

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
APPLICATION FOR MODIFICATION OF
CONSTRUCTION PERMIT
(FCC FILE NO. BMPCDT-20070125ABU)
KFDX-DT, WICHITA FALLS, TEXAS
CHANNEL 28 1000 KW ERP 269.4 METERS HAAT

MAY 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)

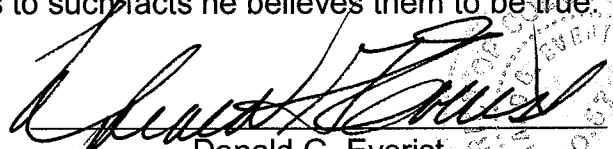
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

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;

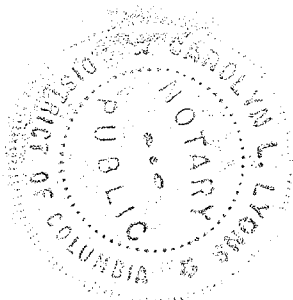
That his qualifications are a matter of record in the Federal Communications Commission;

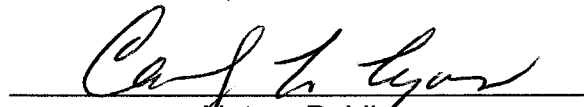
That the attached engineering report was prepared by him or under his supervision and direction and

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 29th day of May, 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;

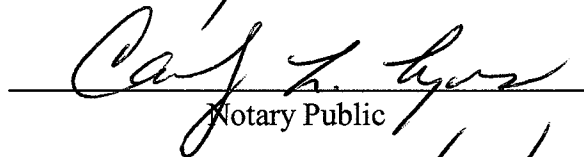
That the attached engineering report was prepared by him or under his supervision and direction and

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.

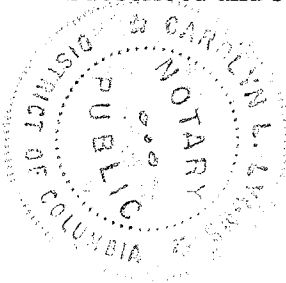


Martin R. Doczkat

Subscribed and sworn to before me this 29th day of May, 2007.


Notary Public

My Commission Expires: 2/28/2008



This engineering statement has been prepared on behalf of Nexstar Broadcasting, Inc., licensee of KFDX-TV, Channel 3, Wichita Falls, Texas. The purpose of this engineering statement is to request modification of its outstanding DTV construction permit, FCC File No. BMPCDT-20070125ABU.

KFDX-TV is licensed to operate on NTSC television Channel 3 with a maximum visual effective radiated power (ERP) of 100 kW (horizontal polarization) and height above average terrain (HAAT) of 305 meters (1000.7 feet). KFDX-DT has been allocated DTV Channel 28 with facilities of 1000 kW and HAAT of 305 meters in the revised DTV Table of Allotments.¹ KFDX-DT currently has a construction permit (FCC File No. BMPCDT-20070125ABU) for 1000 kW ERP at 274.3 meters HAAT. KFDX-DT proposes modification of construction permit to its DTV operation by constructing Channel 28 DTV facilities of 1000 kW non-directional (horizontal polarization) at an HAAT of 269.4 meters. The purpose of this modification is to avoid conflict with the existing RCA antenna interchange platform by lowering the proposed antenna height by 4.9 meters. No other changes are proposed.

The DTV antenna will be side-mounted on the tower specified in FCC File No. BMPCDT-20070125ABU. The tower has an overall structure height above ground of 319.3 meters (1047.6 feet). Exhibit E-1 shows a vertical sketch and the arrangement of the antennas on the tower. The existing transmitter site is located at 4500 Seymour Highway, Wichita Falls, Texas.

The geographic coordinates of the site are:

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) February 12, 1998, DTV Table of Allotments (Appendix B).

North Latitude: 33° 53' 23"

West Longitude: 98° 33' 30"

NAD-27

Tower Registration No. 1044169

Equipment Data

Antenna: Dielectric, Type TFU-34JSC-R O3 (or equivalent) horizontally polarized antenna with 1.0° of electrical beam tilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included in Exhibit E-2.

Transmission Line: Dielectric, Type EIA/DCA, 6-1/8",
75 ohm, 296.6 m (973 ft)

Power Data

Transmitter Power Output	40.5 kW	16.07 dBk
Transmission Line Efficiency/Loss	77.3%	1.12 dB
Antenna Input Power	31.3 kW	14.95 dBk
Antenna Power Gain	32.0	15.05 dB
Effective Radiated Power	1000 kW	30.0 dBk

Elevation Data

Overall height above ground of existing antenna structure (including appurtenances)	319.3 meters 1047.6 feet
Center of radiation of Channel 28 antenna above ground	266.1 meters 873 feet
Elevation of site above mean sea level	306 meters 1004 feet

Center of radiation of Channel 28 antenna above mean sea level	572.1 meters 1877 feet
Overall height above mean sea level of existing tower (including beacon)	625.3 meters 2151.5 feet
Antenna height above average terrain	269.4 meters

Coverage

The average elevation data for 3.2 to 16.1 km along the eight cardinal radials has been determined from the NGDC 3-second database. The F(50,90) DTV coverage contours have been computed from reference to the propagation data for Channel 28 as published by the FCC in Figure 10, 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 0.447 to 0.462 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.

