

ENGINEERING STATEMENT
MODIFICATION OF CONSTRUCTION PERMIT
FCC FILE NO. BPCDT-19991015ABB
ON BEHALF OF
NEXSTAR BROADCASTING, INC.
KLST-DT, SAN ANGELO, TEXAS
CHANNEL 11 18.8 KW ERP 434.2 METERS HAAT

JANUARY 2007

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

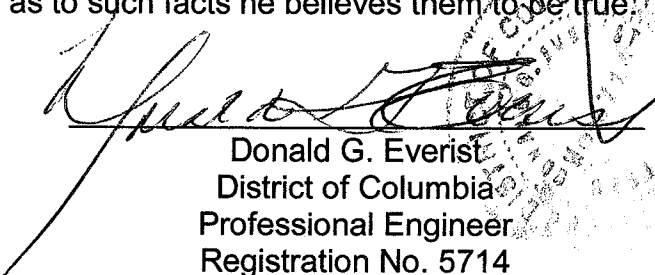
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

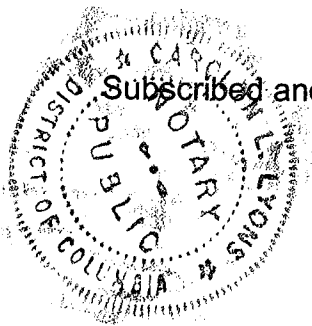
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 22nd day of January, 2007.


Notary Public

My Commission Expires: 2/28/2008



COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

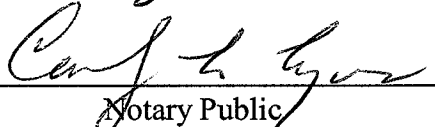
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



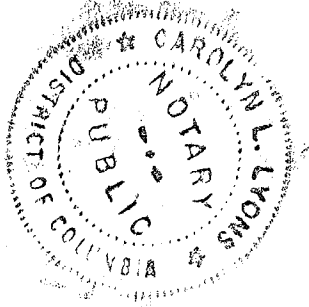
Martin R. Doczkat

Subscribed and sworn to before me this 22nd day of January, 2007.



Notary Public

My Commission Expires: 2/28/2008



This engineering statement has been prepared on behalf of Nexstar Broadcasting, Inc., licensee of KLST(TV), San Angelo, Texas. The purpose of this engineering statement is to accompany its request to modify its outstanding construction permit (FCC File No. BPCDT-19991015ABB) for digital television ("DTV") facilities and to supplement those data required in FCC Form 301, Section III-D.

KLST(TV) operates on NTSC Television Channel 8 (+) with a maximum visual horizontal effective radiated power (ERP) of 316 kW non-directional and a height above average terrain (HAAT) of 442 meters. KLST(TV) has been allocated DTV Channel 11 in the revised DTV Table of Allotments¹ and is authorized to construct DTV facilities of 18.8 kW non-directional (horizontal polarization) at a HAAT of 427.1 meters in its outstanding construction permit (FCC File No. BPCDT-19991015ABB). KLST-DT proposes herein to construct DTV facilities of 18.8 kW non-directional (horizontal polarization) at an HAAT of 434.2 meters on its existing antenna structure. A slight increase in height of 7.3 meters is required and this slightly exceeds the plus 2 meter criteria contained in Section 73.1690 of the FCC Rules. Therefore, since this is a de-minimus change in height, a waiver of the freeze dated August 3, 2004, is hereby requested, if necessary.

There are no AM stations located within 3.22 km of the existing KLST(TV) tower site. There is one FM station, and with the exception of KLST(TV), no other full-service NTSC stations located and transmitting from this site.

¹"In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service", MM Docket No. 87-286, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order (FCC 98-24), 2/12/98, DTV Table of Allotments, Appendix B.

The DTV antenna will be top-mounted on the existing tower having a total overall structure height above ground of 457.2 meters (1500 feet). The existing transmitter site is located 3.3 miles southeast of Eola, Texas.

Since there is no change in overall height, FAA airspace approval is not required. The tower registration number of the existing tower is 1048460. Exhibit E-1 is a diagram of the tower and transmitting antenna.

North Latitude: 31 ° 22' 01"

West Longitude: 100 ° 02' 48"

NAD-27

Equipment Data

Antenna: Dielectric, Type TF-12HT-H-DC (or equivalent) top-mounted horizontally polarized antenna with 1.0° electrical beam tilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included (see Exhibit E-2)

Power Data

Transmitter power output Dielectric, EIA/DCA 3-1/8", 50 ohm equivalent—length 477.6 meters (1567 ft)	2.6 kW 60.1%	4.12 dBk 2.21 dB
Combiner efficiency/loss	94.4%	0.25 dB
Input power to the antenna	1.6 kW	1.91 dBk
Antenna power gain, Main Lobe	12.1	10.83 dB
Effective Radiated Power, Maximum	18.8 kW	12.74 dBk

Elevation Data

Vertical dimension of Channel 11 top-mounted antenna	22.6 meters 74 feet
Overall height above ground of the proposed antenna structure (including beacon)	457.2 meters 1500 feet
Center of radiation of Channel 11 antenna above ground	438.8 meters 1439.6 feet
Elevation of site above mean sea level	556.5 meters 1825.8 feet
Center of radiation of Channel 16 antenna above mean sea level	995.3 meters 3265.4 feet
Overall height above mean sea level of proposed tower (including beacon)	1013.7 meters 3325.8 feet
Antenna height above average terrain	434.2 meters

NOTE: Slight height differences result due to conversion to metric.

Allocation

An allocation study from the proposed site has not been performed as the proposed DTV facilities are located at the coordinates authorized for the KLST-DT outstanding construction permit (FCC File No. BPCDT-19991015ABB).

Coverage

The average elevation data for 3.2 to 16.1 km along each radial has been determined from 3-second NGDC for the existing KLST(TV) site. The F(50,90) DTV coverage contour has been computed from reference to the propagation data for Channels 7-13, as published by the FCC in Figure 10 and Figure 10a, Section 73.699 of the FCC

Rules and Regulations. Utilizing the formula in Section 73.625(b)(2) of the Rules for the effective heights, it is found that the depression angle, A_h , varies from 0.558 to 0.603 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Table I includes the distances to the F(50,90) 43 dBu (community coverage contour) and the 36 dBu contour, the average elevation 3.2 to 16.1 km, and the antenna height above average terrain for the eight cardinal radials.

