

## **ENGINEERING EXHIBIT**

### **“Maximization” Application for Post-Transition Digital Television Station Construction Permit**

prepared for

#### **Gray Television Licensee, Inc.**

WVLT-DT Knoxville, TN

Facility ID 35908

Ch. 30 870 kW 551 m

*Gray Television Licensee, Inc.* (“Gray”) is the licensee of television station WVLT-TV, analog Channel 8 and digital Channel 30, Knoxville, TN. *Gray* herein seeks a Construction Permit to expand the WVLT-DT post-transition digital facility on Channel 30. WVLT-DT will be remaining on Channel 30 during the post-transition period, as established in Appendix B of the Seventh Report and Order in MB Docket 87-278. The instant application is intended to be filed by June 20, 2008 in response to the FCC’s lifting of the August 3, 2004 “freeze” concerning expansion in service area.<sup>1</sup>

WVLT-DT is presently licensed (BLCDDT-20040420AAF) to operate with an effective radiated power (“ERP”) of 398 kW with a shared nondirectional antenna at 551 meters height above average terrain (“HAAT”). The proposal would increase the ERP to 870 kW with the continued use of the currently licensed antenna system. The antenna is a horizontally polarized Andrew model ABBP16H3-HTO5-17/30H.

The antenna is top-mounted on an existing antenna supporting structure, having FCC Antenna Structure Registration (“ASR”) number 1222895. No change to the overall structure height and no tower work are required to carry out this proposal.

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<sup>1</sup>Public Notice “*Commission Lifts the Freeze On the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*” DA 08-1213, released May 30, 2008.

A map is supplied as **Figure 1**, which depicts the standard predicted coverage contours. This map includes the location of Knoxville, WVLT-DT's principal community. As demonstrated thereon, the proposed facility complies with §73.625(a)(1), as the entire principal community will be encompassed by the 48 dBμ contour.

The proposed WVLT-DT facility's predicted service population provides a 106.7 percent match of the Appendix B facility, as detailed in the table below.

<b>Post-Transition Population Summary</b>		
Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	1,558,752	1,691,367
Not affected by terrain losses	1,363,046	1,457,338
Lost to all interference	10,624	14,838
Net DTV Service	<b>1,352,422</b>	<b>1,442,500</b>
Match of Appendix B	---	<b>106.66%</b>

A detailed interference study per OET Bulletin 69<sup>2</sup> shows that the proposal complies with the 0.5 percent limit of new interference caused to the Appendix B facilities and current post-transition authorizations of pertinent nearby stations. **Pursuant to §73.616(e)(1), FCC processing of this proposal is requested on the basis of a 1 km cell size.** The interference study output report is provided as **Table 1**. Protection requirements towards authorized Class A stations are also satisfied.

The proposed 870 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 551 meters currently permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. The total area within the proposed WVLT-DT 41 dBμ contour is 42,596 square kilometers, which does not exceed the 42,612 square kilometers within the authorized contour area associated with the post-transition WBIR-DT (BPCDT-20080312AEG, Ch. 10, Knoxville, TN). A coverage contour comparison map is provided as **Figure 2**. Thus, the ERP specified herein is in compliance with §73.622(f)(5) of the Commission's Rules.

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<sup>2</sup>FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. **A cell size of 1 km was employed.** Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

The nearest FCC monitoring station is 247 km distant at Powder Springs GA. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with “quiet” zones specified in §73.1030(a) and (b). There are no authorized nondirectional AM stations within 0.8 kilometers and no directional AM stations within 3.2 kilometers of the site, based on information contained within the Commission’s database. The site location is beyond the border areas requiring international coordination.

### **Human Exposure to Radiofrequency Electromagnetic Field (Environmental)**

The proposal will involve use of an existing transmitting antenna. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. No tower construction or change in structure height is proposed. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission’s OET Bulletin Number 65. Based on OET-65 equation (10), and assuming 20 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is  $5.6 \mu\text{W}/\text{cm}^2$ , which is 1.5 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal’s contribution is less than five percent.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC’s guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

## **Certification**

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.

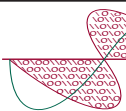
Joseph M. Davis, P.E.  
June 17, 2008

**Chesapeake RF Consultants, LLC**  
11993 Kahns Road  
Manassas, VA 20112  
703-650-9600

## List of Attachments

Figure 1	Proposed Coverage Contours
Figure 2	Largest Station in Market
Table 1	OET Bulletin 69 Interference Study
Form 301	Saved Version of Engineering Sections from FCC Form at Time of Upload

*This material was entered June 17, 2008 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.*

