

ENGINEERING STATEMENT
RE REQUEST FOR SPECIAL TEMPORARY AUTHORITY
TO OPERATE DTV STATION
DURING BUILDOUT OF POST-TRANSITION FACILITIES
WKBN-DT, YOUNGSTOWN, OHIO
CHANNEL 41 700 KW ERP 384.2 METERS HAAT

SEPTEMBER 2008

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)

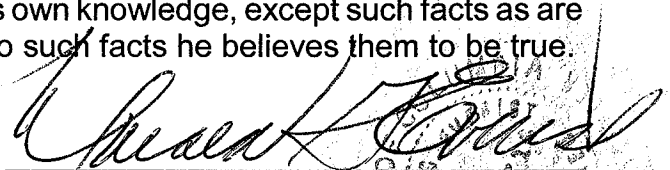
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President 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.



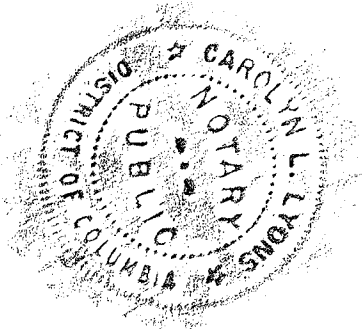
Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 16th day of September, 2008.



Notary Public

My Commission Expires: 2/28/2013



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;

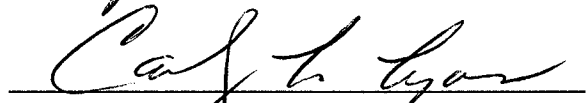
That the attached engineering report was prepared by him or under his supervision and direction and

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.



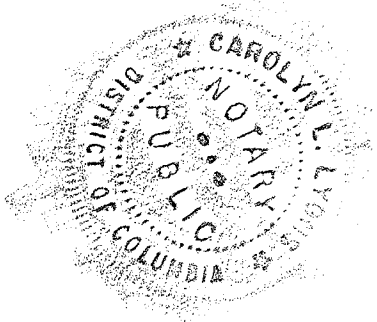
Martin R. Doczkat

Subscribed and sworn to before me this 16th day of September, 2008.



Notary Public

My Commission Expires: 2/28/2013



Introduction

This engineering statement has been prepared on behalf of NVT Youngstown Licensee, LLC, licensee of TV station WKBN-TV, Youngstown, Ohio, in support of its request for a special temporary authority (“STA”) for a digital television (“DTV”) operation during buildout of post-transition facilities. At present, WKBN-TV operates on NTSC TV Channel 27 (548-554 MHz) with 871 kW effective radiated power (“ERP”) and 439.3 meters antenna height above average terrain (“HAAT”). The current analog Channel 27 operation of WKBN-TV is with a non-directional TV antenna. Station WKBN-DT has been allotted Channel 41 (632-638 MHz) for its digital TV operation and been authorized to construct a facility (FCC File No. BPCDT-19991025ACU) with 700 kW non-directional ERP and 418 meters HAAT. It is proposed to operate from the existing tower (no change in overall height) with 700 kW non-directional at an HAAT of 384.2 meters pursuant to its current special temporary authority (“STA”) operation (FCC File No. BDSTA-20060419ACD) during the buildout of the post-transition facilities. This filing is in accordance with Paragraphs 94-96 of the Third Periodic Review¹, Report and Order.

Antenna Site

There is no change in the proposed antenna site. The DTV antenna is currently side-mounted on the existing tower at 372.8 meters above ground level.

The WKBN-TV antenna site is located at 3930 Sunset Boulevard (Youngstown S. 1433 #307645), Youngstown, Ohio. The WKBN-TV antenna structure registration number is 1013678.

The geographic coordinates of the existing tower are as follows:

¹“In the Matter of Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television”, MB Docket No. 07-91, Report & Order (FCC 07-228), Released December 31, 2007.