Interference Analysis

An analysis of predicted interference caused by the proposed KLST-DT service has been performed even as the proposed F(50,90) 41 dBu contour is not predicted to extend in any direction beyond that authorized by the F(50,90) 41 dBu contour of the outstanding construction permit (see Exhibit E-4).

The interference analysis used the FCC's FORTRAN-77 code which was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows 98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, such as calculating new interference as total interference less baseline interference. Any variance effect is further reduced when

using ratios of calculated population values such as measuring the incremental population affected as a percent of the total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 1.0 km at one degree azimuth intervals with 2000 Census centroids.

Stations were selected from the FCC's Consolidated Database System ("CDBS") according to the FCC Public Notice dated August 10, 1998 and entitled, "Additional Application Processing Guidelines for Digital Television", which outlines the station selection criteria "culling distances" for considering potential interference scenarios.

Table II provides a summary of the Longley-Rice interference analysis and demonstrates that no new interference is caused by the proposed operation of KLST-DT to any potentially affected facility above the outstanding construction permit.

Other Licensed and Broadcast Facilities

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the permittee will install filters or take other measures as necessary to resolve the problem.

FCC Rule, Section 1.1307

The proposed 18.8 kW operation will utilize a Dielectric, Type TF-12HT-H-DC top-mounted antenna or the equivalent as described above with a center of radiation above ground of 438.8 meters. The proposed antenna will be top-mounted on a single, guyed, uniform, cross-section, steel lattice tower with an overall height of 457.2 meters AGL.

As previously indicated, there are no AM stations located within 3.22 km of the existing tower site. According to the FCC data base with the exception of KELI(FM) and KLST(TV), there are no other broadcast stations located within 100 meters. The property on which the proposed tower is located 3.3 miles southeast of Eola, Texas. Access to the tower will be prevented by a fence with a locked gate.

The proposed operation based upon the current OET Bulletin No. 65, Edition No. 97-01, dated August 1997 and Supplement A meets the provisions of the FCC radio frequency field ("RFF") guidelines, and thus, complies with Section 1.1307 of the FCC Rules. Provisions will be made to reduce power or to terminate the transmitter emissions, as appropriate, when it is necessary for authorized personnel to be on the tower.

Therefore, the RFF study will consider the following stations:

Station

KLST(TV) Channel 8

KLST-DT Channel 11

The RFF contribution of each station will be calculated using the following formula:

$$S = \frac{33.4(F^2) \text{ Total ERP}}{R^2}$$

where:

S = power density in $\mu\text{W}/\text{cm}^2$

F = relative field factor

Total ERP = ERP Horizontal Polarization + ERP Vertical Polarization

R = RCAGL - 2 meters

ERP = RMS ERP in watts for FM and DTV Stations

ERP = $[0.4 \text{ ERP}_V + \text{ERP}_A]$ for NTSC Stations

ERP_V = peak visual ERP in watts

ERP_A = RMS aural ERP in watts

KLST(TV) NTSC Facility

Channel 8	Freq:	180-186 MHz range
	ERP = 158 kW	(0.4) [316000 watts (visual)]+[31600 watts (aural)]
	Polarization =	Horizontal
	RCAGL -2 meters =	436.8 meters

KLST(TV) will use a Dielectric, Type TF-12HT-H-DC antenna with a 1.0° electrical beam tilt. The VHF vertical plane pattern for this antenna less than 0.2 at any angle greater than 10 degrees below the horizon. A value of 0.2 will be used in the calculation.

$$S = \frac{33.4 (F^2) \text{ Tot ERP}}{R^2}$$

Tot ERP = 158,000 watts (Horizontal Only)
 R = 436.8 meters
 F = 0.2 (field factor) (assumed)

$$S = 1.1 \text{ uW/cm}^2$$

KLST(TV) contributes less than 1.1 uW/cm^2 at 2.0 meters above ground. The limit for an uncontrolled environment is 200 uW/cm^2 for a station broadcasting in the 30-300 MHz range.

Therefore:

KLST(TV) NTSC facility contributes less than 0.6% RFF for an uncontrolled environment two meters above ground at the KLST(TV) tower site.

KLST-DT DTV Facility

Channel 11	Freq:	198-204 MHz range
	ERP =	18.8 kW
	Polarization =	Horizontal
	RCAGL -2 meters =	436.8 meters

KLST-DT proposes to utilize a Dielectric, Type TF-12HT-H-DC antenna with 1.0° electrical beam tilt. The manufacturer's vertical plane pattern for this antenna is included as Exhibit E-2. Based on this plot, the field factor will be less than 0.2 at any angle greater than 10 degrees below the horizon. A value of 0.2 will be used in the calculation.

$$S = \frac{33.4 (F^2) \text{ Tot ERP}}{R^2}$$

Tot ERP = 18.8 kW (Horizontal Only)
 R = 436.8 meters
 F = 0.2 (field factor)

$$S = 0.1 \text{ uW/cm}^2$$

KLST-DT contributes less than 0.1 $\mu\text{W/cm}^2$ at 2.0 meters above ground.
 The limit for an uncontrolled environment is 200 $\mu\text{W/cm}^2$ for a station broadcasting in the 30-300 MHz range.

Therefore:

KLST-DT contributes less than 0.1% RFF for an uncontrolled environment two meters above ground at the KLST(TV) tower site.

KELI(FM) FM Facility

Channel 254	Freq:	98.7 MHz
	ERP =	100 kW
	Polarization =	Horizontal + Vertical
	RCAGL -2 meters =	394 meters

KELI(FM) assumed to be using a typical FM antenna with a downward relative field less than 0.3 at any angle greater than 45 degrees below the horizon. A value of 0.3 will be used in the calculation.

$$S = \frac{33.4 (F^2) \text{ Tot ERP}}{R^2}$$

Tot ERP = 200 kW (Horizontal and Vertical)
 R = 394 meters
 F = 0.32 (field factor)

$$S = 3.9 \text{ uW/cm}^2$$

KELI(FM) contributes less than 3.9 $\mu\text{W/cm}^2$ at 2.0 meters above ground.
 The limit for an uncontrolled environment is 200 $\mu\text{W/cm}^2$ for a station broadcasting in the 30-300 MHz range.