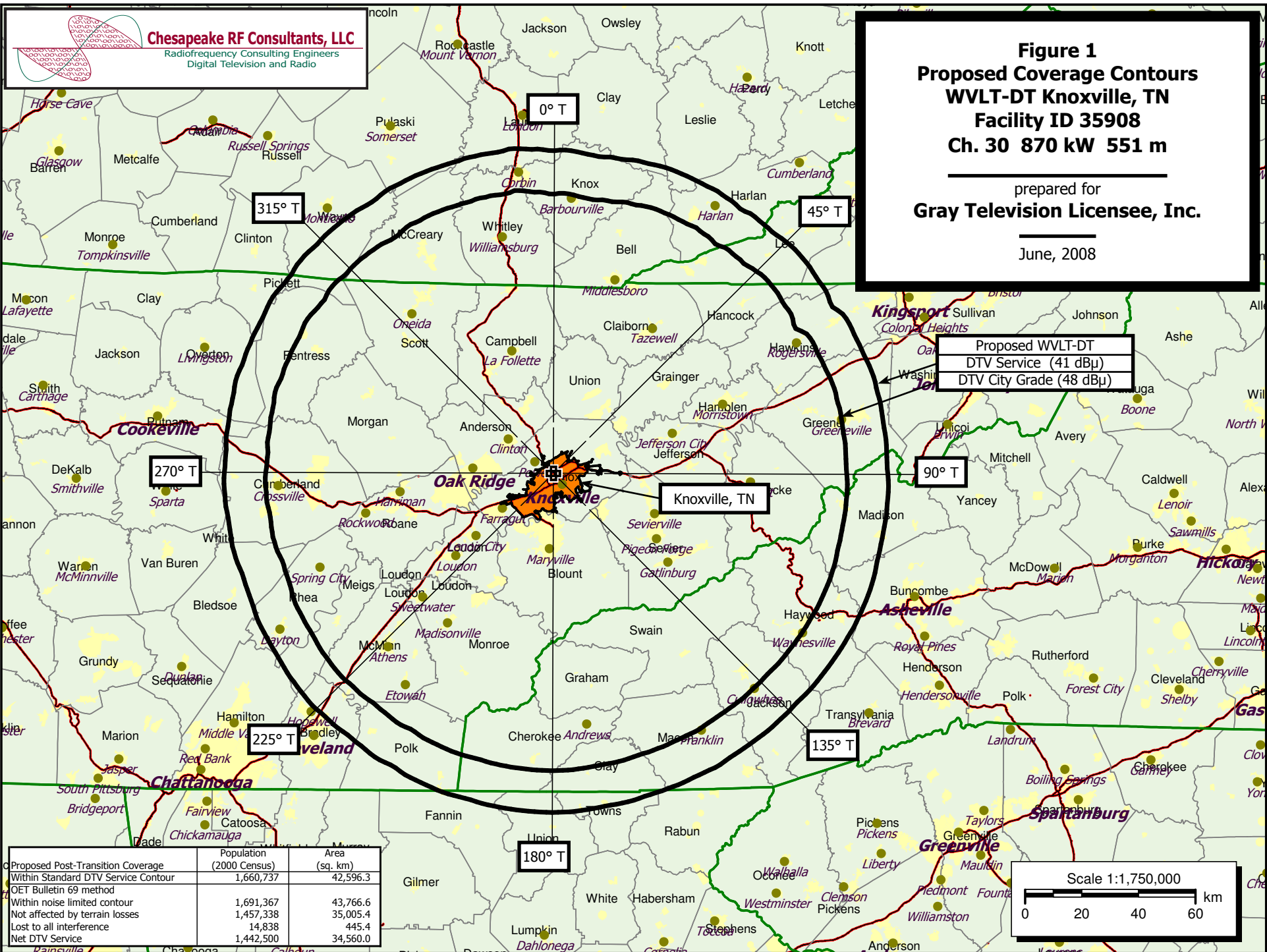


**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

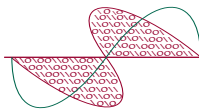
**Figure 1**  
**Proposed Coverage Contours**  
**WVLT-DT Knoxville, TN**  
**Facility ID 35908**  
**Ch. 30 870 kW 551 m**

prepared for  
**Gray Television Licensee, Inc.**  
June, 2008

Proposed WVLT-DT  
DTV Service (41 dBμ)  
DTV City Grade (48 dBμ)







