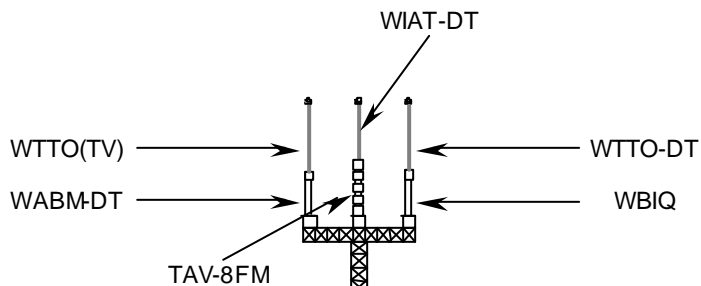


John E. Hidle, Jr.

COORDINATES NAD-27

NORTH LATITUDE: 33° 29' 04.0"

WEST LONGITUDE: 86° 48' 25.0"



OVERALL HEIGHT

RCL

| <u>AGL</u> | <u>AMSL</u> |
|------------|-------------|
| 335.9 m | 624.6 m |
| 327.7 m | 616.4 m |

GROUND ELEVATION = 288.7 meters A.M.S.L. / AVERAGE TERRAIN = 187.165 meters A.M.S.L.

VERTICAL PLAN ANTENNA SKETCH

WTTO-DT - HOMEWOOD, ALABAMA

Ch. 28 - 765 kW ERP - 427.3 m HAAT

DIRECTIONAL ANTENNA (TFU-24GTH-R 6T160)

OCTOBER, 2004

CARL T. JONES
CORPORATION

NOTE : NOT DRAWN TO SCALE



Proposal Number

DCA-9616

EXHBIT 2

Date

1-Oct-01

Call Letters

WTTO-DT

Channel

28

Location

Birmingham, AL

Customer

Antenna Type

TFU-24GTH-R 6T160

AZIMUTH PATTERN

Gain

1.60

(2.04 dB)

Calculated / Measured

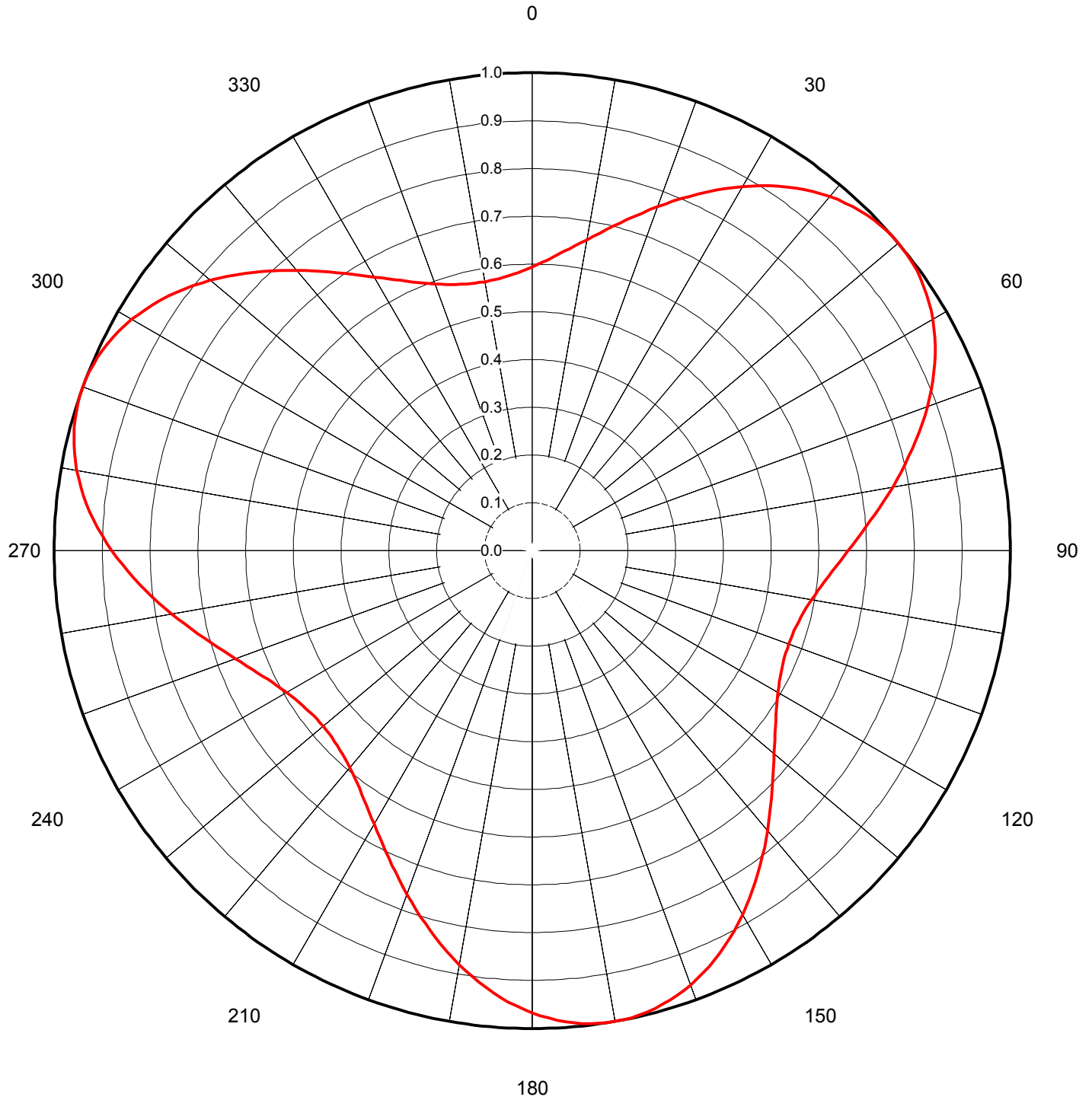
Calculated

Frequency

557.00 MHz

Drawing #

TFU-T160-28





Proposal Number **DCA-9616** EXHIBIT 3
 Date **1-Oct-01**
 Call Letters **WTTO-DT** Channel **28**
 Location **Birmingham, AL**
 Customer
 Antenna Type **TFU-24GTH-R 6T160**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-T160-28**