Therefore:

KELI(FM) FM contributes less than 2.0% RFF for an uncontrolled environment two meters above ground at the KLST(TV) tower site

Total RFF at Site

The total RFF contribution for all transmitters can now be calculated:

Total RFF = 1.1 uW/cm² (TV) RFF + 0.1 uW/cm² (DT) RFF + 3.9 μW/cm² (FM) RFF

Total RFF = 0.6% + 0.1% + 2.0% = 2.7%

Authorized personnel and rigging contractors will be alerted to the potential zone of high field level on the tower, and if necessary, the station will operate with reduced power or terminate the operation of the transmitter as appropriate when it is necessary for authorized personnel or contractors to perform work on the tower. Workers and the general public, therefore, will not be subjected to RFF levels in excess of the current FCC guidelines.

Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the permittee indicates:

- (a)(1) The existing tower is not located in an officially designated wilderness area.
- (a)(2) The existing tower is not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.

- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The existing tower is not located near any known Indian religious sites.
- (a)(6) The existing tower is not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing guyed tower will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) It is not proposed to equip the tower with high intensity white lights unless required by the FAA.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin No. 65, Edition 97-01, dated August 1997 and Supplement A.

ABOVE GROUND

ABOVE MEAN SEA LEVEL

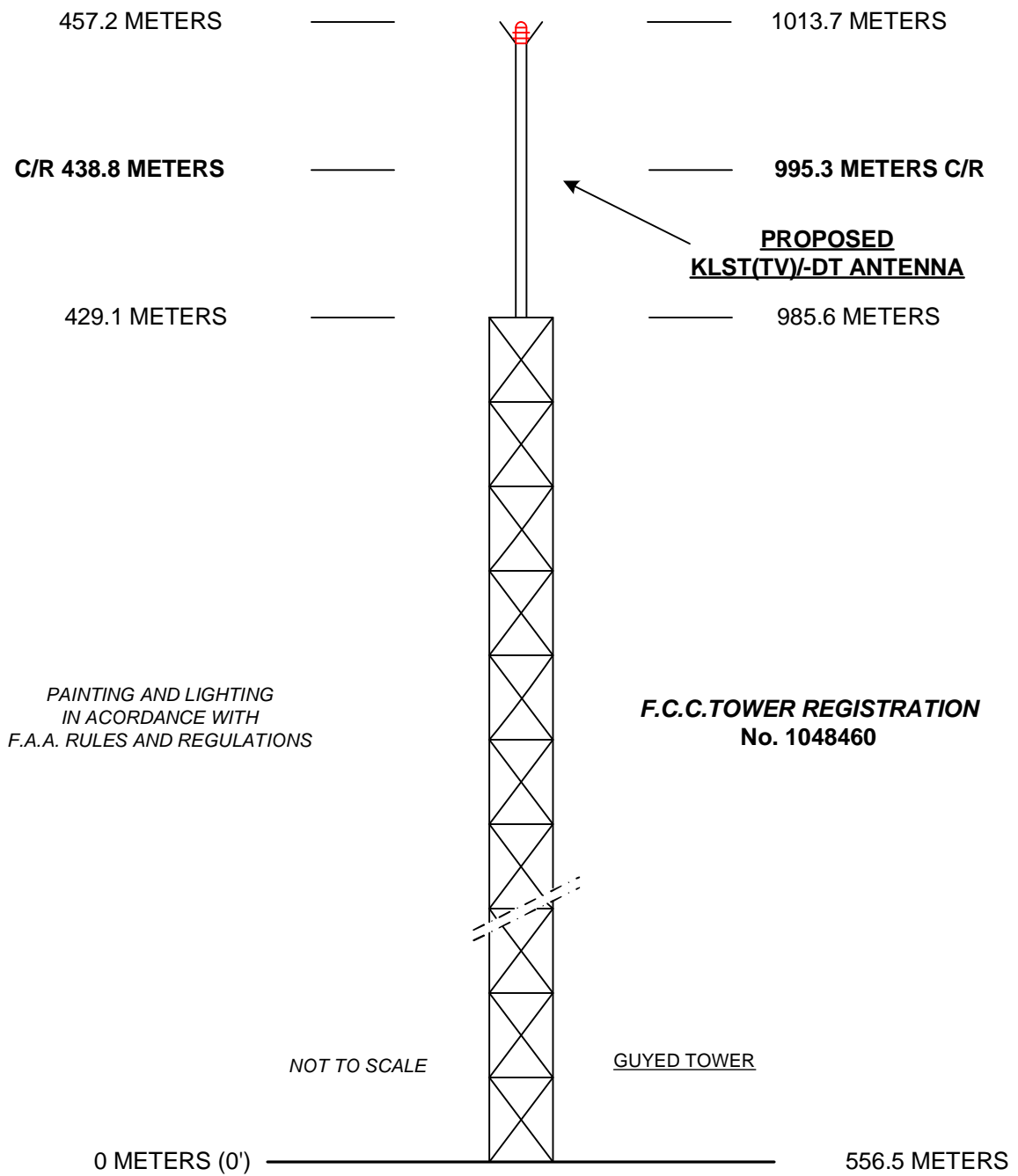


EXHIBIT E-1
VERTICAL SKETCH
FOR THE PROPOSED DTV OPERATION OF
KLST-DT, SAN ANGELO, TEXAS
JANUARY 2007

Cohen, Dippell and Everist, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KLST-DT, SAN ANGELO, TEXAS



EXHIBIT E-2a

Proposal #: **DCA-10841-1** Antenna Type: **TF-12HT-H-DC**
 Call Letters: **KLST** Location: **San Angelo, TX**