**Chesapeake RF Consultants, LLC**  
Radiofrequency Consulting Engineers  
Digital Television and Radio

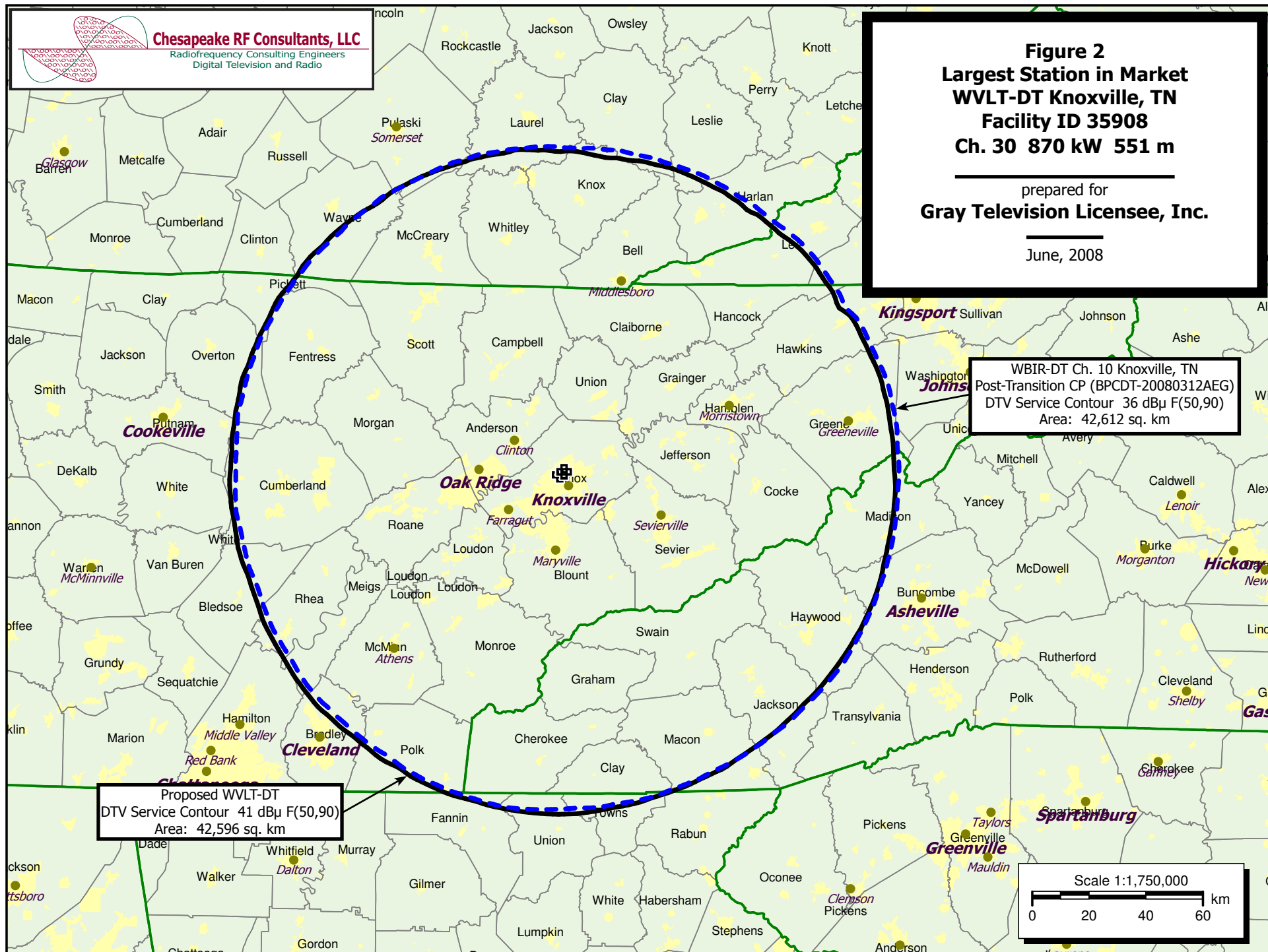
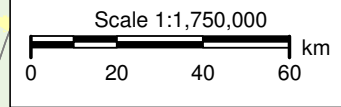
**Figure 2**  
**Largest Station in Market**  
**WVLT-DT Knoxville, TN**  
**Facility ID 35908**  
**Ch. 30 870 kW 551 m**

prepared for  
**Gray Television Licensee, Inc.**

June, 2008

WBIR-DT Ch. 10 Knoxville, TN  
Post-Transition CP (BPCDT-20080312AEG)  
DTV Service Contour 36 dBμ F(50,90)  
Area: 42,612 sq. km

Proposed WVLT-DT  
DTV Service Contour 41 dBμ F(50,90)  
Area: 42,596 sq. km



**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 1 of 14)

**Cell Size = 1 km**

TW Census data selected 2000  
Post Transition Data Base Selected /space/software/cdbs/pt\_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-17-2008 Time: 09:12:33

Record Selected for Analysis

WVLT-DT USERRECORD-01 KNOXVILLE TN US  
Channel 30 ERP 870. kW HAAT 552. m RCAMSL 00858 m  
Latitude 035-59-44 Longitude 0083-57-23  
Status APP Zone 2 Border  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility does not meet maximum height/power limits  
Channel 30 ERP = 870.00 HAAT = 552.

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	870.000	504.8	113.5
45.0	870.000	534.0	115.5
90.0	870.000	569.5	117.6
135.0	870.000	569.9	117.6
180.0	870.000	596.1	119.0
225.0	870.000	567.0	117.4
270.0	870.000	538.4	115.7
315.0	870.000	539.2	115.8

Evaluation toward Class A Stations

Station inside contour of Class A station  
WEZK-LP 28 KNOXVILLE TN BLTTL 20001011ACO

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 2 of 14)

**Cell Size = 1 km**

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Start of Interference Analysis

Channel	Call	City/State	ARN
30	WVLT-DT	KNOXVILLE TN	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
22	WJZC-LP	SEVIERVILLE TN	38.5	LIC	BLTTL	-19901017JE
27	WTNB-CA	CLEVELAND TN	121.8	LIC	BLTT	-19971027JD
28	WEZK-LP	KNOXVILLE TN	2.7	LIC	BLTTL	-20001011ACO
29	WTCI	CHATTANOOGA TN	148.4	LIC	BLEDT	-20060629ACO
29	WTCI	CHATTANOOGA TN	148.4	PLN	DTVPLN	-DTVP1093
30	WIAT	BIRMINGHAM AL	381.7	LIC	BLCDT	-20021219AAV
30	WIAT	BIRMINGHAM AL	381.7	PLN	DTVPLN	-DTVP1098
30	WAGT	AUGUSTA GA	347.1	LIC	BLCDT	-20030530AON
30	WAGT	AUGUSTA GA	347.1	PLN	DTVPLN	-DTVP1106
30	WKOH	OWENSBORO KY	363.8	LIC	BLEDT	-20020304ALJ
30	WKOH	OWENSBORO KY	363.8	PLN	DTVPLN	-DTVP1108
30	WRGT-TV	DAYTON OH	415.3	CP	BPCDT	-19991101ADJ
30	WRGT-TV	DAYTON OH	415.3	PLN	DTVPLN	-DTVP1117
30	WSLS-TV	ROANOKE VA	365.2	CP MOD	BMPCDT	-20050329ACK
30	WSLS-TV	ROANOKE VA	365.2	PLN	DTVPLN	-DTVP1126