North Latitude: 41° 03' 24"

West Longitude: 80° 38' 44"

NAD-27

The following data shows the pertinent information concerning the proposed STA operation.

Power Data

Proposed Transmitter Output	49 kW	16.90 dBk
Existing Transmission Line Efficiency/Loss	65.0%	1.87 dB
Input to Existing Antenna	31.8 kW	15.03 dBk
Antenna Power Gain	22.0 kW	13.42 dB
Effective Radiated Power	700 kW	28.45 dBk

Antenna Data

Antenna: Dielectric, Type TFU-23JTH-R O4 DC

The vertical plane pattern and other exhibits required by Section 73.625(c) are included herein as Exhibit E-1

Beam Tilt 0.75 electrical

Non-Directional Max.
Power Gain 22 13.42 dB

Elevation Data

Elevation of the site above mean sea level: 336.8 meters
1105 feet

Elevation of the top of existing supporting structure 435.9 meters
above ground including top-mounted NTSC antenna 1430 feet

Elevation of the top of supporting structure 772.7 meters
above mean sea level including top-mounted NTSC antenna 2535 feet

Height of DTV STA antenna radiation center meters above ground	372.8 meters 1223 feet
Height of DTV STA antenna radiation center above mean sea level	709.6 meters 2328 feet
Height of DTV STA antenna radiation center above average terrain	384.2 meters 1260 feet

Authorized Effective Radiated Power

The non-directional ERP authorized by the outstanding construction permit for the DTV operation is 700 kW at 418 meters HAAT. Station WKBN-DT is proposing to operate its STA facility with an ERP of 700 kW and 384.2 meters HAAT using a non-directional transmitting antenna. This power and height will ensure that it does not extend the predicted F(50,90) 41 dBu contour in any direction beyond that authorized by the construction permit.

The attached map (Exhibit E-1) shows the computed F(50,90) 41 dBu contour predicted according to Section 73.625(b) of the Commission's rules based on the DTV facilities authorized in the outstanding construction permit and the requested STA facilities of 700 kW ERP and 384.2 meters HAAT in relation to the currently licensed WKBN-TV F(50,50) 64 dBu Grade B contour.

Principal Community Coverage

In MM Docket No. 00-39, the Commission adopted rules to require DTV stations to place a stronger TV signal over the principal community.

The STA operation proposed by Station WKBN-DT places a predicted F(50,90) 48 dBu contour over the community of license.

Topographic Data

The average elevation data of the eight cardinal radials from 3.2 to 16.1 kilometers, are based on the NGDC 3-second computerized terrain database.

Contour Data

Utilizing the formula in Section 73.625(b)(2) for the effective heights shown on the attached tabulation, the depression angle A_h , for each azimuth has been calculated. The maximum radiation value has been used to calculate ERP where the vertical radiation pattern at these angles is greater than 90% of the maximum.

Table I provides the distances along the eight cardinal radials to the predicted F(50,90) 48 dBu and 41 dBu STA contours, the average elevations, and the effective antenna heights.

The distances along each radial to the limits of F(50,90) 48 dBu and 41 dBu contours were determined as specified in Section 73.625(b) by reference to the propagation data for Channels 14-69, as published by the Commission in Figures 10b and 10c, Section 73.699 of its rules.

Other Stations

There are three FM, one full-service TV and one full-service DTV broadcast stations located within 0.5 km of the proposed site. Additionally, there is one digital and one analog low-power television or television translator station located within 0.5 km of the proposed site. No objectionable interference problems are anticipated, however, if any problems occur, the applicant will take the necessary steps to resolve them. There is one non-directional AM station within 3.22 km of the proposed site.