Channel: **8 NTSC**
11 DTV

Electrical Specifications		Value		Remarks
		Ratio	dB	
RMS Gain at Main Lobe over Halfwave Dipole	Hpol	11.8	10.72	N8; D11: 12.1 (10.83 dB)
	Vpol			
RMS Gain at Horizontal over Halfwave Dipole	Hpol	9.9	9.96	N8; D11: 9.8 (9.91 dB)
	Vpol			
Peak Directional Gain over Halfwave Dipole	Hpol			Antenna Designed with Dual input, Channel 8 on one line Channel 11 on the other, combining of channel 8 & 11 will be done in the antenna.
	Vpol			
Peak Directional Gain at Horizontal over Halfwave Dipole	Hpol			
	Vpol			
Circularity		+/- 2.0 dB		
Axial Ratio		dB		
Beam Tilt		1.00 deg		N8; D11: 1.00 deg
Peak TV Power	10% Aural	40 kW	16.02 dBk	+20 kW average DTV power
Antenna Input:	T/L 2 x	3-1/8 in	50.0 ohm	Type: EIA/DCA
Maximum Antenna Input VSWR		Pix +.5MHz	1.05 : 1	Note: 5 psi Pressurization dry air or Nitrogen Required D11: Channel: 1.10 : 1
		Color	1.08 : 1	
		Aural	1.10 : 1	
		Channel	1.10 : 1	
Patterns	Azimuth	TF-O4-1830		N8 D11
	Elevation	12S118100	12S118100-90	
		12S121110	12S121110-90	
Mechanical Specifications		Metric	English	Preliminary
Height with Lightning Protector	H4	23.8 m	78.0 ft	
Height Less Lightning Protector	H2	22.6 m	74.0 ft	
Height of Center of Radiation	H3	11.3 m	37.0 ft	
Basic Wind Speed	V	120.7 km/h	75 mi/h	TIA/EIA-222-F.
Force Coeff. x Projected Area	CaAc	10.78 m ²	116.0 ft ²	Above base flange
Moment Arm	D1	10.9 m	35.7 ft	Above base flange
Force Coeff. x Projected Area	CaAc	0.8 m ²	8.9 ft ²	Below tower top
Moment Arm	D3	1.83 m	6.0 ft	Below tower top
Pole Bury Length	D2	3.66 m	12.0 ft	
Weight	W	4.8 t	10,500 lbs	
Deicer Power (3 phase)		12.0 kW	480 V	
Antenna designed in accordance with AISC specifications for design of structural steel for building as prescribed by TIA/EIA-222-F.				

NOTE:

Prepared By : SRR
 Original Date : 7-Feb-05

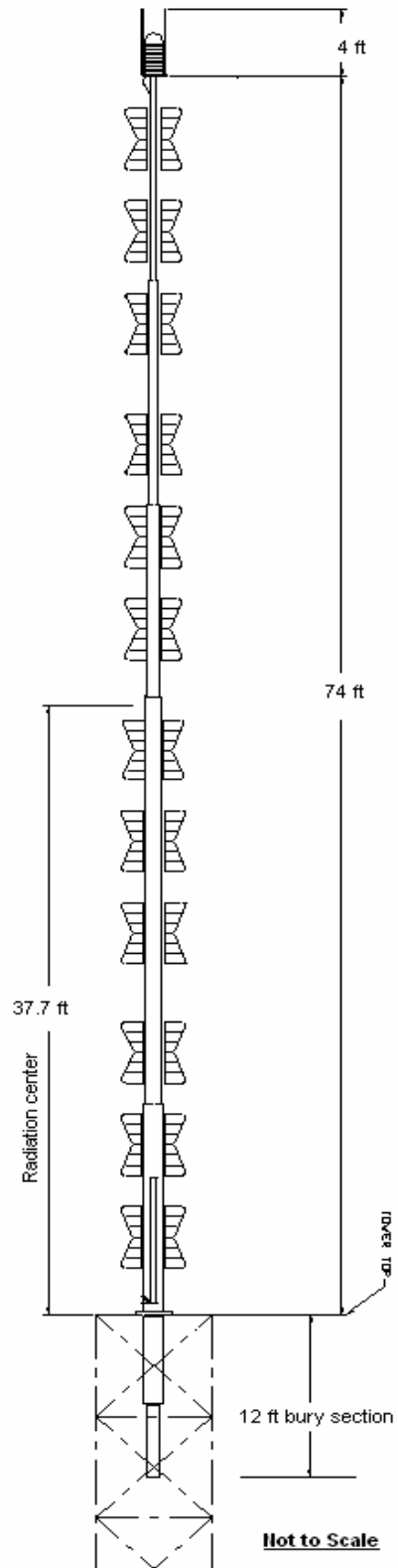
Revision: 1

Approved By :
 Rev. Date: 23-Nov-05

AJS

Andre J
 Skalina

Digitally signed by Andre J Skalina
 DN: CN = Andre J Skalina, C = US, O = SPX, OU = Dielectric Communications
 Reason: I am approving this document
 Date: 2005.11.30 16:41:44 -05'00'





Proposal Number	DCA-10841	Revision:	1
Date	23-Nov-05		
Call Letters	KLST-DT	Channel	11
Location	San Angelo, TX		
Customer	Azcar		
Antenna Type	TF-12HT-H-DC		

SYSTEM SUMMARY

Antenna:

Type:	TF-12HT-H-DC	ERP:	18.8 kW	H Pol	(12.74 dBk)
Channel:	11	Gain*:	12.1		(10.83 dB)
Location:	San Angelo, TX	Input Power:	1.6 kW		(1.91 dBk)

Transmission Line:

Type:	EIA/DCA	Attenuation:	2.21 dB
Size:	3-1/8 in	Efficiency:	60.1%
Impedance:	50 ohm		
Length:	1,567 ft		477.6 m

Combiner:	DCA	Attenuation:	0.25 dB
		Efficiency:	94.4%

Combiner Input:

Power Required:	2.7 kW	(4.37 dBk)
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* Gain is with respect to half wave dipole.