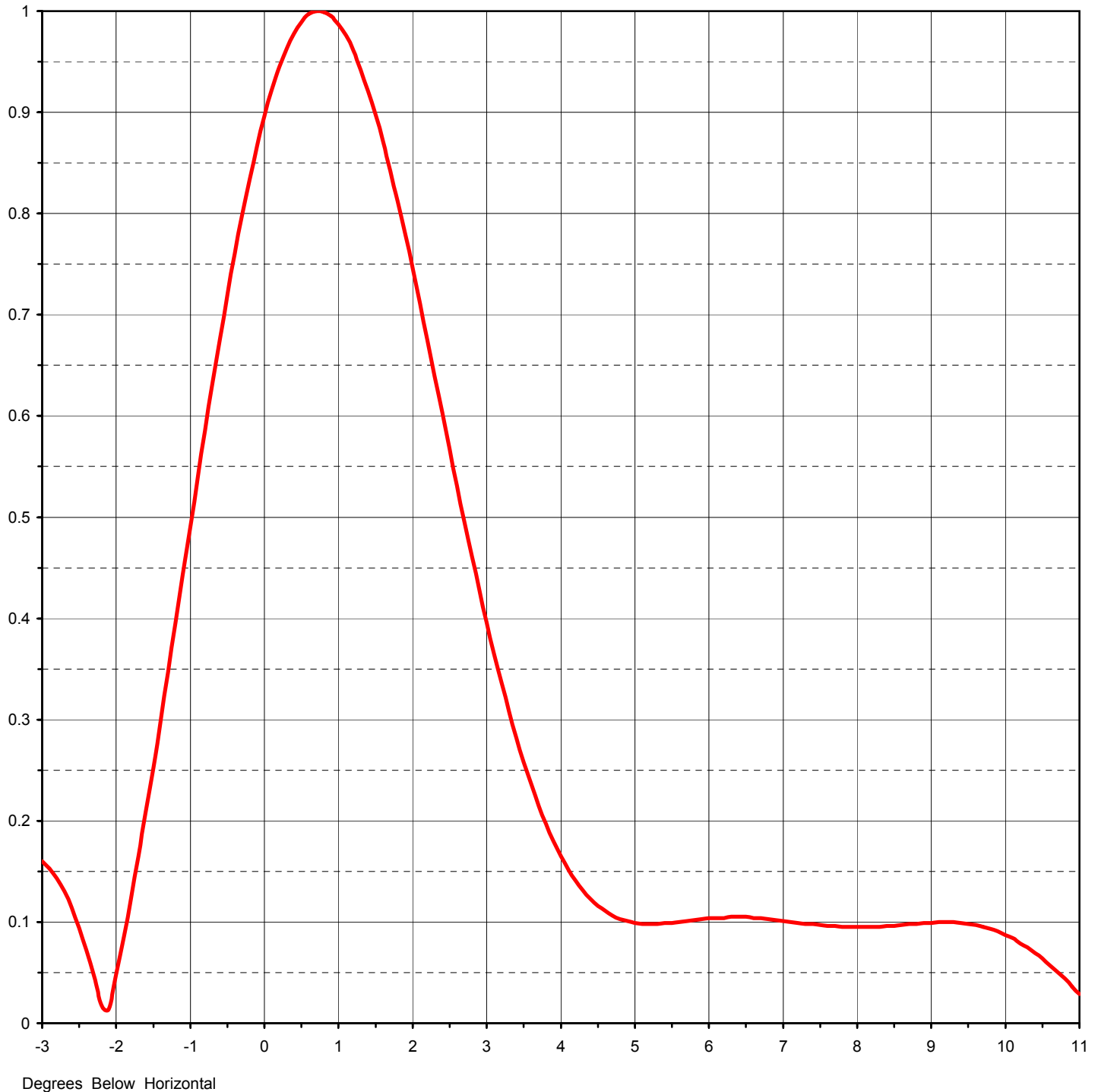
| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0 | 0.593 | 45 | 0.992 | 90 | 0.661 | 135 | 0.710 | 180 | 0.967 | 225 | 0.577 | 270 | 0.879 | 315 | 0.823 |
| 1 | 0.598 | 46 | 0.995 | 91 | 0.652 | 136 | 0.720 | 181 | 0.961 | 226 | 0.575 | 271 | 0.890 | 316 | 0.812 |
| 2 | 0.603 | 47 | 0.997 | 92 | 0.644 | 137 | 0.731 | 182 | 0.953 | 227 | 0.573 | 272 | 0.900 | 317 | 0.800 |
| 3 | 0.609 | 48 | 0.999 | 93 | 0.636 | 138 | 0.743 | 183 | 0.946 | 228 | 0.572 | 273 | 0.910 | 318 | 0.789 |
| 4 | 0.615 | 49 | 1.000 | 94 | 0.628 | 139 | 0.754 | 184 | 0.937 | 229 | 0.572 | 274 | 0.920 | 319 | 0.777 |
| 5 | 0.622 | 50 | 1.000 | 95 | 0.622 | 140 | 0.765 | 185 | 0.929 | 230 | 0.571 | 275 | 0.929 | 320 | 0.765 |
| 6 | 0.628 | 51 | 1.000 | 96 | 0.615 | 141 | 0.777 | 186 | 0.920 | 231 | 0.572 | 276 | 0.937 | 321 | 0.754 |
| 7 | 0.636 | 52 | 0.999 | 97 | 0.609 | 142 | 0.789 | 187 | 0.910 | 232 | 0.572 | 277 | 0.946 | 322 | 0.743 |
| 8 | 0.644 | 53 | 0.997 | 98 | 0.603 | 143 | 0.800 | 188 | 0.900 | 233 | 0.573 | 278 | 0.953 | 323 | 0.731 |
| 9 | 0.652 | 54 | 0.995 | 99 | 0.598 | 144 | 0.812 | 189 | 0.890 | 234 | 0.575 | 279 | 0.961 | 324 | 0.720 |
| 10 | 0.661 | 55 | 0.992 | 100 | 0.593 | 145 | 0.823 | 190 | 0.879 | 235 | 0.577 | 280 | 0.967 | 325 | 0.710 |
| 11 | 0.670 | 56 | 0.988 | 101 | 0.589 | 146 | 0.835 | 191 | 0.869 | 236 | 0.579 | 281 | 0.973 | 326 | 0.699 |
| 12 | 0.679 | 57 | 0.984 | 102 | 0.585 | 147 | 0.846 | 192 | 0.858 | 237 | 0.582 | 282 | 0.979 | 327 | 0.689 |
| 13 | 0.689 | 58 | 0.979 | 103 | 0.582 | 148 | 0.858 | 193 | 0.846 | 238 | 0.585 | 283 | 0.984 | 328 | 0.679 |
| 14 | 0.699 | 59 | 0.973 | 104 | 0.579 | 149 | 0.869 | 194 | 0.835 | 239 | 0.589 | 284 | 0.988 | 329 | 0.670 |