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Analysis of Interference to Affected Station 1

Analysis of current record  
Channel Call City/State Application Ref. No.  
22 WJZC-LP SEVIERVILLE TN BLTTL -19901017JE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
15	WKOP-TV	KNOXVILLE TN	37.5	LIC	BLET	-19900829KE
20	WBXX-TV	CROSSVILLE TN	75.1	PLN	DTVPLN	-DTVP0740
21	WHNS	GREENVILLE SC	110.5	LIC	BMLCT	-20030912AAE
21	WHNS	GREENVILLE SC	110.5	PLN	DTVPLN	-DTVP0782
21	WHNS	GREENVILLE SC	110.5	CP	BPCDT	-20080225ABE
22	WSKC-CA	ATLANTA GA	217.7	LIC	BLTTA	-20051013AAE
22	WKPI-TV	PIKEVILLE KY	181.1	LIC	BMLET	-19830426KN
22	WCNC-TV	CHARLOTTE NC	223.2	LIC	BLCDT	-20031211ABN
22	WCNC-TV	CHARLOTTE NC	223.2	PLN	DTVPLN	-DTVP0813
22	WCTE	COOKEVILLE TN	164.3	CP	BPEDT	-20080317ADB
22	WCTE	COOKEVILLE TN	164.3	PLN	DTVPLN	-DTVP0824
22	WCTE	COOKEVILLE TN	164.3	LIC	BLET	-19880802KE
22	WCTD-LP	DUCKETOWN TN	124.1	LIC	BLTTL	-20070622ADD
23	WPXK	JELLLICO TN	70.5	LIC	BLCDT	-20020510AAJ
23	WPXK	JELLLICO TN	70.5	PLN	DTVPLN	-DTVP0861
24	WNEG-TV	TOCCOA GA	141.9	CP MOD	BMPCDT	-20080410ABJ
24	WNEG-TV	TOCCOA GA	141.9	PLN	DTVPLN	-DTVP0880
25	WUNF-TV	ASHEVILLE NC	87.9	LIC	BLEDT	-20030401BAI
25	WUNF-TV	ASHEVILLE NC	87.9	PLN	DTVPLN	-DTVP0929
26	WATE-TV	KNOXVILLE TN	37.7	LIC	BMLCDT	-20041203AEG
26	WATE-TV	KNOXVILLE TN	37.7	PLN	DTVPLN	-DTVP0977

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 3 of 14)

**Cell Size = 1 km**

30	WVLT-TV	KNOXVILLE TN	38.5	LIC	BLCDT	-20040420AAF
30	WVLT-TV	KNOXVILLE TN	38.5	PLN	DTVPLN	-DTVPI121
36	WYFF	GREENVILLE SC	120.9	CP	BPCDT	-20080317ABT
36	WYFF	GREENVILLE SC	120.9	PLN	DTVPLN	-DTVPI347
30	WVLT-DT	KNOXVILLE TN	38.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application Ref. No.
27	WTNB-CA	CLEVELAND TN	BLTT -19971027JD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
20	WBXX-TV	CROSSVILLE TN	112.4	LIC	BLCT -19971028KE
20	WBXX-TV	CROSSVILLE TN	112.4	PLN	DTVPLN -DTVPO740
23	WPXX	JELICO TN	125.5	LIC	BLCDT -20020510AAJ
23	WPXX	JELICO TN	125.5	PLN	DTVPLN -DTVPO861
26	W26BE	CHATTANOOGA TN	31.7	LIC	BLTTL -19950313IR
26	WATE-TV	KNOXVILLE TN	123.3	LIC	BMLCDT -20041203AEG
26	WATE-TV	KNOXVILLE TN	123.3	PLN	DTVPLN -DTVPO977
27	WAIQ	MONTGOMERY AL	339.3	LIC	BLEDT -20060706ACK
27	WAIQ	MONTGOMERY AL	339.3	PLN	DTVPLN -DTVPO986
27	WAGA	ATLANTA GA	163.9	LIC	BLCDT -20060728AEL
27	WAGA	ATLANTA GA	163.9	PLN	DTVPLN -DTVPO995
27	WKYT-TV	LEXINGTON KY	318.4	LIC	BLCT -19890526KE
27	WUNW	CANTON NC	183.7	CP	BPET -19960919KW
27	WUNW	CANTON NC	183.7	APP	BPEDT -20080402AAN
27	WCCB	CHARLOTTE NC	376.7	LIC	BLCDT -20020227AAZ
27	WCCB	CHARLOTTE NC	376.7	PLN	DTVPLN -DTVPI004
27	WKPT-TV	KINGSPORT TN	282.8	CP MOD	BMPCDT -20050303AAJ
27	WKPT-TV	KINGSPORT TN	282.7	PLN	DTVPLN -DTVPI017
27	WKRN-TV	NASHVILLE TN	199.4	LIC	BLCDT -20020528AAC
27	WKRN-TV	NASHVILLE TN	199.4	PLN	DTVPLN -DTVPI018
29	WTCI	CHATTANOOGA TN	36.1	LIC	BLEDT -20060629ACO
29	WTCI	CHATTANOOGA TN	36.1	PLN	DTVPLN -DTVPI093
30	WVLT-TV	KNOXVILLE TN	121.8	LIC	BLCDT -20040420AAF
30	WVLT-TV	KNOXVILLE TN	121.8	PLN	DTVPLN -DTVPI121
34	WTNZ	KNOXVILLE TN	123.3	LIC	BMLCDT -20040706ABG
34	WTNZ	KNOXVILLE TN	123.3	PLN	DTVPLN -DTVPI273
41	WATC	ATLANTA GA	132.1	LIC	BLEDT -20070912AAT
41	WATC	ATLANTA GA	132.1	PLN	DTVPLN -DTVPI466
42	WFLI-TV	CLEVELAND TN	35.8	LIC	BLCDT -20050808AGH
42	WFLI-TV	CLEVELAND TN	35.8	PLN	DTVPLN -DTVPI516
30	WVLT-DT	KNOXVILLE TN	121.8	APP	USERRECORD-01