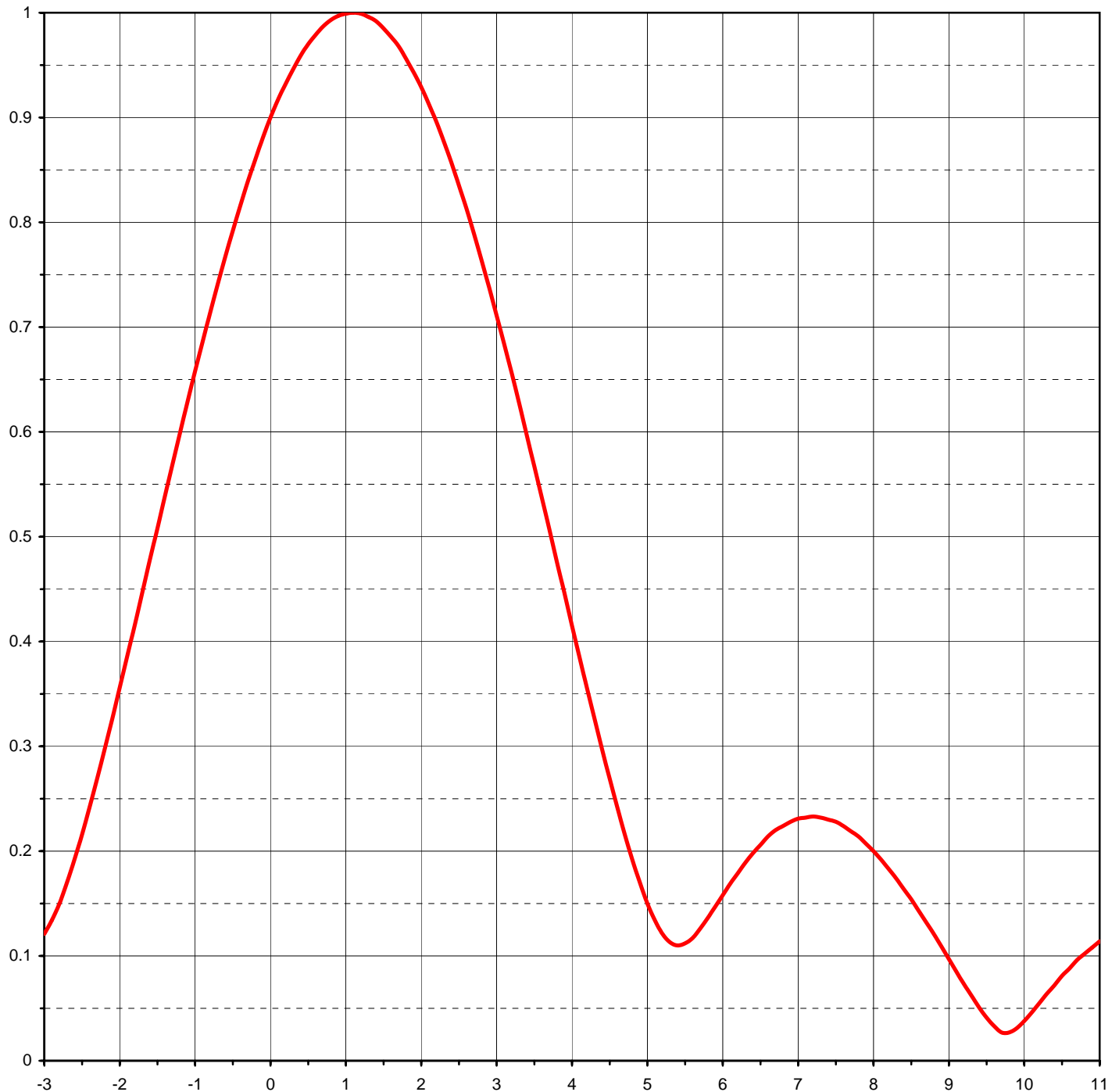


Proposal Number	DCA-10841	Revision:	1
Date	23-Nov-05		
Call Letters	KLST-DT	Channel	11
Location	San Angelo, TX		
Customer	Azcar		
Antenna Type	TF-12HT-H-DC		

ELEVATION PATTERN

RMS Gain at Main Lobe	12.10 (10.83 dB)
RMS Gain at Horizontal	9.80 (9.91 dB)
Calculated / Measured	Calculated

Beam Tilt	1.00 deg
Frequency	201.00 MHz
Drawing #	12S121110



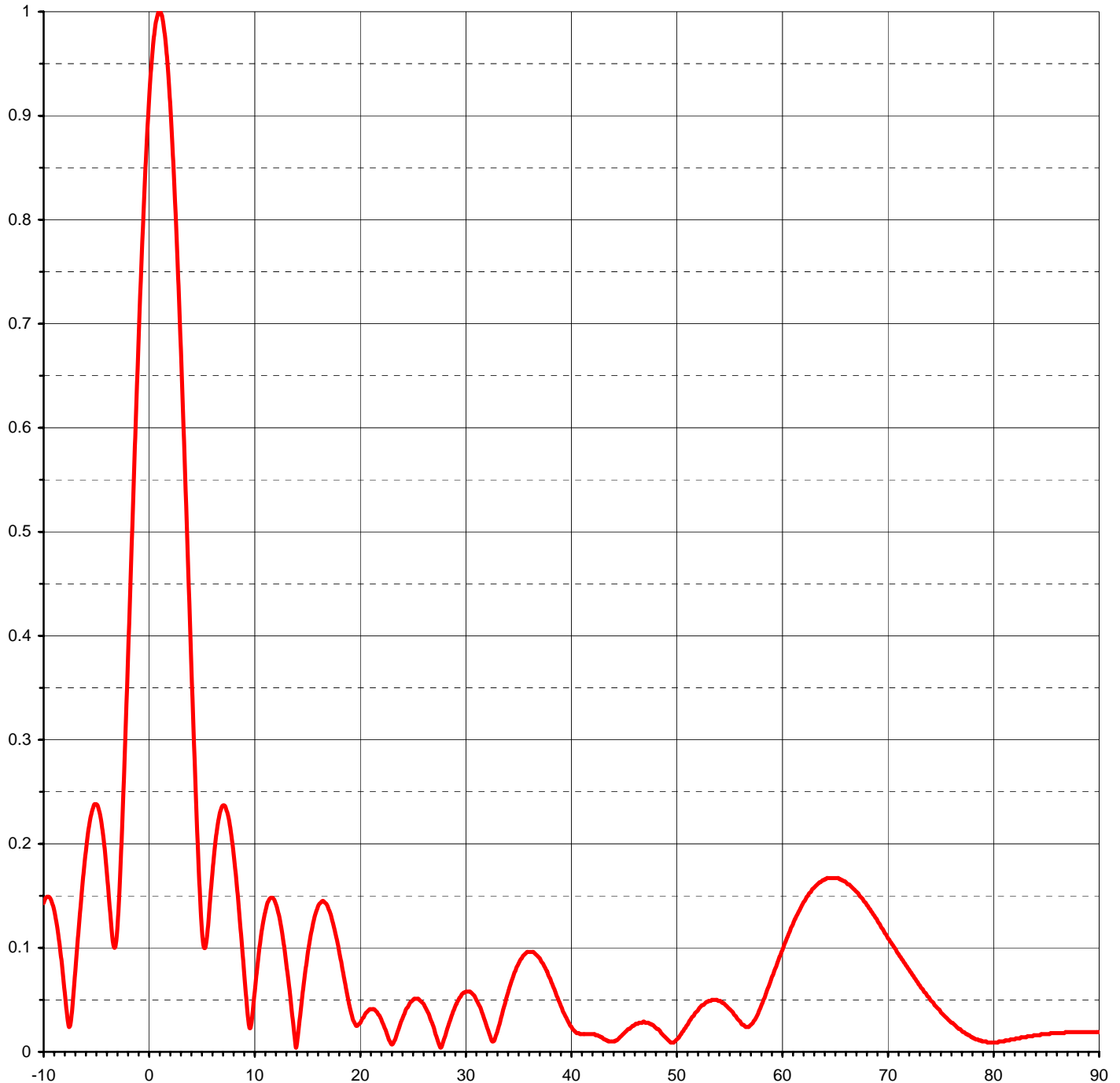


Proposal Number	DCA-10841	Revision:	1
Date	23-Nov-05		
Call Letters	KLST-DT	Channel	11
Location	San Angelo, TX		
Customer	Azcar		
Antenna Type	TF-12HT-H-DC		