| 15 | 0.710 | 60 | 0.967 | 105 | 0.577 | 150 | 0.879 | 195 | 0.823 | 240 | 0.593 | 285 | 0.992 | 330 | 0.661 |
| 16 | 0.720 | 61 | 0.961 | 106 | 0.575 | 151 | 0.890 | 196 | 0.812 | 241 | 0.598 | 286 | 0.995 | 331 | 0.652 |
| 17 | 0.731 | 62 | 0.953 | 107 | 0.573 | 152 | 0.900 | 197 | 0.800 | 242 | 0.603 | 287 | 0.997 | 332 | 0.644 |
| 18 | 0.743 | 63 | 0.946 | 108 | 0.572 | 153 | 0.910 | 198 | 0.789 | 243 | 0.609 | 288 | 0.999 | 333 | 0.636 |
| 19 | 0.754 | 64 | 0.937 | 109 | 0.572 | 154 | 0.920 | 199 | 0.777 | 244 | 0.615 | 289 | 1.000 | 334 | 0.628 |
| 20 | 0.765 | 65 | 0.929 | 110 | 0.571 | 155 | 0.929 | 200 | 0.765 | 245 | 0.622 | 290 | 1.000 | 335 | 0.622 |
| 21 | 0.777 | 66 | 0.920 | 111 | 0.572 | 156 | 0.937 | 201 | 0.754 | 246 | 0.628 | 291 | 1.000 | 336 | 0.615 |
| 22 | 0.789 | 67 | 0.910 | 112 | 0.572 | 157 | 0.946 | 202 | 0.743 | 247 | 0.636 | 292 | 0.999 | 337 | 0.609 |
| 23 | 0.800 | 68 | 0.900 | 113 | 0.573 | 158 | 0.953 | 203 | 0.731 | 248 | 0.644 | 293 | 0.997 | 338 | 0.603 |
| 24 | 0.812 | 69 | 0.890 | 114 | 0.575 | 159 | 0.961 | 204 | 0.720 | 249 | 0.652 | 294 | 0.995 | 339 | 0.598 |
| 25 | 0.823 | 70 | 0.879 | 115 | 0.577 | 160 | 0.967 | 205 | 0.710 | 250 | 0.661 | 295 | 0.992 | 340 | 0.593 |
| 26 | 0.835 | 71 | 0.869 | 116 | 0.579 | 161 | 0.973 | 206 | 0.699 | 251 | 0.670 | 296 | 0.988 | 341 | 0.589 |
| 27 | 0.846 | 72 | 0.858 | 117 | 0.582 | 162 | 0.979 | 207 | 0.689 | 252 | 0.679 | 297 | 0.984 | 342 | 0.585 |
| 28 | 0.858 | 73 | 0.846 | 118 | 0.585 | 163 | 0.984 | 208 | 0.679 | 253 | 0.689 | 298 | 0.979 | 343 | 0.582 |
| 29 | 0.869 | 74 | 0.835 | 119 | 0.589 | 164 | 0.988 | 209 | 0.670 | 254 | 0.699 | 299 | 0.973 | 344 | 0.579 |