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 3

Analysis of current record

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 4 of 14)

**Cell Size = 1 km**

Channel	Call	City/State	Application Ref. No.
28	WEZK-LP	KNOXVILLE TN	BLTTL -20001011ACO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
20	WBXX-TV	CROSSVILLE TN	38.1	PLN	DTVPLN -DTVPO740
21	WHNS	GREENVILLE SC	145.7	LIC	BMLCT -20030912AAE
21	WHNS	GREENVILLE SC	145.7	PLN	DTVPLN -DTVPO782
21	WHNS	GREENVILLE SC	145.7	CP	BPCDT -20080225ABE
25	WUNF-TV	ASHEVILLE NC	124.4	LIC	BLEDT -20030401BAI
25	WUNF-TV	ASHEVILLE NC	124.4	PLN	DTVPLN -DTVPO929
26	WATE-TV	KNOXVILLE TN	1.2	LIC	BMLCDT -20041203AEG
26	WATE-TV	KNOXVILLE TN	1.2	PLN	DTVPLN -DTVPO977
27	WUNW	CANTON NC	104.7	CP	BPET -19960919KW
27	WUNW	CANTON NC	104.7	APP	BPEDT -20080402AAN
28	WTTO	HOMEWOOD AL	384.3	CP MOD	BMPCDT -20041104AMB
28	WTTO	HOMEWOOD AL	384.3	PLN	DTVPLN -DTVPI027
28	WDWW-LP	CLEVELAND GA	167.2	LIC	BLTTL -20070215AAL
28	WJSP-TV	COLUMBUS GA	358.0	APP	BSTA -20051121AMG
28	WJSP-TV	COLUMBUS GA	358.0	APP	BSTA -20050811AAJ
28	WJSP-TV	COLUMBUS GA	358.0	LIC	BLET -19901022KE
28	NEW	DALTON GA	164.5	APP	BNPTTL -20000831CHX
28	WRNG-LP	RINGGOLD GA	176.1	CP	BP TTL -20070828ACI
28	WTWV	EVANSVILLE IN	377.8	CP	BPCDT -19991101ACY
28	WTWV	EVANSVILLE IN	377.8	PLN	DTVPLN -DTVPI038
28	W28AN	FRANKLIN NC	98.3	LIC	BLTT -19900925IE
28	WPTO	OXFORD OH	350.1	LIC	BLEDT -20040714AAQ
28	WPTO	OXFORD OH	350.1	PLN	DTVPLN -DTVPI052
28	WNPX	COOKEVILLE TN	178.2	LIC	BLCT -19980626KE
28	WJDP-LP	GATLINBURG TN	32.4	LIC	BLTTL -20070122AAC
30	WVLT-TV	KNOXVILLE TN	2.7	LIC	BLCDT -20040420AAF
30	WVLT-TV	KNOXVILLE TN	2.7	PLN	DTVPLN -DTVPI121
43	WTNZ	KNOXVILLE TN	1.2	LIC	BMLCT -20040706ABH
30	WVLT-DT	KNOXVILLE TN	2.7	APP	USERRECORD-01

Total scenarios = 2

Result key: 1  
Scenario 1 Affected station 3  
Before Analysis

Results for: 28N TN KNOXVILLE	BLTTL	20001011ACO	LIC
POPULATION	273338	928.4	
within Noise Limited Contour	268294	884.9	
not affected by terrain losses	232345	787.1	
lost to NTSC IX	1010	3.0	
lost to additional IX by ATV	233355	790.1	
lost to all IX			

Potential Interfering Stations Included in above Scenario 1

28N GA RINGGOLD	BP TTL	20070828ACI	CP
28N TN GATLINBURG	BLTTL	20070122AAC	LIC
43N TN KNOXVILLE	BMLCT	20040706ABH	LIC
26A TN KNOXVILLE	BMLCDT	20041203AEG	LIC
30A TN KNOXVILLE	DTVPLN	DTVPI121	PLN

After Analysis

Results for: 28N TN KNOXVILLE BLTTL 20001011ACO LIC



**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 5 of 14)

**Cell Size = 1 km**

	POPULATION	AREA (sq km)
within Noise Limited Contour	273338	928.4
not affected by terrain losses	268294	884.9
lost to NTSC IX	232345	787.1
lost to additional IX by ATV	1010	3.0
lost to all IX	233355	790.1