Exhibit E-3 shows the proposed KFDX-DT, 48 dBu and 41 dBu F(50,90) coverage contours on a map and includes the legal boundaries of Wichita Falls, Texas.

Interference Analysis

An analysis of predicted interference caused by the proposed KFDX-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 XP/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 KFDX-DT to any potentially affected facility above the outstanding construction permit.

Other Licensed and Broadcast Facilities

There are no AM stations within 3.22 km of the proposed site. There are numerous FM and TV broadcast stations located within 2 km of the proposed site. No adverse technical effect is anticipated by the DTV operation to any other FCC licensed facility, however, if any problems occur, the permittee will take the necessary steps to resolve them.

Radio Frequency Field Level ("RFF Level")

<u>Station</u>	<u>ERP</u> (kW)	<u>HAAT</u> (m)	<u>Frequency</u> (MHz)	<u>Ch</u>	<u>RCAGL**</u> (m)	<u>F*</u>	<u>S (: W/cm²)</u>	<u>RFF</u> (%)
KFDX-DT Prop. Max	1000	269.4	557	28	264.1	0.1	4.8	1.3

*F = assumed value

** RCAGL -2 meters

The addition of the KFDX-DT facilities will contribute approximately 4.8 $\mu\text{W}/\text{cm}^2$ or 1.3% of the limit for an uncontrolled environment to the total RFF levels at 2 meters above ground from the existing operational facilities.

Section 1.1307

The proposed operation based upon the current OET Bulletin No.65, Edition 97-01 dated August 1997 and Supplement A meets the provisions of the FCC radio frequency field guidelines, and thus, complies with Section 1.1307 of the FCC Rules.

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 proposed facilities are not located in an officially designated wilderness area.
- (a)(2) The proposed facilities are 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 proposed facilities are not located near any known Indian religious sites.
- (a)(6) The proposed facilities are not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) The existing tower lighting will remain unchanged.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.