The attached map (Exhibit E-2) shows the noise-limited coverage from the STA operation and from the authorized facility. The authorized facility based on the final DTV Table of Allotments is predicted to serve 3,817,000 persons in an area of 29,686 sq. km. The STA facility is predicted to serve 3,640,000 persons and an area of 28,228 sq. km. Therefore, as shown the STA operation serves approximately 95.4% of the population served by the 700 kW operation authorized by the construction permit. By inspection of Exhibit E-1, the proposed STA operation serves the entire licensed NTSC Grade B service area.

$$(635 \text{ MHz})/1.5 = 423.3 \text{ } \mu\text{W}/\text{cm}^2$$

Therefore under STA scenario:

WKBN-DT contributes less than 0.4% RFF level for an uncontrolled environment (general population) two meters above the ground in the vicinity of the WKBN-TV tower site.

The permittee indicates that all authorized personnel climbing the tower will be alerted to the potential zones of high field levels on the tower.

Summary of 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 licensee indicates:

- (a)(1) The proposed facilities will not be located in an officially designated wilderness area.
- (a)(2) The proposed facilities will not be 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 will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The proposed facilities will not be located near any known Indian religious sites.
- (a)(6) The proposed facilities will not be 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 change the tower lighting 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. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines.

COHEN, DIPPELL AND EVERIST, P.C.

EXHIBIT E-1

ANTENNA MANUFACTURER DATA

WKBN-DT, YOUNGSTOWN, OHIO



Proposal #: **DCA-11110-2** Antenna Type: **TFU-23JTH-R O4**
 Call Letters: **WKBN-DT** Location: **Youngstown, OH**

Channel: **41 DTV**

Electrical Specifications		Value		Remarks	
		Ratio	dB		
RMS Gain at Main Lobe over Halfwave Dipole	Hpol	22.0	13.42		
	Vpol				
RMS Gain at Horizontal over Halfwave Dipole	Hpol	16.4	12.15		
	Vpol				
Peak Directional Gain over Halfwave Dipole	Hpol				
	Vpol				
Peak Directional Gain at Horizontal over Halfwave Dipole	Hpol				
	Vpol				
Circularity		+/- 2.0 dB			
Axial Ratio		dB			
Beam Tilt		0.75 deg			
Average Power	DTV	38 kW	15.80 dBk		
Antenna Input:	T/L	6 1/8 in	75.0 ohm	Type:	EIA/DCA
Maximum Antenna Input VSWR					
		Channel	1.08 : 1		
Patterns	Azimuth	TFU-O4			
	Elevation	23J220075	23J220075-90		
Mechanical Specifications		Metric	English	Side Mounted	
Height with Lightning Protector	H4	12.9 m	42.4 ft		
Height Less Lightning Protector	H2	11.7 m	38.4 ft		38.4 ft
Height of Center of Radiation	H3	5.9 m	19.2 ft		
Basic Wind Speed	V	128.7 km/h	80 mi/h	TIA/EIA-222-F.	
Force Coeff. x Projected Area	CaAc	3.53 m²	38.0 ft²	Above base flange	74.1 ft²
Moment Arm	D1	6.5 m	21.3 ft	Above base flange	Exclude Mounts
Force Coeff. x Projected Area	CaAc	m²	ft²		
Moment Arm	D3	m	ft		
Pole Bury Length	D2	m	ft		
Weight	W	1.5 t	3,200 lbs		3,100 lbs
Radome					Exclude Mounts
Antenna designed in accordance with AISC specifications for design of structural steel for building as prescribed by TIA/EIA-222-F.					

NOTE:

Prepared By :
 Original Date : 5-Aug-05

SWB

Revision: 2

Approved By :
 Rev. Date: 21-Nov-05

JLS

SWB



DTV ANTENNA CONFIGURATION
TFU-23JTH-R O4
WKBN-DT : Youngstown, OH

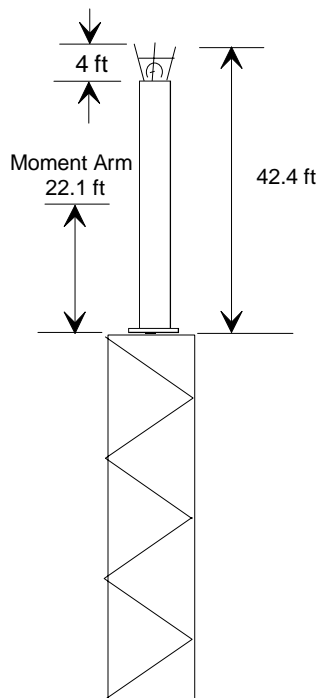
TOP MOUNTED MECHANICAL DATA

CaAc = 38 ft²

D1 = 21.3 ft

Weight = 3,200 lbs

EIA-222-F Specification
(80 mph basic wind speed)



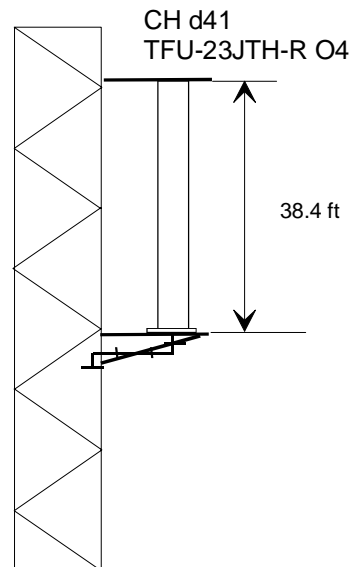
CH d41
TFU-23JTH-R O4

SIDE MOUNTED MECHANICAL DATA

CaAc = 74.1 ft² Exclude Mounts

Weight = 3,100 lbs Exclude Mounts

EIA-222-F Specification
(80 mph basic wind speed)



SWB-051121-02SK

NOT DRAWN TO SCALE



Proposal Number
Date
Call Letters
Location
Customer
Antenna Type

DCA-11110 Revision: **2**
21-Nov-05
WKBN-DT Channel **41**
Youngstown, OH
TFU-23JTH-R 04

SYSTEM SUMMARY

Antenna:

Type:	TFU-23JTH-R 04	ERP:	700 kW	H Pol	(28.45 dBk)
Channel:	41	RMS Gain*:	22.0		(13.42 dB)
Location:	Youngstown, OH	Input Power:	31.8 kW		(15.03 dBk)

Transmission Line:

Type:	EIA/DCA	Attenuation:	1.87 dB
Size:	6-1/8 in	Efficiency:	65.0%
Impedance:	75 ohm		
Length:	1,515 ft		461.8 m

Transmitter:

Power Required: **49.0 kW** **(16.90 dBk)**

* Gain is with respect to half wave dipole.