Potential Interfering Stations Included in above Scenario 1

28N GA RINGGOLD	BPTTL	20070828ACI	CP
28N TN GATLINBURG	BLTTL	20070122AAC	LIC
43N TN KNOXVILLE	BMLCT	20040706ABH	LIC
26A TN KNOXVILLE	BMLCDT	20041203AEG	LIC
30A TN KNOXVILLE	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
29	WTCI	CHATTANOOGA TN	BLEDT	-20060629ACO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WBIH	SELMA AL	329.5	PLN	DTVPLN	-DTVP1064
29	WBIH	SELMA AL	329.6	CP	BPCDT	-20080226ABK
29	WKNO	MEMPHIS TN	412.6	CP MOD	BMPEDT	-20021112ACA
29	WKNO	MEMPHIS TN	412.6	PLN	DTVPLN	-DTVP1094
29	WKNO	MEMPHIS TN	412.6	LIC	BLEDT	-20060627ABE
30	WVLT-TV	KNOXVILLE TN	148.4	PLN	DTVPLN	-DTVP1121
30	WVLT-DT	KNOXVILLE TN	148.4	APP	USERRECORD-01	

Total scenarios = 2

Result key: 3  
Scenario 1 Affected station 4  
Before Analysis

Results for: 29A TN CHATTANOOGA	BLEDT	20060629ACO	LIC
HAAT 336.0 m, ATV ERP 200.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1085134	24165.3	
not affected by terrain losses	984968	20408.7	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	8616	283.5	
lost to ATV IX only	8616	283.5	
lost to all IX	8616	283.5	

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA	DTVPLN	DTVP1064	PLN
30A TN KNOXVILLE	DTVPLN	DTVP1121	PLN

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 6 of 14)

**Cell Size = 1 km**

After Analysis

Results for: 29A TN CHATTANOOGA	BLEDT	20060629ACO	LIC
HAAT 336.0 m, ATV ERP 200.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1085134	24165.3	
not affected by terrain losses	984968	20408.7	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	12003	348.4	
lost to ATV IX only	12003	348.4	
lost to all IX	12003	348.4	

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA	DTVPLN	DTVP1064	PLN
30A TN KNOXVILLE	USERRECORD01		APP

Percent new IX = 0.3469%

Worst case new IX 0.3469% Scenario 1

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
29	WTCI	CHATTANOOGA TN	DTVPLN	-DTVP1093

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WBIH	SELMA AL	329.5	PLN	DTVPLN	-DTVP1064
29	WBIH	SELMA AL	329.6	CP	BPCDT	-20080226ABK
29	WKNO	MEMPHIS TN	412.6	CP MOD	BMPEDT	-20021112ACA
29	WKNO	MEMPHIS TN	412.6	PLN	DTVPLN	-DTVP1094
29	WKNO	MEMPHIS TN	412.6	LIC	BLEDT	-20060627ABE
30	WVLT-TV	KNOXVILLE TN	148.4	PLN	DTVPLN	-DTVP1121
30	WVLT-DT	KNOXVILLE TN	148.4	APP	USERRECORD-01	

Total scenarios = 2

Result key: 5  
Scenario 1 Affected station 5  
Before Analysis

Results for: 29A TN CHATTANOOGA	DTVPLN	DTVP1093	PLN
HAAT 336.0 m, ATV ERP 200.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1085134	24165.3	
not affected by terrain losses	984968	20408.7	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	8616	283.5	
lost to ATV IX only	8616	283.5	
lost to all IX	8616	283.5	

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA	DTVPLN	DTVP1064	PLN
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**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 7 of 14)

**Cell Size = 1 km**

30A TN KNOXVILLE DTVPLN DTVP1121 PLN

After Analysis

Results for: 29A TN CHATTANOOGA DTVPLN DTVP1093 PLN  
HAAT 336.0 m, ATV ERP 200.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1085134	24165.3
not affected by terrain losses	984968	20408.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12003	348.4
lost to ATV IX only	12003	348.4
lost to all IX	12003	348.4

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA DTVPLN DTVP1064 PLN  
30A TN KNOXVILLE USERRECORD01 APP

Percent new IX = 0.3469%

Worst case new IX 0.3469% Scenario 1

#####

Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
30	WIAT	BIRMINGHAM AL	BLCDDT	-20021219AAV

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WBIH	SELMA AL	104.9	PLN	DTVPLN	-DTVLP1064
29	WBIH	SELMA AL	105.0	CP	BPCDDT	-20080226ABK
30	WVLT-TV	KNOXVILLE TN	381.7	PLN	DTVPLN	-DTVLP1121
31	WGBC	MERIDIAN MS	217.9	CP MOD	BMPCDDT	-20070522AAR
31	WGBC	MERIDIAN MS	217.9	PLN	DTVPLN	-DTVLP1151
30	WVLT-DT	KNOXVILLE TN	381.7	APP	USERRECORD-01	

Total scenarios = 2

Result key: 7

Scenario 1 Affected station 6

Before Analysis

Results for: 30A AL BIRMINGHAM BLCDDT 20021219AAV LIC  
HAAT 426.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1723879	32971.7
not affected by terrain losses	1689155	31735.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	8488	804.4
lost to ATV IX only	8488	804.4
lost to all IX	8488	804.4