ELEVATION PATTERN

RMS Gain at Main Lobe **12.10 (10.83 dB)**
RMS Gain at Horizontal **9.80 (9.91 dB)**
Calculated / Measured **Calculated**

Beam Tilt **1.00 deg**
Frequency **201.00 MHz**
Drawing # **12S121110-90**





Proposal Number **DCA-10841** Revision: **1**
 Date **23-Nov-05**
 Call Letters **KLST-DT** Channel **11**
 Location **San Angelo, TX**
 Customer **Azcar**
 Antenna Type **TF-12HT-H-DC**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **12S121110-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.129	2.4	0.857	10.6	0.081	30.5	0.053	51.0	0.014	71.5	0.111
-9.5	0.137	2.6	0.813	10.8	0.096	31.0	0.051	51.5	0.025	72.0	0.103
-9.0	0.127	2.8	0.764	11.0	0.108	31.5	0.044	52.0	0.036	72.5	0.096
-8.5	0.100	3.0	0.711	11.5	0.129	32.0	0.034	52.5	0.046	73.0	0.089
-8.0	0.059	3.2	0.656	12.0	0.132	32.5	0.020	53.0	0.054	73.5	0.082
-7.5	0.027	3.4	0.597	12.5	0.120	33.0	0.005	53.5	0.060	74.0	0.075
-7.0	0.072	3.6	0.537	13.0	0.095	33.5	0.011	54.0	0.064	74.5	0.069
-6.5	0.132	3.8	0.476	13.5	0.060	34.0	0.025	54.5	0.065	75.0	0.063
-6.0	0.185	4.0	0.415	14.0	0.023	34.5	0.036	55.0	0.063	75.5	0.057
-5.5	0.222	4.2	0.355	14.5	0.021	35.0	0.044	55.5	0.059	76.0	0.052
-5.0	0.237	4.4	0.297	15.0	0.052	35.5	0.048	56.0	0.053	76.5	0.046
-4.5	0.223	4.6	0.242	15.5	0.077	36.0	0.048	56.5	0.045	77.0	0.042
-4.0	0.182	4.8	0.192	16.0	0.091	36.5	0.044	57.0	0.036	77.5	0.037
-3.5	0.127	5.0	0.150	16.5	0.094	37.0	0.036	57.5	0.029	78.0	0.033
-3.0	0.121	5.2	0.121	17.0	0.085	37.5	0.025	58.0	0.027	78.5	0.030
-2.8	0.150	5.4	0.110	17.5	0.067	38.0	0.013	58.5	0.032	79.0	0.026
-2.6	0.192	5.6	0.117	18.0	0.043	38.5	0.003	59.0	0.043	79.5	0.023
-2.4	0.242	5.8	0.136	18.5	0.015	39.0	0.015	59.5	0.056	80.0	0.021
-2.2	0.297	6.0	0.158	19.0	0.014	39.5	0.026	60.0	0.070	80.5	0.019
-2.0	0.356	6.2	0.179	19.5	0.039	40.0	0.036	60.5	0.085	81.0	0.017
-1.8	0.416	6.4	0.198	20.0	0.058	40.5	0.043	61.0	0.099	81.5	0.015
-1.6	0.478	6.6	0.214	20.5	0.070	41.0	0.047	61.5	0.112	82.0	0.014
-1.4	0.539	6.8	0.224	21.0	0.073	41.5	0.047	62.0	0.125	82.5	0.013
-1.2	0.599	7.0	0.231	21.5	0.068	42.0	0.044	62.5	0.136	83.0	0.012
-1.0	0.658	7.2	0.233	22.0	0.056	42.5	0.037	63.0	0.146	83.5	0.011
-0.8	0.714	7.4	0.230	22.5	0.038	43.0	0.028	63.5	0.154	84.0	0.011
-0.6	0.767	7.6	0.224	23.0	0.016	43.5	0.017	64.0	0.160	84.5	0.011
-0.4	0.816	7.8	0.214	23.5	0.006	44.0	0.006	64.5	0.166	85.0	0.011
-0.2	0.860	8.0	0.200	24.0	0.027	44.5	0.009	65.0	0.169	85.5	0.011
0.0	0.900	8.2	0.183	24.5	0.043	45.0	0.020	65.5	0.171	86.0	0.011
0.2	0.932	8.4	0.164	25.0	0.055	45.5	0.031	66.0	0.170	86.5	0.011
0.4	0.959	8.6	0.143	25.5	0.060	46.0	0.040	66.5	0.169	87.0	0.011
0.6	0.979	8.8	0.121	26.0	0.059	46.5	0.046	67.0	0.166	87.5	0.011
0.8	0.993	9.0	0.097	26.5	0.052	47.0	0.050	67.5	0.163	88.0	0.011
1.0	0.999	9.2	0.073	27.0	0.039	47.5	0.050	68.0	0.158	88.5	0.011
1.2	0.999	9.4	0.051	27.5	0.023	48.0	0.048	68.5	0.152	89.0	0.011
1.4	0.992	9.6	0.033	28.0	0.005	48.5	0.043	69.0	0.146	89.5	0.011
1.6	0.977	9.8	0.027	28.5	0.013	49.0	0.035	69.5	0.139	90.0	0.011
1.8	0.956	10.0	0.031	29.0	0.029	49.5	0.026	70.0	0.131		
2.0	0.929	10.2	0.046	29.5	0.042	50.0	0.016	70.5	0.125		
2.2	0.896	10.4	0.064	30.0	0.050	50.5	0.009	71.0	0.118		