| 30 | 0.879 | 75 | 0.823 | 120 | 0.593 | 165 | 0.992 | 210 | 0.661 | 255 | 0.710 | 300 | 0.967 | 345 | 0.577 |
| 31 | 0.890 | 76 | 0.812 | 121 | 0.598 | 166 | 0.995 | 211 | 0.652 | 256 | 0.720 | 301 | 0.961 | 346 | 0.575 |
| 32 | 0.900 | 77 | 0.800 | 122 | 0.603 | 167 | 0.997 | 212 | 0.644 | 257 | 0.731 | 302 | 0.953 | 347 | 0.573 |
| 33 | 0.910 | 78 | 0.789 | 123 | 0.609 | 168 | 0.999 | 213 | 0.636 | 258 | 0.743 | 303 | 0.946 | 348 | 0.572 |
| 34 | 0.920 | 79 | 0.777 | 124 | 0.615 | 169 | 1.000 | 214 | 0.628 | 259 | 0.754 | 304 | 0.937 | 349 | 0.572 |
| 35 | 0.929 | 80 | 0.765 | 125 | 0.622 | 170 | 1.000 | 215 | 0.622 | 260 | 0.765 | 305 | 0.929 | 350 | 0.571 |
| 36 | 0.937 | 81 | 0.754 | 126 | 0.628 | 171 | 1.000 | 216 | 0.615 | 261 | 0.777 | 306 | 0.920 | 351 | 0.572 |
| 37 | 0.946 | 82 | 0.743 | 127 | 0.636 | 172 | 0.999 | 217 | 0.609 | 262 | 0.789 | 307 | 0.910 | 352 | 0.572 |
| 38 | 0.953 | 83 | 0.731 | 128 | 0.644 | 173 | 0.997 | 218 | 0.603 | 263 | 0.800 | 308 | 0.900 | 353 | 0.573 |
| 39 | 0.961 | 84 | 0.720 | 129 | 0.652 | 174 | 0.995 | 219 | 0.598 | 264 | 0.812 | 309 | 0.890 | 354 | 0.575 |
| 40 | 0.967 | 85 | 0.710 | 130 | 0.661 | 175 | 0.992 | 220 | 0.593 | 265 | 0.823 | 310 | 0.879 | 355 | 0.577 |
| 41 | 0.973 | 86 | 0.699 | 131 | 0.670 | 176 | 0.988 | 221 | 0.589 | 266 | 0.835 | 311 | 0.869 | 356 | 0.579 |
| 42 | 0.979 | 87 | 0.689 | 132 | 0.679 | 177 | 0.984 | 222 | 0.585 | 267 | 0.846 | 312 | 0.858 | 357 | 0.582 |
| 43 | 0.984 | 88 | 0.679 | 133 | 0.689 | 178 | 0.979 | 223 | 0.582 | 268 | 0.858 | 313 | 0.846 | 358 | 0.585 |
| 44 | 0.988 | 89 | 0.670 | 134 | 0.699 | 179 | 0.973 | 224 | 0.579 | 269 | 0.869 | 314 | 0.835 | 359 | 0.589 |