ABOVE MEAN SEA LEVEL

ABOVE GROUND

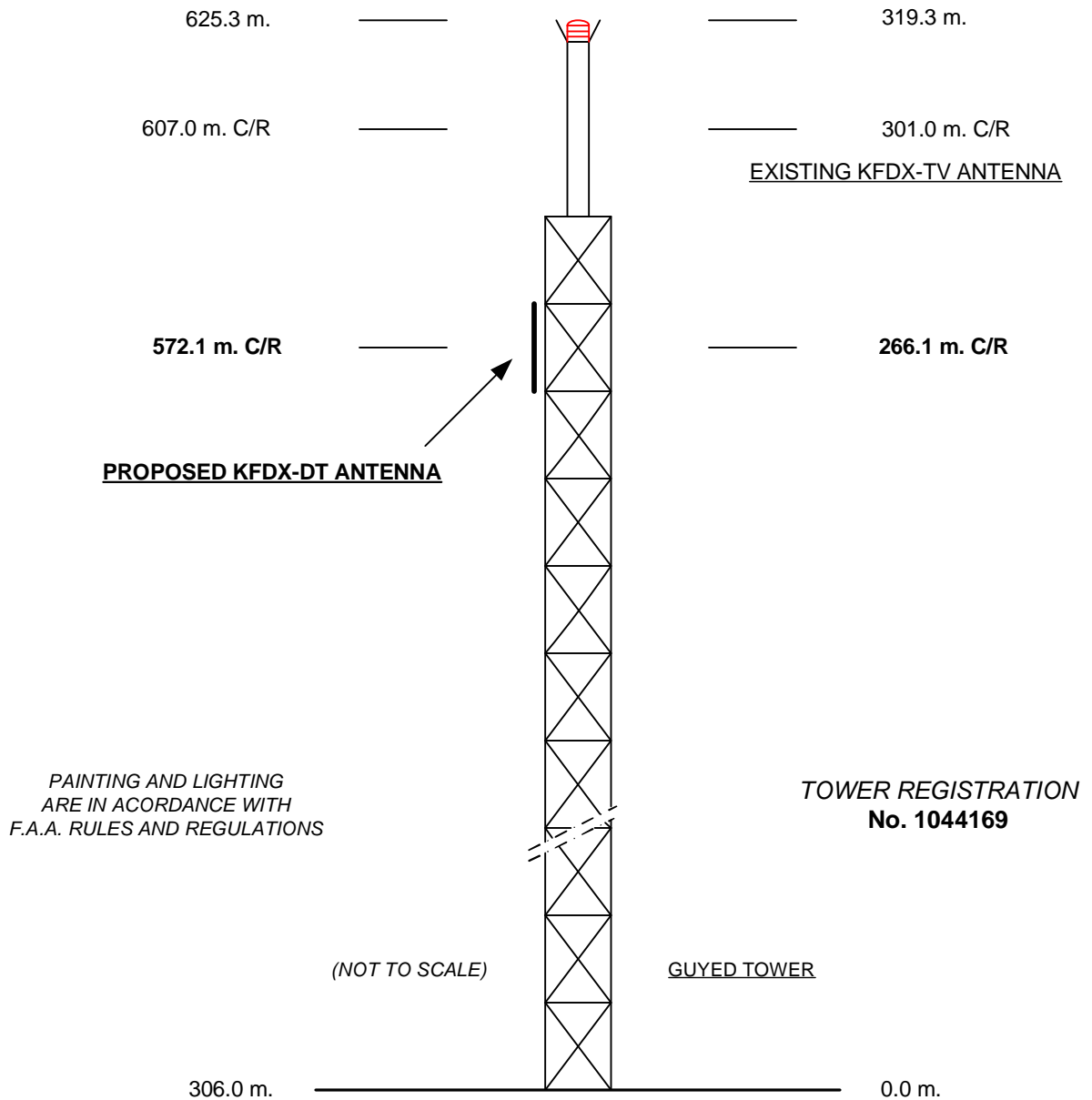


EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED OPERATION OF
KFDX-DT, WICHITA FALLS, TEXAS
MAY 2007

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-2

ANTENNA MANUFACTURER DATA

KFDX-DT, WICHITA FALLS, TEXAS

Proposal #: **C-01131**Antenna Type: **TFU-34JSC-R O3**Channel: **28 DTV**Call Letters: **KFDX-DT**Location: **Wichita Falls, TX**

Electrical Specifications		Value		Remarks	
		Ratio	dBd		
RMS Gain at Main Lobe over Halfwave Dipole	Hpol	32.0	15.05		
	Vpol				
RMS Gain at Horizontal over Halfwave Dipole	Hpol	7.7	8.86		
	Vpol				
Peak Directional Gain over Halfwave Dipole	Hpol				
	Vpol				
Peak Directional Gain at Horizontal over Halfwave Dipole	Hpol				
	Vpol				
Circularity		+/- 1.0 dB		In free space	
Axial Ratio		dB			
Beam Tilt		1.00 deg			
Average Power	DTV	35 kW	15.44 dBk		
Antenna Input:	T/L	6-1/8 in	75.0 ohm	Type: EIA/DCA	
Maximum Antenna Input VSWR				Notes:	
		Channel 1.08 : 1			
Patterns	Azimuth	TFU-03-5570			
	Elevation	34Y320100	34Y320100-90		
Mechanical Specifications		Metric	English	Preliminary	
Height with Lightning Protector	H4	m	ft	Side mounted	
Height Less Lightning Protector	H2	20.0 m	65.6 ft	TIA/EIA-222-F.	
Height of Center of Radiation	H3	10.0 m	32.8 ft		
Basic Wind Speed	V	128.7 km/h	80 mi/h		
Force Coeff. x Projected Area	CaAc	8.4 m²	90.5 ft²	Excludes Mounts	
Moment Arm	D1	m	ft		
Force Coeff. x Projected Area	CaAc	m²	ft²		
Moment Arm	D3	m	ft		
Pole Bury Length	D2	m	ft		
Weight	W	0.5 t	1060.0 lbs	Excludes Mounts	
Radome					
Antenna designed in accordance with AISC specifications for design of structural steel for building as prescribed by TIA/EIA-222-F. Mechanical Loads Exclude Mounts					

NOTE:

Prepared By :

SWB

Approved By :

JLS

Original Date : 5-Mar-07

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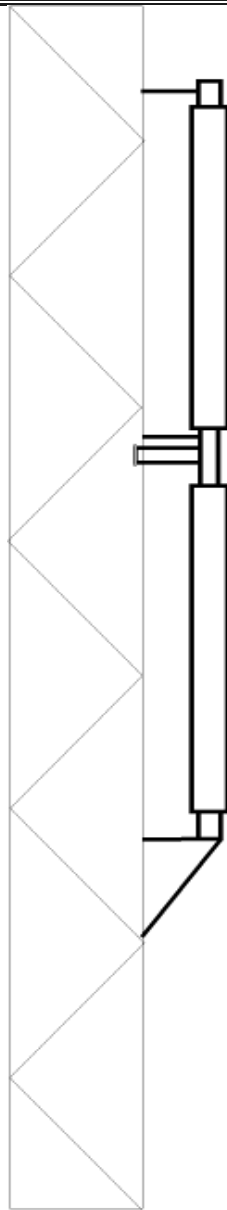
Dielectric Communications or SPX Corporation.