Cohen, Dippell and Everist, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KLST-DT, SAN ANGELO, TEXAS
CHANNEL 11 18.8 KW ERP 434.2 METERS HAAT
JANUARY 2007

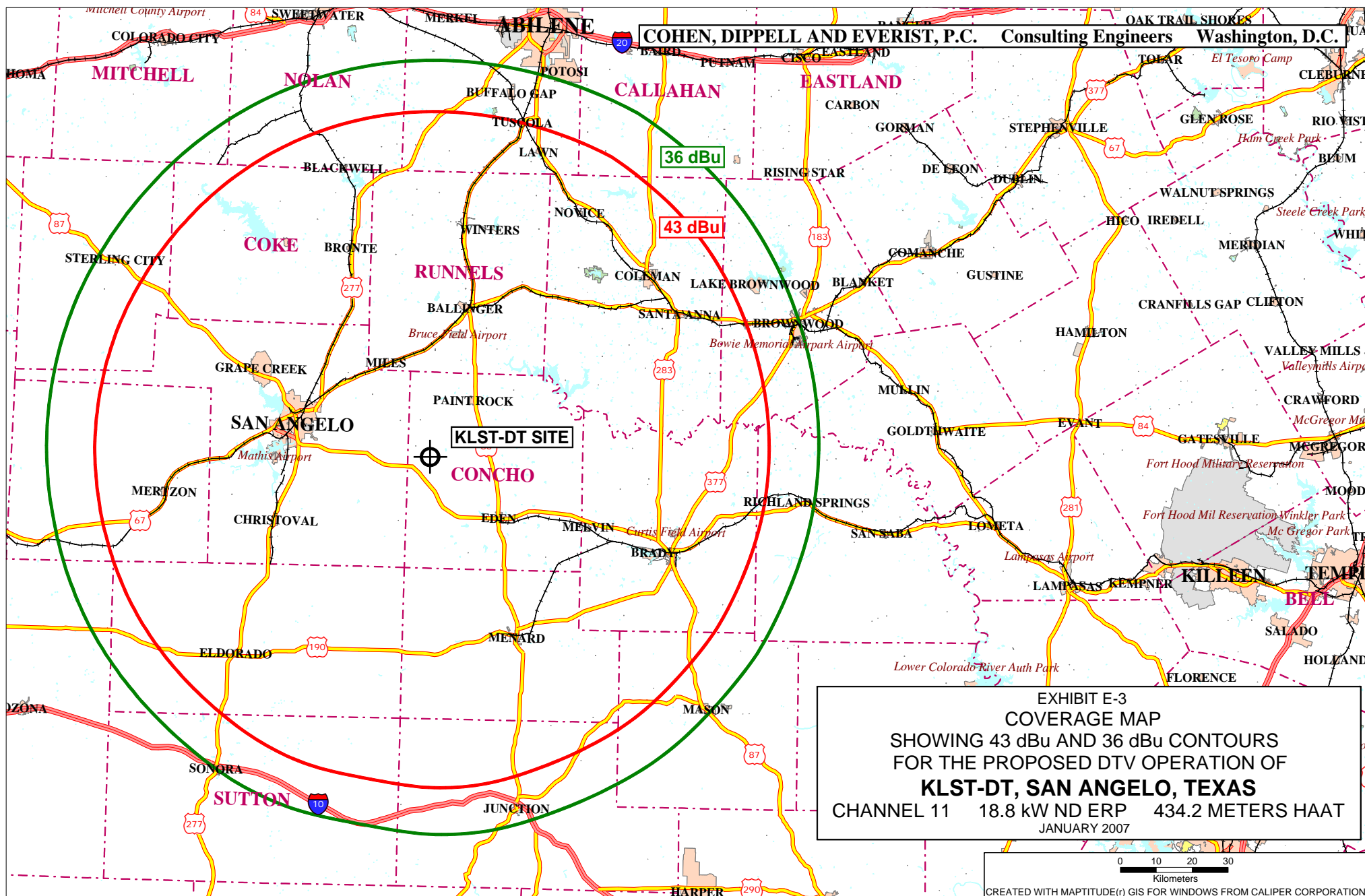
<u>Radial</u> <u>Bearing</u> N ° E, T	<u>Average*</u> <u>Elevation</u> <u>3.2 to 16.1 km</u> meters	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u>	<u>ERP At</u> <u>Radio</u> <u>Horizon</u> kW	<u>Distance to Contour F(50,90)</u> <u>43 dBu</u> <u>City Grade</u> km	<u>36 dBu</u> <u>Noise-Limited</u> km
0	531.4	463.9	0.597	18.8	95.8	110.1
45	521.2	474.1	0.603	18.8	96.6	110.9
90	556.2	439.1	0.580	18.8	94.2	107.9
135	588.9	406.4	0.558	18.8	92.3	105.3
180	589.5	405.8	0.558	18.8	92.3	105.3
225	589.4	405.9	0.558	18.8	92.3	105.3
270	566.7	428.6	0.573	18.8	93.6	107.1
315	545.4	449.9	0.588	18.8	94.9	108.9
Average	561.1	434.2				