| | | |
|-----------------|--------------------------|-------------------|
| Proposal Number | DCA-9616 | EXHIBIT 4A |
| Date | 1-Oct-01 | |
| Call Letters | WTTO-DT | Channel 28 |
| Location | Birmingham, AL | |
| Customer | | |
| Antenna Type | TFU-24GTH-R 6T160 | |

ELEVATION PATTERN

| | | | |
|------------------------|---------------------------|-----------|-------------------|
| RMS Gain at Main Lobe | 21.50 (13.32 dB) | Beam Tilt | 0.75 deg |
| RMS Gain at Horizontal | 17.30 (12.38 dB) | Frequency | 557.00 MHz |
| Calculated / Measured | Calculated | Drawing # | 24G215075 |

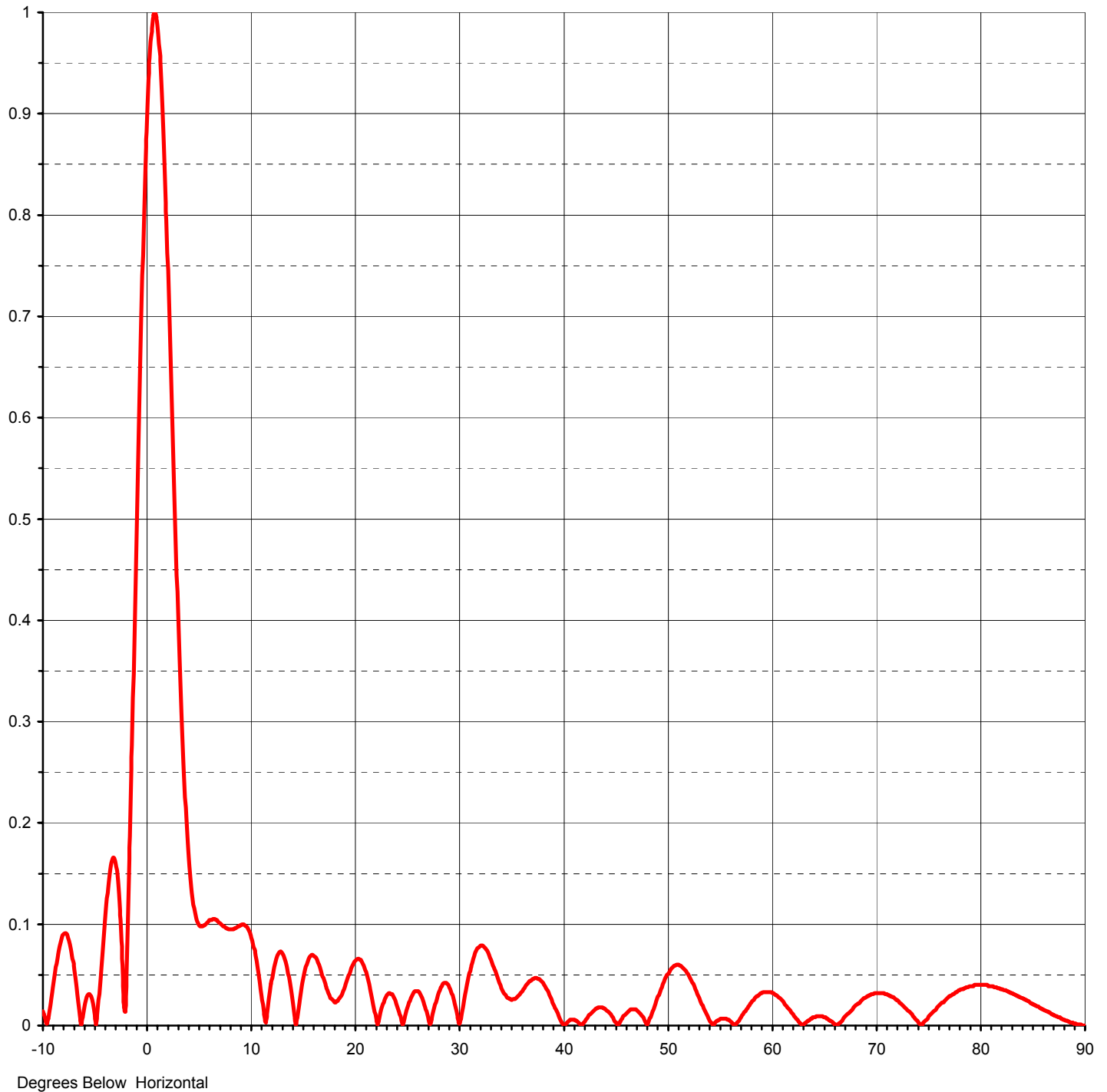




| | | |
|-----------------|--------------------------|-------------------|
| Proposal Number | DCA-9616 | EXHIBIT 4B |
| Date | 1-Oct-01 | |
| Call Letters | WTTO-DT | Channel 28 |
| Location | Birmingham, AL | |
| Customer | | |
| Antenna Type | TFU-24GTH-R 6T160 | |

ELEVATION PATTERN

| | | | |
|------------------------|---------------------------|-----------|---------------------|
| RMS Gain at Main Lobe | 21.50 (13.32 dB) | Beam Tilt | 0.75 deg |
| RMS Gain at Horizontal | 17.30 (12.38 dB) | Frequency | 557.00 MHz |
| Calculated / Measured | Calculated | Drawing # | 24G215075-90 |