Potential Interfering Stations Included in above Scenario 1

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 8 of 14)

**Cell Size = 1 km**

29A AL SELMA DTVPLN DTVP1064 PLN  
30A TN KNOXVILLE DTVPLN DTVP1121 PLN

After Analysis

Results for: 30A AL BIRMINGHAM BLCDDT 20021219AAV LIC  
HAAT 426.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1723879	32971.7
not affected by terrain losses	1689155	31735.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9619	829.2
lost to ATV IX only	9619	829.2
lost to all IX	9619	829.2

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA DTVPLN DTVP1064 PLN  
30A TN KNOXVILLE USERRECORD01 APP

Percent new IX = 0.0673%

Worst case new IX 0.0673% Scenario 1

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
30	WIAT	BIRMINGHAM AL	DTVPLN	-DTVLP1098

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WBIH	SELMA AL	104.9	PLN	DTVPLN	-DTVLP1064
29	WBIH	SELMA AL	105.0	CP	BPCDDT	-20080226ABK
30	WVLT-TV	KNOXVILLE TN	381.7	PLN	DTVPLN	-DTVLP1121
31	WGBC	MERIDIAN MS	217.9	CP MOD	BMPCDDT	-20070522AAR
31	WGBC	MERIDIAN MS	217.9	PLN	DTVPLN	-DTVLP1151
30	WVLT-DT	KNOXVILLE TN	381.7	APP	USERRECORD-01	

Total scenarios = 2

Result key: 9

Scenario 1 Affected station 7

Before Analysis

Results for: 30A AL BIRMINGHAM DTVPLN DTVP1098 PLN  
HAAT 426.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1723879	32971.7
not affected by terrain losses	1689155	31735.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	8488	804.4
lost to ATV IX only	8488	804.4
lost to all IX	8488	804.4

Potential Interfering Stations Included in above Scenario 1

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 9 of 14)

**Cell Size = 1 km**

29A AL SELMA DTVPLN DTVP1064 PLN  
30A TN KNOXVILLE DTVPLN DTVP1121 PLN

After Analysis

Results for: 30A AL BIRMINGHAM DTVPLN DTVP1098 PLN  
HAAT 426.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1723879	32971.7
not affected by terrain losses	1689155	31735.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9619	829.2
lost to ATV IX only	9619	829.2
lost to all IX	9619	829.2

Potential Interfering Stations Included in above Scenario 1

29A AL SELMA DTVPLN DTVP1064 PLN  
30A TN KNOXVILLE USERRECORD01 APP

Percent new IX = 0.0673%

Worst case new IX 0.0673% Scenario 1

#####

Analysis of Interference to Affected Station 8

Analysis of current record  
Channel Call City/State Application Ref. No.  
30 WAGT AUGUSTA GA BLCDDT -20030530AON

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	WSFX-TV	WILMINGTON NC	346.3	LIC	BLCDDT -20070213AAS
30	WSFX-TV	WILMINGTON NC	346.3	PLN	DTVPLN -DTVP1112
30	WVLT-TV	KNOXVILLE TN	347.1	PLN	DTVPLN -DTVP1121
30	WVLT-DT	KNOXVILLE TN	347.1	APP	USERRECORD-01

Proposal causes no interference

#####

Analysis of Interference to Affected Station 9

Analysis of current record  
Channel Call City/State Application Ref. No.  
30 WAGT AUGUSTA GA DTVPLN -DTVP1106

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	WSFX-TV	WILMINGTON NC	346.3	LIC	BLCDDT -20070213AAS
30	WSFX-TV	WILMINGTON NC	346.3	PLN	DTVPLN -DTVP1112
30	WVLT-TV	KNOXVILLE TN	347.1	PLN	DTVPLN -DTVP1121
30	WVLT-DT	KNOXVILLE TN	347.1	APP	USERRECORD-01

Proposal causes no interference

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 10 of 14)

**Cell Size = 1 km**

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Analysis of Interference to Affected Station 10

Analysis of current record  
Channel Call City/State Application Ref. No.  
30 WKOH OWENSBORO KY BLEDDT -20020304ALJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	WMBD-TV	PEORIA IL	363.1	CP MOD	BMPCDDT -20060314ABP
30	WMBD-TV	PEORIA IL	363.1	PLN	DTVPLN -DTVP1107
30	WRGT-TV	DAYTON OH	338.0	CP	BPCDDT -19991101ADJ
30	WRGT-TV	DAYTON OH	338.0	PLN	DTVPLN -DTVP1117
30	WVLT-TV	KNOXVILLE TN	363.8	PLN	DTVPLN -DTVP1121
30	WVLT-DT	KNOXVILLE TN	363.8	APP	USERRECORD-01

Proposal causes no interference

#####

Analysis of Interference to Affected Station 11

Analysis of current record  
Channel Call City/State Application Ref. No.  
30 WKOH OWENSBORO KY DTVPLN -DTVP1108

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
30	WMBD-TV	PEORIA IL	363.1	CP MOD	BMPCDDT -20060314ABP
30	WMBD-TV	PEORIA IL	363.1	PLN	DTVPLN -DTVP1107
30	WRGT-TV	DAYTON OH	338.0	CP	BPCDDT -19991101ADJ
30	WRGT-TV	DAYTON OH	338.0	PLN	DTVPLN -DTVP1117
30	WVLT-TV	KNOXVILLE TN	363.8	PLN	DTVPLN -DTVP1121
30	WVLT-DT	KNOXVILLE TN	363.8	APP	USERRECORD-01