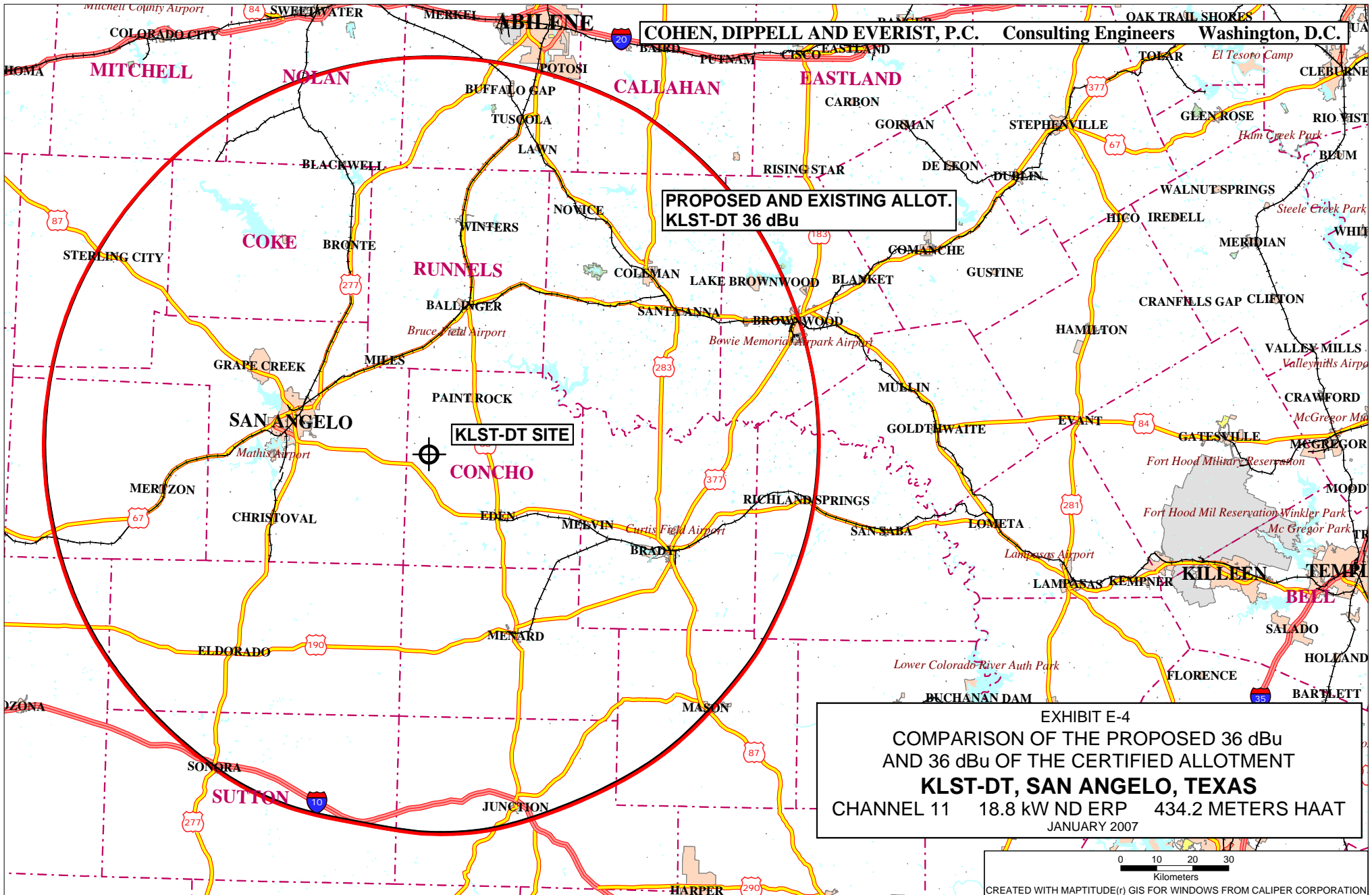
*Based on data from FCC 3-second data base

DTV Channel 11 (198-204 MHz)
Average Elevation 3.2 to 16.1 km 561.1 meters AMSL
Center of Radiation 995.3 meters AMSL
Antenna Height Above Average Terrain 434.2 meters
Effective Radiated Power 18.8 kW (12.74 dBk) Max.

North Latitude: 31° 22' 01"
West Longitude: 100° 02' 48"

(NAD-27)





COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
LONGLEY-RICE ANALYSIS
ABOVE THE OUTSTANDING CONSTRUCTION PERMIT
(FCC FILE NO. BPCDT-19991015ABB
FOR THE PROPOSED OPERATION OF
KLST-DT, SAN ANGELO, TEXAS
CHANNEL 11 18.8 KW ERP ND 434.2 METERS HAAT
JANUARY 2007

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Dist(km)</u>	<u>Status</u>	<u>Application Ref. No.</u>	<u>Result</u>
10	KPCB-DT	SNYDER TX	176.4	LIC	BLCDT-20060623ABI	no interference
10	KPCB-DT	SNYDER TX	176.4	ALLOT		no interference
11	KSWO-DT	LAWTON OK	340	CP MOD	BMPCDT-20030213AAF	no interference
11	KSWO-DT	LAWTON OK	340	GRANT	BPRM-20011231ABE	no interference
11	KQUX-CA	AUSTIN TX	243.8	LIC	BLTVA-20060613AAL	no interference
11	KTVT(TV)	FORT WORTH TX	321.2	LIC	BMLCT-20021028AAN	0.00%
11	KCBD(TV)	LUBBOCK TX	294.4	LIC	BMLCT-20020517AAW	0.00%
11	KVCT-DT	VICTORIA TX	396.8	CP MOD	BMPCDT-20021107AAS	no interference
11	KVCT-DT	VICTORIA TX	396.9	GRANT	BPRM-20010613AIJ	no interference
12	KTXS-TV	SWEETWATER TX	116.4	LIC	BLCT-1772	0.00%

SECTION III-D - DTV Engineering

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Certification Checklist: A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
- (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No
- (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☐ Yes ☐ No

2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☐ Yes ☐ No

Applicant must **submit the Exhibit** called for in Item 13.

3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☐ Yes ☐ No
4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☐ Yes ☐ No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☐ Yes ☐ No

SECTION III-D DTV Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV _____ Analog TV, if any _____

2. Zone: ☐ I ☐ II ☐ III

3. Antenna Location Coordinates: (NAD 27)

_____ ° _____ ' _____ " ☐ N ☐ S Latitude
_____ ° _____ ' _____ " ☐ E ☐ W Longitude

4. Antenna Structure Registration Number: _____

☐ Not applicable ☐ FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: _____ meters

6. Overall Tower Height Above Ground Level: _____ meters

7. Height of Radiation Center Above Ground Level: _____ meters

8. Height of Radiation Center Above Average Terrain: _____ meters

9. Maximum Effective Radiated Power (average power): _____ kW

10. Antenna Specifications:

a.

Manufacturer	Model
--------------	-------

b. Electrical Beam Tilt: _____ degrees ☐ Not Applicable

c. Mechanical Beam Tilt: _____ degrees toward azimuth _____ degrees True ☐ Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).

Exhibit No.

d. Polarization: ☐ Horizontal ☐ Circular ☐ Elliptical

TECH BOX

e. Directional Antenna Relative Field Values: ☐ Not applicable (Nondirectional)

Rotation: _____ ° ☐ No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") ☐ Yes ☐ No

If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.

Exhibit No.

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No.

- a. If **Certification Checklist** Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.

KLST-DT


I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Martin R. Doczkat	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 	Date January 22, 2007	
Mailing Address Cohen, Dippell and Everist, P.C., 1300 L Street, NW, Suite 1100		
City Washington	State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111	E-Mail Address (if available) cde@attglobal.net	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).