Proposal Number **DCA-9616**

EXHIBIT 5

Date **1-Oct-01**

Call Letters **WTTO-DT** Channel **28**

Location **Birmingham, AL**

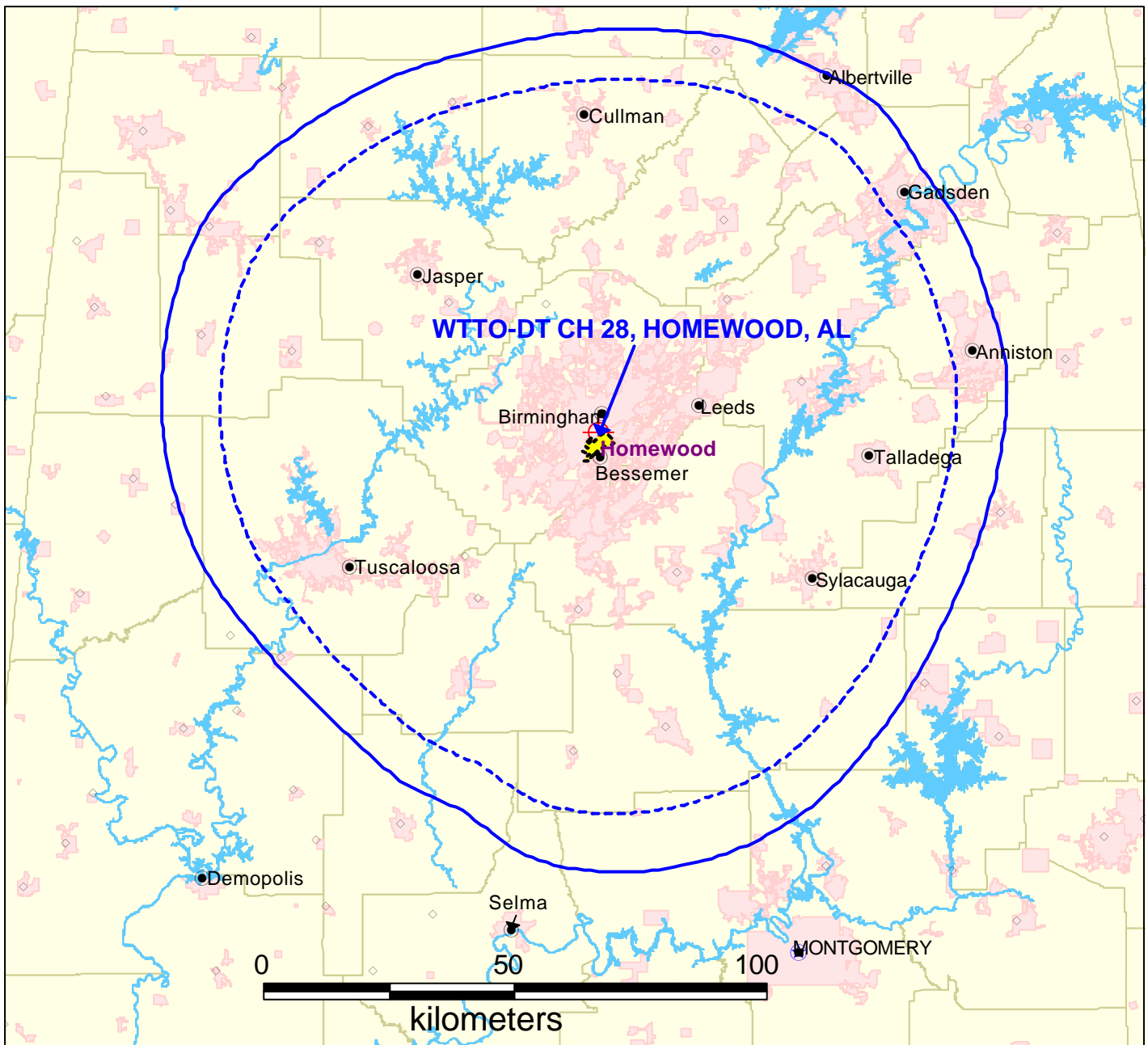
Customer

Antenna Type **TFU-24GTH-R 6T160**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **24G215075-90**

| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.014 | 2.4 | 0.603 | 10.6 | 0.064 | 30.5 | 0.024 | 51.0 | 0.060 | 71.5 | 0.028 |
| -9.5 | 0.007 | 2.6 | 0.531 | 10.8 | 0.051 | 31.0 | 0.050 | 51.5 | 0.057 | 72.0 | 0.025 |
| -9.0 | 0.040 | 2.8 | 0.461 | 11.0 | 0.036 | 31.5 | 0.069 | 52.0 | 0.051 | 72.5 | 0.020 |
| -8.5 | 0.073 | 3.0 | 0.396 | 11.5 | 0.003 | 32.0 | 0.078 | 52.5 | 0.041 | 73.0 | 0.015 |
| -8.0 | 0.090 | 3.2 | 0.336 | 12.0 | 0.041 | 32.5 | 0.077 | 53.0 | 0.029 | 73.5 | 0.009 |
| -7.5 | 0.084 | 3.4 | 0.282 | 12.5 | 0.066 | 33.0 | 0.067 | 53.5 | 0.017 | 74.0 | 0.003 |
| -7.0 | 0.055 | 3.6 | 0.236 | 13.0 | 0.072 | 33.5 | 0.054 | 54.0 | 0.007 | 74.5 | 0.003 |
| -6.5 | 0.015 | 3.8 | 0.197 | 13.5 | 0.059 | 34.0 | 0.040 | 54.5 | 0.001 | 75.0 | 0.009 |
| -6.0 | 0.020 | 4.0 | 0.165 | 14.0 | 0.029 | 34.5 | 0.030 | 55.0 | 0.006 | 75.5 | 0.014 |
| -5.5 | 0.031 | 4.2 | 0.141 | 14.5 | 0.008 | 35.0 | 0.026 | 55.5 | 0.007 | 76.0 | 0.020 |
| -5.0 | 0.009 | 4.4 | 0.123 | 15.0 | 0.042 | 35.5 | 0.027 | 56.0 | 0.005 | 76.5 | 0.024 |
| -4.5 | 0.043 | 4.6 | 0.111 | 15.5 | 0.063 | 36.0 | 0.033 | 56.5 | 0.001 | 77.0 | 0.029 |
| -4.0 | 0.108 | 4.8 | 0.103 | 16.0 | 0.070 | 36.5 | 0.040 | 57.0 | 0.007 | 77.5 | 0.032 |
| -3.5 | 0.157 | 5.0 | 0.099 | 16.5 | 0.062 | 37.0 | 0.045 | 57.5 | 0.014 | 78.0 | 0.035 |
| -3.0 | 0.160 | 5.2 | 0.098 | 17.0 | 0.047 | 37.5 | 0.047 | 58.0 | 0.022 | 78.5 | 0.037 |
| -2.8 | 0.143 | 5.4 | 0.099 | 17.5 | 0.032 | 38.0 | 0.043 | 58.5 | 0.028 | 79.0 | 0.039 |
| -2.6 | 0.114 | 5.6 | 0.100 | 18.0 | 0.024 | 38.5 | 0.035 | 59.0 | 0.032 | 79.5 | 0.040 |
| -2.4 | 0.072 | 5.8 | 0.102 | 18.5 | 0.026 | 39.0 | 0.023 | 59.5 | 0.033 | 80.0 | 0.040 |