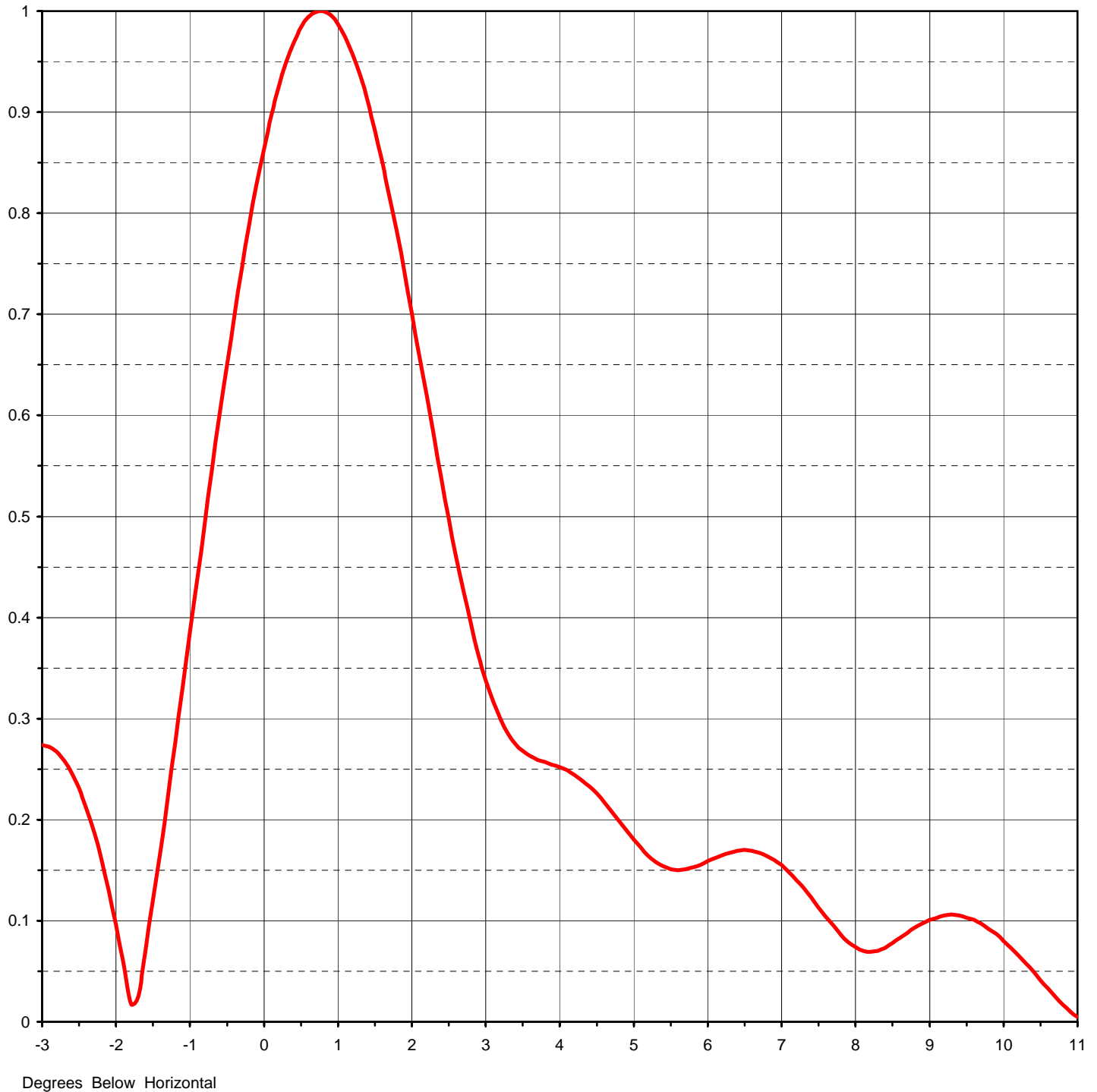


Proposal Number	DCA-11110	Revision:	2
Date	21-Nov-05		
Call Letters	WKBN-DT	Channel	41
Location	Youngstown, OH		
Customer			
Antenna Type	TFU-23JTH-R 04		

ELEVATION PATTERN

RMS Gain at Main Lobe	22.00 (13.42 dB)
RMS Gain at Horizontal	16.40 (12.15 dB)
Calculated / Measured	Calculated