Proposal #: **C-01131**
Call Letters: **KFDX-DT**

Antenna Type:
Location:

TFU-34JSC-R O3
Wichita Falls, TX

Channel: **28 DTV**



Mechanical Specifications

TIA/EIA-222-F. @ 80 mi/h (128.7 km/h)

CaAc = 90.5 ft²(8.4 m²)

W = 1060 lbs(0.5 t)

65.6 ft (20 m)

TFU-34JSC-R O3
Channel: D28

XXX-00000-1

Not to Scale

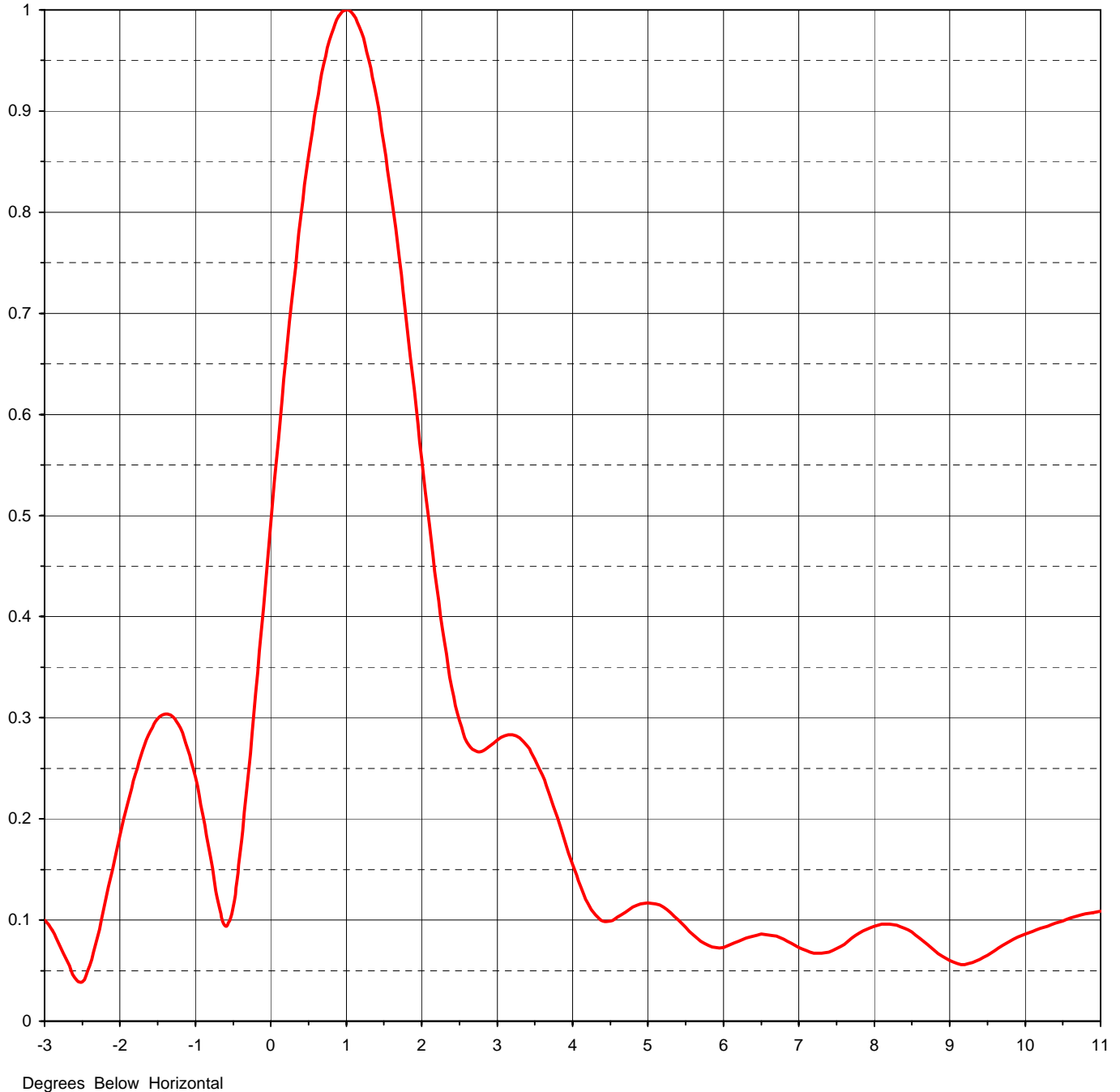
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Proposal Number	C-01131	
Date	5-Mar-07	
Call Letters	KFDX-DT	Channel 28
Location	Wichita Falls, TX	
Customer	Nexstar	
Antenna Type	TFU-34JSC-R O3	

ELEVATION PATTERN

RMS Gain at Main Lobe	32.00 (15.05 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	7.70 (8.86 dB)	Frequency	557.00 MHz
Calculated / Measured	Calculated	Drawing #	34Y320100