| -2.2 | 0.018 | 6.0 | 0.104 | 19.0 | 0.036 | 39.5 | 0.012 | 60.0 | 0.033 | 80.5 | 0.040 |
| -2.0 | 0.048 | 6.2 | 0.104 | 19.5 | 0.051 | 40.0 | 0.002 | 60.5 | 0.030 | 81.0 | 0.039 |
| -1.8 | 0.124 | 6.4 | 0.105 | 20.0 | 0.063 | 40.5 | 0.004 | 61.0 | 0.025 | 81.5 | 0.038 |
| -1.6 | 0.209 | 6.6 | 0.104 | 20.5 | 0.065 | 41.0 | 0.006 | 61.5 | 0.019 | 82.0 | 0.036 |
| -1.4 | 0.300 | 6.8 | 0.103 | 21.0 | 0.056 | 41.5 | 0.003 | 62.0 | 0.012 | 82.5 | 0.034 |
| -1.2 | 0.395 | 7.0 | 0.101 | 21.5 | 0.036 | 42.0 | 0.003 | 62.5 | 0.006 | 83.0 | 0.032 |
| -1.0 | 0.491 | 7.2 | 0.099 | 22.0 | 0.011 | 42.5 | 0.010 | 63.0 | 0.000 | 83.5 | 0.029 |
| -0.8 | 0.586 | 7.4 | 0.098 | 22.5 | 0.013 | 43.0 | 0.015 | 63.5 | 0.005 | 84.0 | 0.027 |
| -0.6 | 0.677 | 7.6 | 0.096 | 23.0 | 0.028 | 43.5 | 0.018 | 64.0 | 0.008 | 84.5 | 0.024 |
| -0.4 | 0.760 | 7.8 | 0.095 | 23.5 | 0.031 | 44.0 | 0.017 | 64.5 | 0.009 | 85.0 | 0.021 |
| -0.2 | 0.834 | 8.0 | 0.095 | 24.0 | 0.022 | 44.5 | 0.012 | 65.0 | 0.008 | 85.5 | 0.019 |
| 0.0 | 0.896 | 8.2 | 0.095 | 24.5 | 0.005 | 45.0 | 0.004 | 65.5 | 0.005 | 86.0 | 0.016 |
| 0.2 | 0.945 | 8.4 | 0.096 | 25.0 | 0.015 | 45.5 | 0.004 | 66.0 | 0.001 | 86.5 | 0.013 |
| 0.4 | 0.978 | 8.6 | 0.097 | 25.5 | 0.029 | 46.0 | 0.011 | 66.5 | 0.003 | 87.0 | 0.010 |
| 0.6 | 0.997 | 8.8 | 0.098 | 26.0 | 0.034 | 46.5 | 0.016 | 67.0 | 0.009 | 87.5 | 0.008 |
| 0.8 | 0.999 | 9.0 | 0.099 | 26.5 | 0.027 | 47.0 | 0.016 | 67.5 | 0.014 | 88.0 | 0.006 |
| 1.0 | 0.987 | 9.2 | 0.100 | 27.0 | 0.010 | 47.5 | 0.011 | 68.0 | 0.020 | 88.5 | 0.004 |
| 1.2 | 0.961 | 9.4 | 0.099 | 27.5 | 0.011 | 48.0 | 0.002 | 68.5 | 0.024 | 89.0 | 0.002 |
| 1.4 | 0.921 | 9.6 | 0.097 | 28.0 | 0.030 | 48.5 | 0.011 | 69.0 | 0.028 | 89.5 | 0.001 |
| 1.6 | 0.871 | 9.8 | 0.095 | 28.5 | 0.041 | 49.0 | 0.025 | 69.5 | 0.031 | 90.0 | 0.000 |
| 1.8 | 0.812 | 10.0 | 0.091 | 29.0 | 0.040 | 49.5 | 0.038 | 70.0 | 0.032 | | |
| 2.0 | 0.746 | 10.2 | 0.084 | 29.5 | 0.026 | 50.0 | 0.050 | 70.5 | 0.032 | | |
| 2.2 | 0.675 | 10.4 | 0.075 | 30.0 | 0.003 | 50.5 | 0.057 | 71.0 | 0.031 | | |