Beam Tilt	0.75 deg
Frequency	635.00 MHz
Drawing #	23J220075



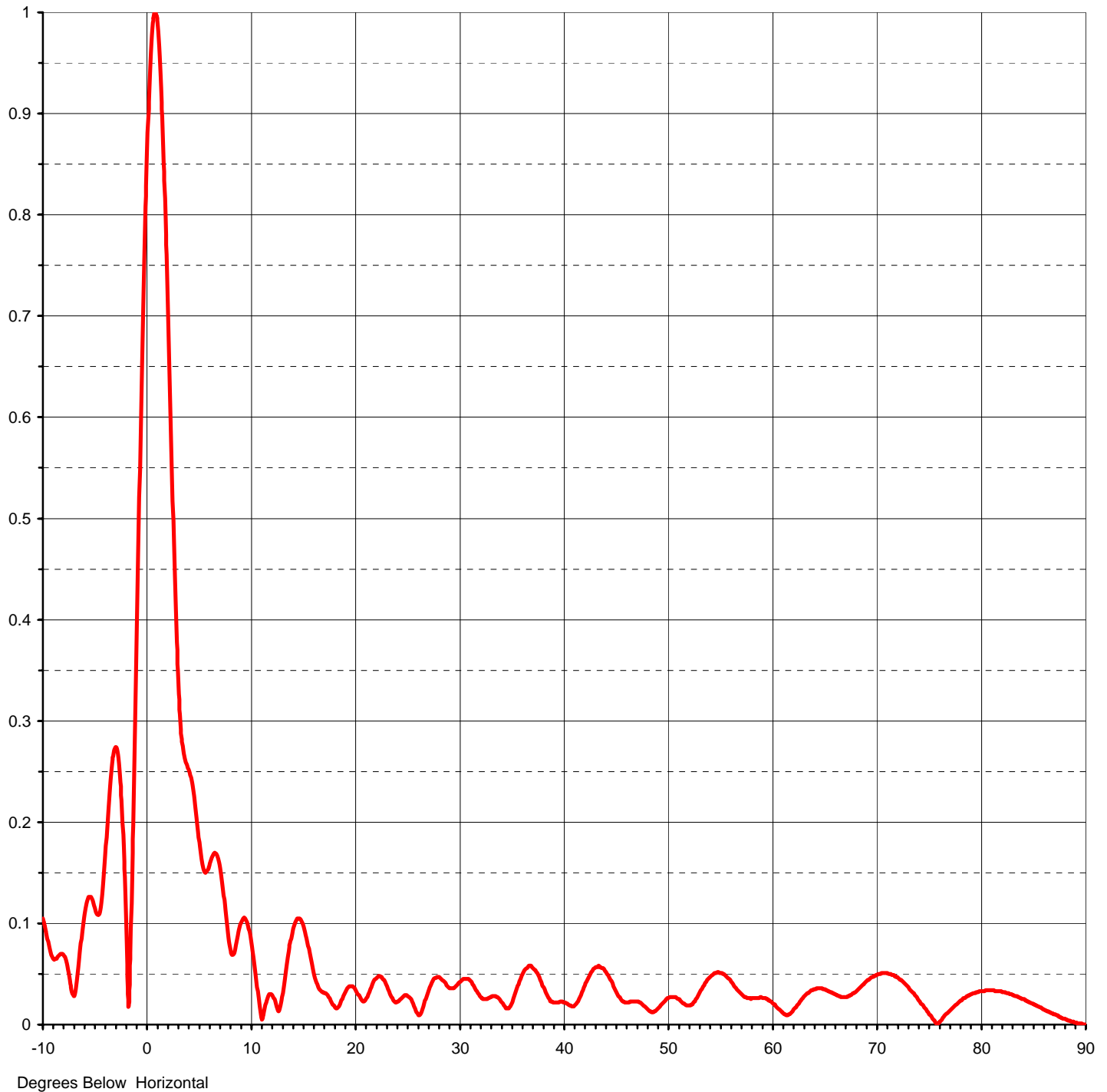


Proposal Number	DCA-11110	Revision:	2
Date	21-Nov-05		
Call Letters	WKBN-DT	Channel	41
Location	Youngstown, OH		
Customer			
Antenna Type	TFU-23JTH-R 04		

ELEVATION PATTERN

RMS Gain at Main Lobe	22.00 (13.42 dB)
RMS Gain at Horizontal	16.40 (12.15 dB)
Calculated / Measured	Calculated