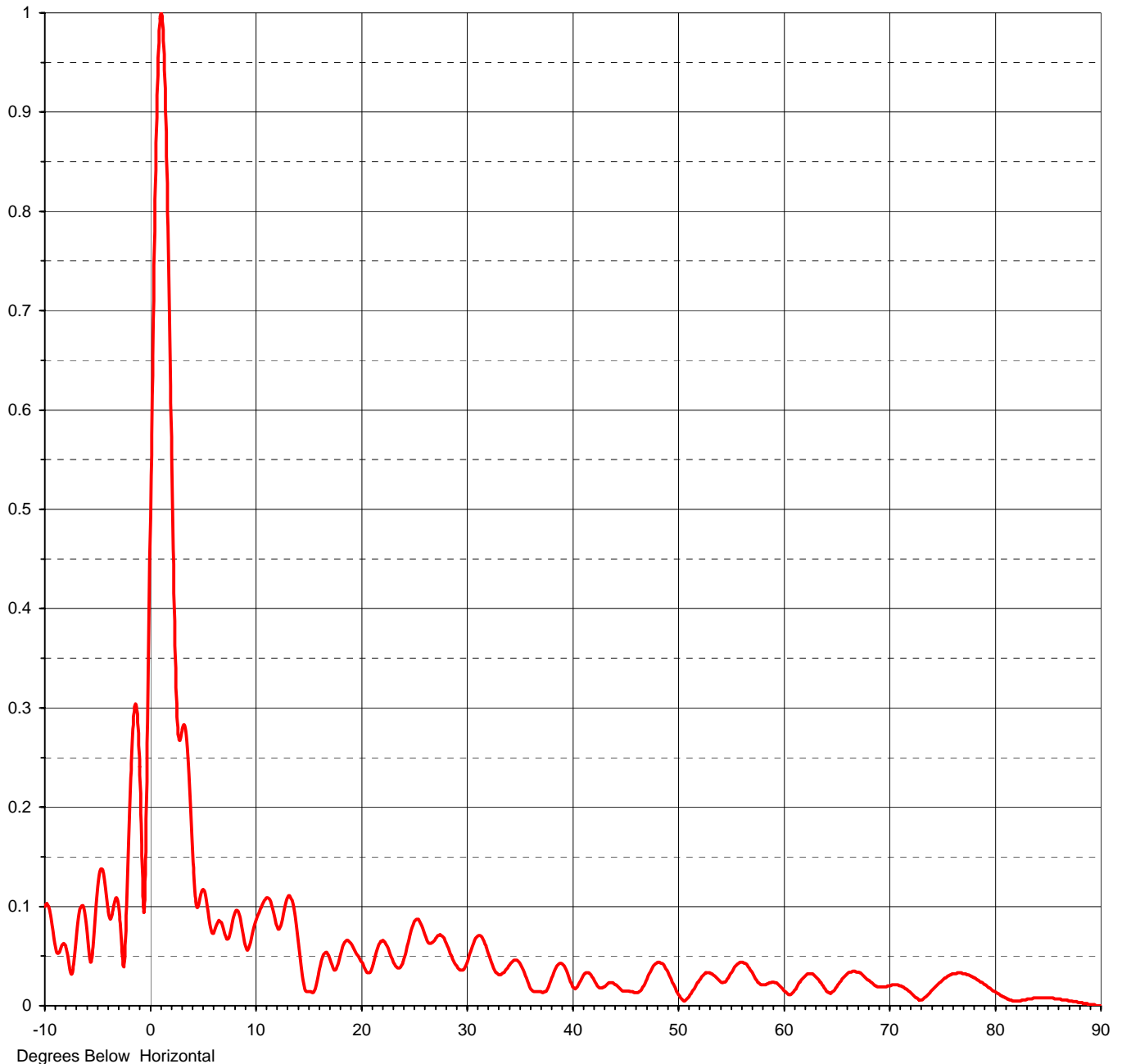




Proposal Number	C-01131	
Date	5-Mar-07	
Call Letters	KFDX-DT	Channel 28
Location	Wichita Falls, TX	
Customer	Nexstar	
Antenna Type	TFU-34JSC-R 03	

ELEVATION PATTERN

RMS Gain at Main Lobe	32.00 (15.05 dB)	Beam Tilt	1.00 deg
RMS Gain at Horizontal	7.70 (8.86 dB)	Frequency	557.00 MHz
Calculated / Measured	Calculated	Drawing #	34Y320100-90