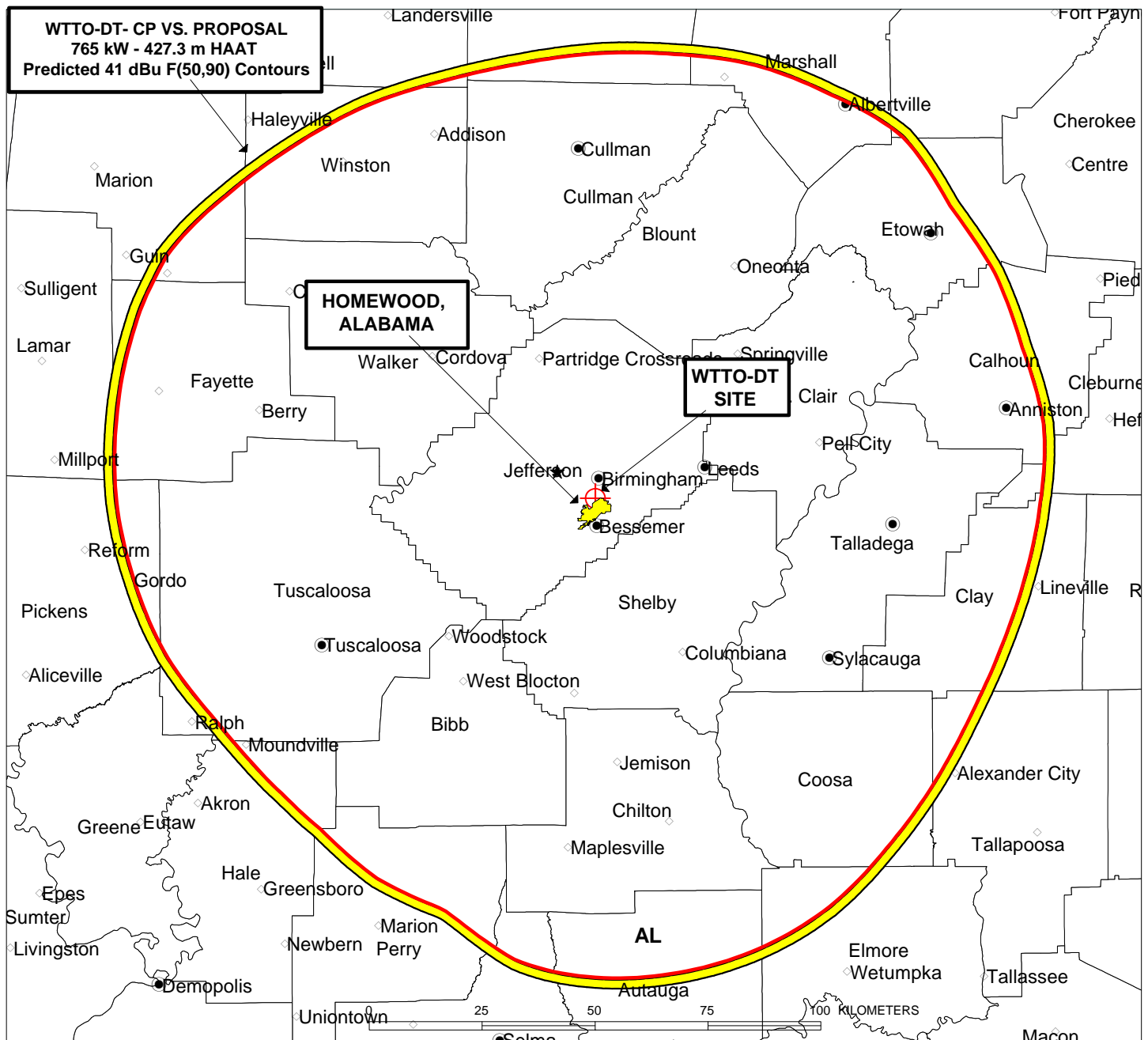


PREDICTED COVERAGE CONTOURS

PROPOSED WTTO-DT CH 28, HOMEWOOD, AL
427.3 mHAAT, 616.4 mRCAMSL
765 kW, DIE TFU-24JTT T160 (29634)


PREDICTED 48 dBu F(50,90)
CITY GRADE COVERAGE CONTOUR


PREDICTED 41 dBu F(50,90)
PROTECTED COVERAGE CONTOUR



COMPARISON OF COVERAGE CONTOURS

WTTO-DT, HOMEWOOD, ALABAMA
765 kW ERP; 427.3 m HAAT; DIRECTIONAL
OCTOBER, 2004

 **Proposed Facility**
765 kW ERP; 427.3 m HAAT; Directional
Predicted "Grade B Equivalent" Contour
F(50,90) - 41 dBu

 **Authorized Construction Permit Facility**
1000 kW ERP; 409 m HAAT; Directional
Predicted "Grade B Equivalent" Contour
F(50,90) - 41 dBu

CARL T. JONES
CORPORATION

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
 WTTO-DT, HOMEWOOD, ALABAMA
 CHANNEL 28, 765 kW ERP, 427.3 m HAAT
 OCTOBER, 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> |
|-------------|----------------|----------------|------------------|---------------------|---------------------------------------|---------------------|--|--|---|--|
| WBIQ(TV) | TV | 10 | 195 | H | 309.9 | 316.000 | 0.300 | 0.00495 | 0.200 | 2.47% |
| WTTO(TV) | TV | 21 | 515 | H | 322.9 | 920.000 | 0.300 | 0.01327 | 0.343 | 3.86% |
| WBUN-CA | TV | 24 | 533 | H | 187.5 | 3.500 | 0.300 | 0.00015 | 0.355 | 0.04% |
| WTTO-DT | DT | 28 | 557 | H | 325.7 | 765.000 | 0.300 | 0.02168 | 0.371 | 5.84% |
| WIAT-DT | DT | 30 | 569 | H | 324.3 | 1000.000 | 0.300 | 0.02858 | 0.379 | 7.53% |
| WABM-DT | DT | 36 | 605 | H | 304.5 | # 885.000 | 0.300 | 0.02869 | 0.403 | 7.11% |
| W46DK | TV | 46 | 665 | H | 126.4 | 15.100 | 0.300 | 0.00142 | 0.443 | 0.32% |
| WODL(FM) | FM | 247 | 97.3 | H & V | 306.3 | 6.200 | 1.000 | 0.00442 | 0.200 | 2.21% |
| WBHK(FM) | FM | 254 | 98.7 | H & V | 310.3 | 39.000 | 1.000 | 0.02706 | 0.200 | 13.53% |
| WZZK-FM | FM | 284 | 104.7 | H & V | 306.3 | 97.800 | 0.210 | 0.00307 | 0.200 | 1.54% |
| WENN(FM) | FM | 288 | 105.5 | H & V | 92.3 | 29.500 | 0.177 | 0.00727 | 0.200 | 3.63% |
| WBPT(FM) | FM | 295 | 106.9 | H & V | 306.3 | 97.000 | 0.210 | 0.00305 | 0.200 | 1.52% |
| WRAX(FM) | FM | 299 | 107.7 | H & V | 306.3 | 42.500 | 1.000 | 0.03027 | 0.200 | 15.13% |

TOTAL PERCENTAGE OF ANSI VALUE= 64.75%

*** 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.*