Beam Tilt	0.75 deg
Frequency	635.00 MHz
Drawing #	23J220075-90





Proposal Number **DCA-11110** Revision: **2**
 Date **21-Nov-05**
 Call Letters **WKBN-DT** Channel **41**
 Location **Youngstown, OH**
 Customer
 Antenna Type **TFU-23JTH-R O4**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **23J220075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.105	2.4	0.537	10.6	0.041	30.5	0.045	51.0	0.025	71.5	0.049
-9.5	0.082	2.6	0.460	10.8	0.025	31.0	0.044	51.5	0.021	72.0	0.046
-9.0	0.065	2.8	0.393	11.0	0.010	31.5	0.037	52.0	0.019	72.5	0.042
-8.5	0.068	3.0	0.338	11.5	0.022	32.0	0.028	52.5	0.022	73.0	0.037
-8.0	0.069	3.2	0.299	12.0	0.030	32.5	0.025	53.0	0.030	73.5	0.031
-7.5	0.050	3.4	0.275	12.5	0.018	33.0	0.027	53.5	0.039	74.0	0.024
-7.0	0.028	3.6	0.263	13.0	0.024	33.5	0.028	54.0	0.046	74.5	0.017
-6.5	0.066	3.8	0.257	13.5	0.060	34.0	0.024	54.5	0.051	75.0	0.010
-6.0	0.109	4.0	0.252	14.0	0.090	34.5	0.016	55.0	0.051	75.5	0.004
-5.5	0.126	4.2	0.244	14.5	0.105	35.0	0.020	55.5	0.049	76.0	0.003
-5.0	0.115	4.4	0.233	15.0	0.100	35.5	0.034	56.0	0.044	76.5	0.009
-4.5	0.113	4.6	0.217	15.5	0.080	36.0	0.048	56.5	0.037	77.0	0.014
-4.0	0.169	4.8	0.199	16.0	0.055	36.5	0.056	57.0	0.031	77.5	0.019
-3.5	0.242	5.0	0.180	16.5	0.037	37.0	0.057	57.5	0.027	78.0	0.024
-3.0	0.274	5.2	0.164	17.0	0.032	37.5	0.051	58.0	0.025	78.5	0.027
-2.8	0.267	5.4	0.154	17.5	0.027	38.0	0.039	58.5	0.026	79.0	0.030
-2.6	0.246	5.6	0.150	18.0	0.019	38.5	0.028	59.0	0.027	79.5	0.032
-2.4	0.211	5.8	0.153	18.5	0.018	39.0	0.022	59.5	0.025	80.0	0.033
-2.2	0.161	6.0	0.159	19.0	0.030	39.5	0.022	60.0	0.022	80.5	0.034
-2.0	0.096	6.2	0.165	19.5	0.038	40.0	0.022	60.5	0.017	81.0	0.034
-1.8	0.018	6.4	0.169	20.0	0.036	40.5	0.020	61.0	0.012	81.5	0.033
-1.6	0.071	6.6	0.169	20.5	0.027	41.0	0.018	61.5	0.009	82.0	0.032
-1.4	0.170	6.8	0.164	21.0	0.024	41.5	0.025	62.0	0.013	82.5	0.031
-1.2	0.276	7.0	0.155	21.5	0.035	42.0	0.037	62.5	0.020	83.0	0.029
-1.0	0.385	7.2	0.140	22.0	0.045	42.5	0.048	63.0	0.026	83.5	0.027
-0.8	0.494	7.4	0.123	22.5	0.047	43.0	0.056	63.5	0.031	84.0	0.025
-0.6	0.600	7.6	0.104	23.0	0.040	43.5	0.057	64.0	0.035	84.5	0.023
-0.4	0.699	7.8	0.086	23.5	0.028	44.0	0.053	64.5	0.036	85.0	0.020
-0.2	0.788	8.0	0.074	24.0	0.022	44.5	0.045	65.0	0.035	85.5	0.018
0.0	0.864	8.2	0.069	24.5	0.026	45.0	0.034	65.5	0.032	86.0	0.015
0.2	0.925	8.4	0.073	25.0	0.029	45.5	0.025	66.0	0.030	86.5	0.012
0.4	0.969	8.6	0.083	25.5	0.023	46.0	0.022	66.5	0.027	87.0	0.010
0.6	0.994	8.8	0.093	26.0	0.011	46.5	0.023	67.0	0.027	87.5	0.008
0.8	1.000	9.0	0.101	26.5	0.015	47.0	0.023	67.5	0.029	88.0	0.006
1.0	0.987	9.2	0.105	27.0	0.031	47.5	0.021	68.0	0.033	88.5	0.004
1.2	0.957	9.4	0.105	27.5	0.043	48.0	0.016	68.5	0.038	89.0	0.002
1.4	0.911	9.6	0.101	28.0	0.047	48.5	0.012	69.0	0.043	89.5	0.001
1.6	0.851	9.8	0.097	28.5	0.043	49.0	0.015	69.5	0.047	90.0	0.000
1.8	0.780	10.0	0.087	29.0	0.037	49.5	0.021	70.0	0.049		
2.0	0.701	10.2	0.073	29.5	0.036	50.0	0.026	70.5	0.051		
2.2	0.619	10.4	0.058	30.0	0.041	50.5	0.027	71.0	0.051		