Proposal Number **C-01131**
Date **5-Mar-07**
Call Letters **KFDX-DT** Channel **28**
Location **Wichita Falls, TX**
Customer **Nexstar**
Antenna Type **TFU-34JSC-R 03**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **34Y320100-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.100	2.4	0.330	10.6	0.099	30.5	0.057	51.0	0.008	71.5	0.017
-9.5	0.094	2.6	0.276	10.8	0.104	31.0	0.069	51.5	0.016	72.0	0.013
-9.0	0.060	2.8	0.267	11.0	0.107	31.5	0.069	52.0	0.024	72.5	0.008
-8.5	0.057	3.0	0.278	11.5	0.105	32.0	0.056	52.5	0.031	73.0	0.006
-8.0	0.060	3.2	0.283	12.0	0.083	32.5	0.041	53.0	0.033	73.5	0.010
-7.5	0.032	3.4	0.272	12.5	0.082	33.0	0.032	53.5	0.030	74.0	0.016
-7.0	0.068	3.6	0.243	13.0	0.106	33.5	0.033	54.0	0.025	74.5	0.021
-6.5	0.101	3.8	0.201	13.5	0.106	34.0	0.040	54.5	0.024	75.0	0.026
-6.0	0.073	4.0	0.155	14.0	0.072	34.5	0.046	55.0	0.032	75.5	0.030
-5.5	0.053	4.2	0.117	14.5	0.028	35.0	0.044	55.5	0.040	76.0	0.032
-5.0	0.120	4.4	0.099	15.0	0.014	35.5	0.033	56.0	0.044	76.5	0.033
-4.5	0.136	4.6	0.103	15.5	0.013	36.0	0.019	56.5	0.042	77.0	0.032
-4.0	0.095	4.8	0.113	16.0	0.031	36.5	0.014	57.0	0.035	77.5	0.031
-3.5	0.099	5.0	0.117	16.5	0.052	37.0	0.014	57.5	0.026	78.0	0.028
-3.0	0.100	5.2	0.113	17.0	0.050	37.5	0.014	58.0	0.021	78.5	0.025
-2.8	0.075	5.4	0.100	17.5	0.036	38.0	0.025	58.5	0.022	79.0	0.021
-2.6	0.043	5.6	0.085	18.0	0.047	38.5	0.038	59.0	0.024	79.5	0.018
-2.4	0.055	5.8	0.075	18.5	0.064	39.0	0.043	59.5	0.022	80.0	0.014
-2.2	0.116	6.0	0.073	19.0	0.064	39.5	0.036	60.0	0.017	80.5	0.010
-2.0	0.183	6.2	0.079	19.5	0.055	40.0	0.022	60.5	0.011	81.0	0.008
-1.8	0.244	6.4	0.084	20.0	0.046	40.5	0.019	61.0	0.014	81.5	0.006
-1.6	0.287	6.6	0.085	20.5	0.035	41.0	0.029	61.5	0.023	82.0	0.005
-1.4	0.304	6.8	0.081	21.0	0.036	41.5	0.033	62.0	0.029	82.5	0.006
-1.2	0.290	7.0	0.073	21.5	0.055	42.0	0.028	62.5	0.032	83.0	0.007
-1.0	0.241	7.2	0.067	22.0	0.065	42.5	0.019	63.0	0.030	83.5	0.007
-0.8	0.162	7.4	0.068	22.5	0.060	43.0	0.019	63.5	0.024	84.0	0.008
-0.6	0.094	7.6	0.076	23.0	0.047	43.5	0.023	64.0	0.017	84.5	0.008
-0.4	0.171	7.8	0.087	23.5	0.038	44.0	0.022	64.5	0.013	85.0	0.008
-0.2	0.325	8.0	0.094	24.0	0.043	44.5	0.018	65.0	0.019	85.5	0.008
0.0	0.492	8.2	0.096	24.5	0.063	45.0	0.015	65.5	0.027	86.0	0.007
0.2	0.654	8.4	0.092	25.0	0.082	45.5	0.014	66.0	0.032	86.5	0.006
0.4	0.796	8.6	0.082	25.5	0.087	46.0	0.013	66.5	0.035	87.0	0.005
0.6	0.906	8.8	0.070	26.0	0.075	46.5	0.015	67.0	0.034	87.5	0.004
0.8	0.976	9.0	0.060	26.5	0.063	47.0	0.025	67.5	0.030	88.0	0.003
1.0	1.000	9.2	0.056	27.0	0.066	47.5	0.036	68.0	0.026	88.5	0.002
1.2	0.978	9.4	0.061	27.5	0.072	48.0	0.043	68.5	0.021	89.0	0.001
1.4	0.914	9.6	0.070	28.0	0.065	48.5	0.043	69.0	0.019	89.5	0.000
1.6	0.814	9.8	0.075	28.5	0.052	49.0	0.036	69.5	0.019	90.0	0.000
1.8	0.690	10.0	0.083	29.0	0.041	49.5	0.024	70.0	0.020		
2.0	0.556	10.2	0.089	29.5	0.036	50.0	0.013	70.5	0.021		
2.2	0.430	10.4	0.094	30.0	0.041	50.5	0.006	71.0	0.020		

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Cohen, Dippell and Everist, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
KFDX-DT, WICHITA FALLS, TEXAS
CHANNEL 28 1000 KW 269.4 METERS HAAT
MAY 2007