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I
COMPUTED COVERAGE DATA
FOR THE PROPOSED DTV OPERATION OF
WKBN-DT, YOUNGSTOWN, OHIO
CHANNEL 41 700 KW 384.2 METERS HAAT
SEPTEMBER 2008

Radial Bearing N ° E, T	Average* Elevation 3.2 to 16.1 km meters	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90)	
					48 dBu City Grade km	41 dBu Noise-Limited km
0	311.2	398.4	0.553	700	89.4	102.5
45	319.4	390.2	0.547	700	88.9	101.9
90	317.6	392.0	0.548	700	89.0	102.0
135	351.0	358.6	0.525	700	86.6	99.5
180	335.2	374.4	0.536	700	87.9	100.7
225	338.8	370.8	0.533	700	87.7	100.4
270	318.3	391.3	0.548	700	89.0	102.0
315	307.6	402.0	0.555	700	89.6	102.8

*Based on data from FCC 3-second data base

DTV Channel 41 (632-638 MHz)
Average Elevation 3.2 to 16.1 km 324.4 meters AMSL
Center of Radiation 709.6 meters AMSL
Antenna Height Above Average Terrain 384.2 meters
Effective Radiated Power 700 kW (28.45 dBk) Max.

North Latitude: 41 ° 03' 24"
West Longitude: 80 ° 38' 44"

(NAD-27)

WKBN-TV GRADE B 64 dBu

WKBN-DT STA APP 41 dBu

WKBN-DT CP 41 dBu

SITE

EXHIBIT E-2
COMPARISON OF
THE CURRENTLY AUTHORIZED DTV STA SERVICE AREA
IN RELATION TO
THE CURRENTLY AUTHORIZED DTV CP SERVICE AREA
AND
THE CURRENTLY LICENSED GRADE B SERVICE AREA
FOR
WKBN-DT, YOUNGSTOWN, OHIO
CHANNEL 41 700 kW ND ERP 384.2 METERS HAAT
SEPTEMBER 2008

0 10 20 30
Kilometers

SECTION III - D - DTV Engineering

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

Pre-Transition Certification Checklist: An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction pen-nit application to modify pre-transition facilities. 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.

Post-Transition Expedited Processing. An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.

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 a pre-transition facility 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 a pre-transition facility 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
 - (d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"). ☐ Yes ☐ No
☐ N/A
 - (e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B. ☐ Yes ☐ No
☐ N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF 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 pre-transition 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.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?

☐

Yes

☐

No

If "No," attach as an Exhibit justification therefore, 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 therefore. (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 radio frequency 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.

13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application.

☐ Yes ☐ No ☐ N/A


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 September 16, 2008	
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).