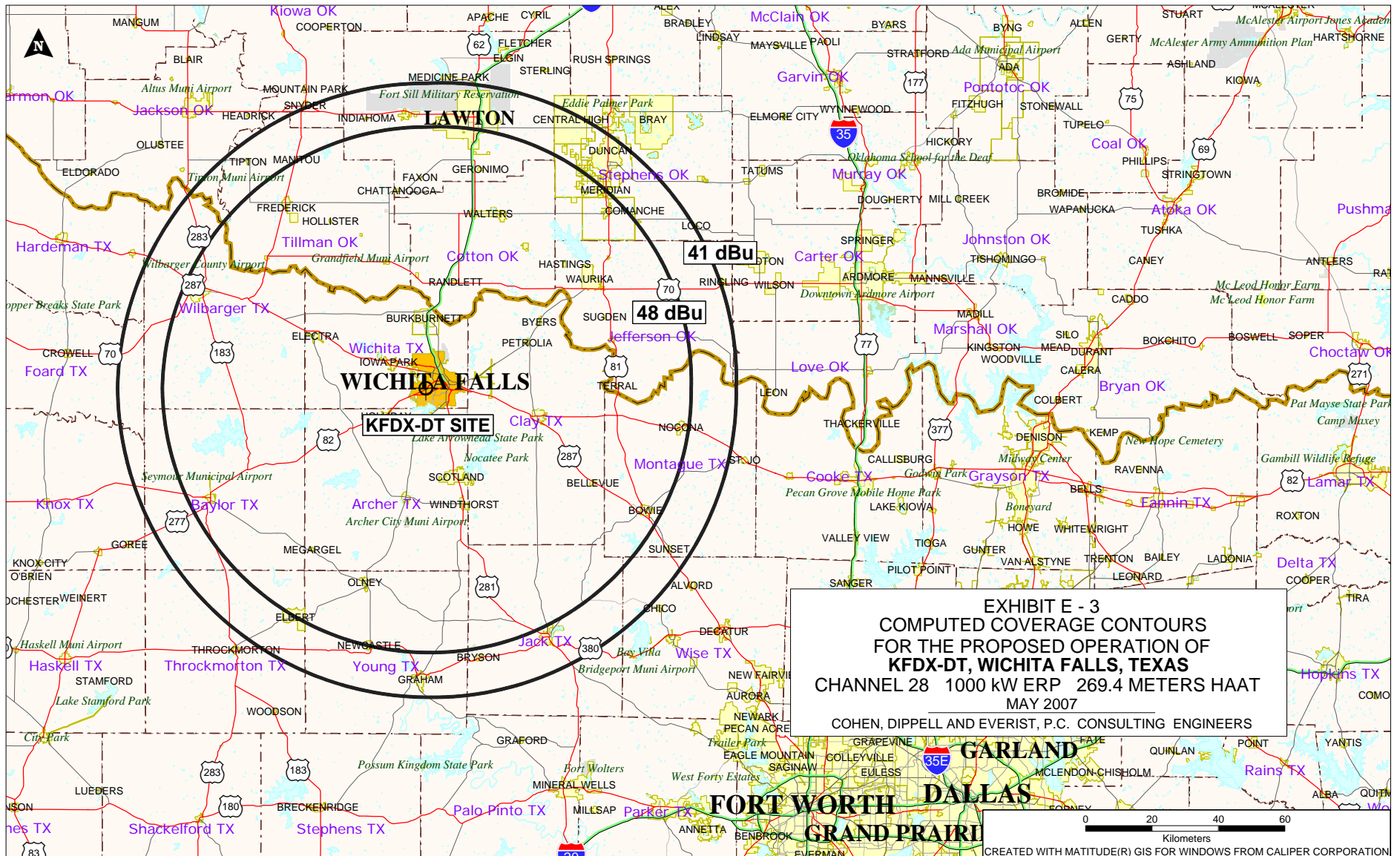
<u>Radial</u> <u>Bearing</u> N ° E, T	<u>Average*</u> <u>Elevation</u> <u>3.2 to 16.1 km</u> meters	<u>Effective</u> <u>Height</u> meters	<u>Depression</u> <u>Angle</u>	<u>ERP At</u> <u>Radio</u> <u>Horizon</u> kW	<u>Distance to Contour F(50,90)</u>	
					<u>48 dBu</u> <u>City Grade</u> km	<u>41 dBu</u> <u>Noise-Limited</u> km
0	311.8	260.3	0.447	1000	78.4	91.5
45	294.1	278.0	0.462	1000	80.3	94.0
90	299.4	272.7	0.457	1000	79.7	93.3
135	296.9	275.1	0.459	1000	80.0	93.6
180	303.5	268.6	0.454	1000	79.2	92.7
225	305.3	266.8	0.452	1000	79.0	92.4
270	302.2	269.9	0.455	1000	79.4	92.9
315	308.6	263.5	0.450	1000	78.7	91.9
Average	302.7	269.4				

*Based on data from FCC 3-second data base

DTV Channel 28 (554-560 MHz)
Average Elevation 3.2 to 16.1 km 302.7 meters AMSL
Center of Radiation 572.1 meters AMSL
Antenna Height Above Average Terrain 269.4 meters
Effective Radiated Power 1000 kW (30 dBk) Max.

North Latitude: 33° 53' 23"
West Longitude: 98° 33' 30"

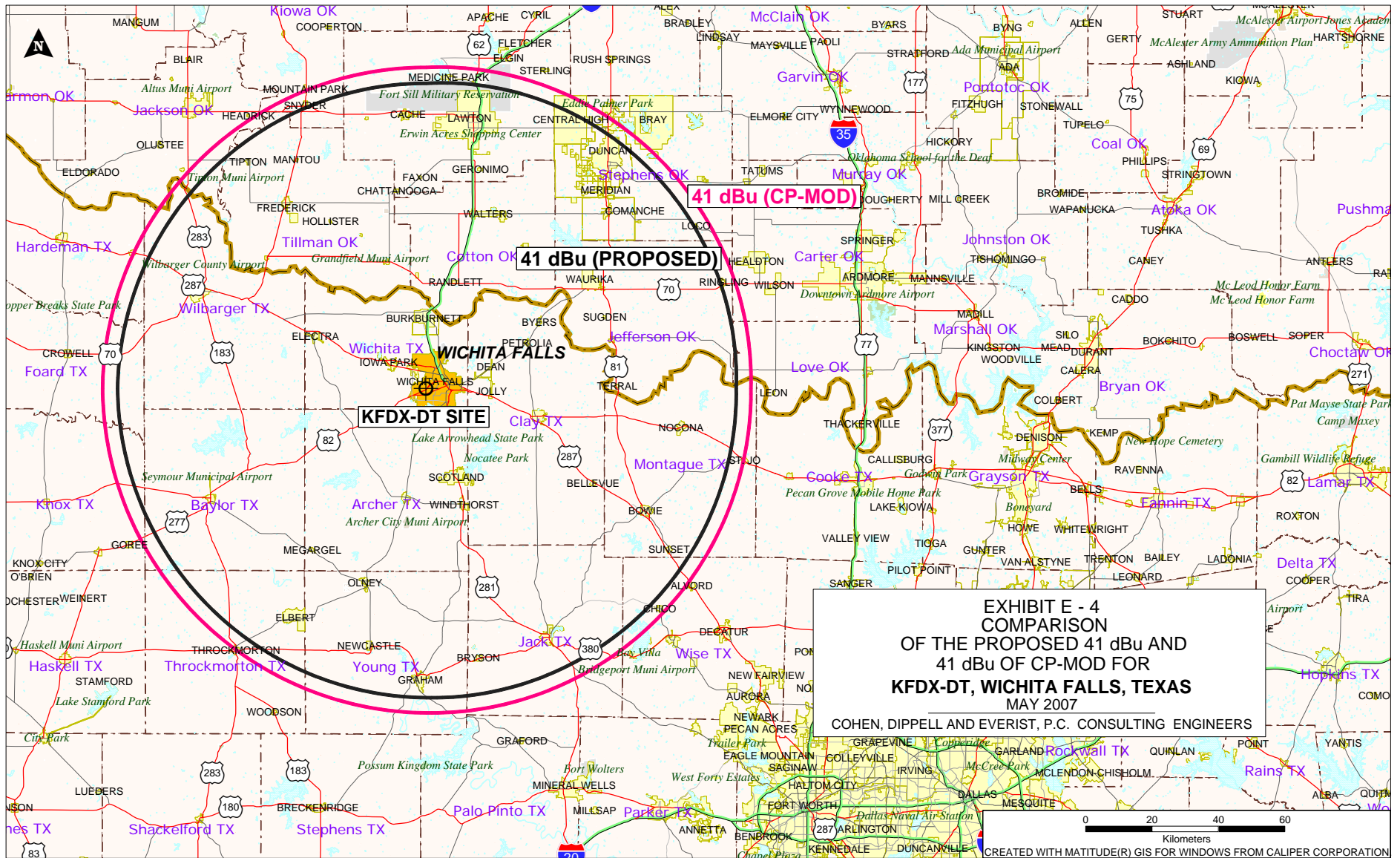
(NAD-27)



COHEN, DIPPELL AND EVERIST, P.C.

TABLE II
LONGLEY-RICE ANALYSIS
ABOVE THE OUTSTANDING CONSTRUCTION PERMIT
(FCC FILE NO. BMPCDT-20070125ABU)
FOR THE PROPOSED OPERATION OF
KFDX-DT, WICHITA FALLS, TEXAS
CHANNEL 28 1000 KW ERP ND 269.4 METERS HAAT
MAY 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>
20	KOKT-LP	SULPHUR OK	141.7	LIC	BLTTL-19970414JA	no interference
20	K20DN	WICHITA FALLS TX	6.1	LIC	BLTTL-19931112IA	no interference
27	KFOR-DT	OKLAHOMA CITY OK	213.5	LIC	BLCDT-20050701ABR	no interference
27	KFOR-DT	OKLAHOMA CITY OK	210.6	ALLOT		no interference
28	KTPX-DT	OKMULGEE OK	309.8	LIC	BLCDT-20020510AAQ	0.00%
28	KTPX-DT	OKMULGEE OK	309.8	ALLOT		0.00%
28	KHPX-CA	GEORGETOWN TX	375.2	LIC	BLTTA-20020408AAP	no interference
28	KAMC(TV)	LUBBOCK TX	307	LIC	BLCT-1848	0.00%
29	KTUZ-DT	SHAWNEE OK	209.9	CP MOD	BMPCDT-20060707AFM	no interference
29	KTUZ-DT	SHAWNEE OK	190.7	ALLOT		no interference
29	KRBC-DT	ABILENE TX	209.6	CP MOD	BMPCDT-20040802AMT	no interference
29	KRBC-DT	ABILENE TX	209.3	ALLOT		no interference
29	KMPX(TV)	DECATUR TX	206.8	LIC	BLCT-20050707ABJ	no interference
30	K30DJ	WICHITA FALLS TX	1.7	LIC	BLTTL-19931112IW	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.


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 May 29, 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
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