Proposal causes no interference

#####

Analysis of Interference to Affected Station 12

Analysis of current record  
Channel Call City/State Application Ref. No.  
30 WRGT-TV DAYTON OH BPCDDT -19991101ADJ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
29	WTTK	KOKOMO IN	167.2	CP	BPCDDT -20080430ACQ
29	WTTK	KOKOMO IN	167.2	PLN	DTVPLN -DTVP1070
29	WXIX-TV	NEWPORT KY	71.5	LIC	BLCDDT -20000908ABI
29	WXIX-TV	NEWPORT KY	71.5	PLN	DTVPLN -DTVP1071
29	WGTE-TV	TOLEDO OH	225.7	LIC	BLEDDT -20031110AKO
29	WGTE-TV	TOLEDO OH	225.8	PLN	DTVPLN -DTVP1086

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 11 of 14)

**Cell Size = 1 km**

30	WKOH	OWENSBORO KY	338.0	LIC	BLED	-20020304ALJ
30	WKOH	OWENSBORO KY	338.0	PLN	DTVPLN	-DTVPl108
30	WEYI-TV	SAGINAW MI	390.7	LIC	BLC	-20040123ASH
30	WEYI-TV	SAGINAW MI	390.7	PLN	DTVPLN	-DTVPl111
30	WBNX-TV	AKRON OH	284.1	LIC	BLC	-20070430AXX
30	WBNX-TV	AKRON OH	284.1	PLN	DTVPLN	-DTVPl116
30	WVLT-TV	KNOXVILLE TN	415.3	PLN	DTVPLN	-DTVPl121
31	WANE-TV	FORT WAYNE IN	171.2	CP MOD	BMP	-20080313AAW
31	WANE-TV	FORT WAYNE IN	171.2	PLN	DTVPLN	-DTVPl143
31	WANE-TV	FORT WAYNE IN	171.2	CP MOD	BMP	-20021002ACJ
30	WVLT-DT	KNOXVILLE TN	415.3	APP	USERRECORD	-01

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 13

Analysis of current record

Channel	Call	City/State	Application Ref. No.
30	WRGT-TV	DAYTON OH	DTVPLN -DTVPl117

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WTTK	KOKOMO IN	167.2	CP	BPCDT	-20080430ACQ
29	WTTK	KOKOMO IN	167.2	PLN	DTVPLN	-DTVPl070
29	WXIX-TV	NEWPORT KY	71.5	LIC	BLCDT	-20000908ABI
29	WXIX-TV	NEWPORT KY	71.5	PLN	DTVPLN	-DTVPl071
29	WGTE-TV	TOLEDO OH	225.7	LIC	BLEDT	-20031110AKO
29	WGTE-TV	TOLEDO OH	225.8	PLN	DTVPLN	-DTVPl086
30	WKOH	OWENSBORO KY	338.0	LIC	BLEDT	-20020304ALJ
30	WKOH	OWENSBORO KY	338.0	PLN	DTVPLN	-DTVPl108
30	WEYI-TV	SAGINAW MI	390.7	LIC	BLCDT	-20040123ASH
30	WEYI-TV	SAGINAW MI	390.7	PLN	DTVPLN	-DTVPl111
30	WBNX-TV	AKRON OH	284.1	LIC	BLCDT	-20070430AXX
30	WBNX-TV	AKRON OH	284.1	PLN	DTVPLN	-DTVPl116
30	WVLT-TV	KNOXVILLE TN	415.3	PLN	DTVPLN	-DTVPl121
31	WANE-TV	FORT WAYNE IN	171.2	CP MOD	BMPCDT	-20080313AAW
31	WANE-TV	FORT WAYNE IN	171.2	PLN	DTVPLN	-DTVPl143
31	WANE-TV	FORT WAYNE IN	171.2	CP MOD	BMPCDT	-20021002ACJ
30	WVLT-DT	KNOXVILLE TN	415.3	APP	USERRECORD-01	

Proposed station is beyond the site to  
nearest cell evaluation distance

#####

Analysis of Interference to Affected Station 14

Analysis of current record

Channel	Call	City/State	Application Ref. No.	
30	WSLS-TV	ROANOKE VA	BMP	-20050329ACK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 12 of 14)

**Cell Size = 1 km**

29	WXLV-TV	WINSTON-SALEM NC	151.0	CP	BPCDT	-19991101ACF
29	WXLV-TV	WINSTON-SALEM NC	151.0	PLN	DTVPLN	-DTVPl078
30	WSFX-TV	WILMINGTON NC	384.3	LIC	BLC	-20070213AAS
30	WSFX-TV	WILMINGTON NC	384.3	PLN	DTVPLN	-DTVPl112
30	WVLT-TV	KNOXVILLE TN	365.2	PLN	DTVPLN	-DTVPl121
30	WTVT	GOLDVEIN VA	285.7	LIC	BLED	-20031230AAR
30	WTVT	GOLDVEIN VA	285.7	PLN	DTVPLN	-DTVPl125
31	WXII-TV	WINSTON-SALEM NC	93.9	LIC	BLC	-20050627AAU
31	WXII-TV	WINSTON-SALEM NC	93.9	PLN	DTVPLN	-DTVPl153
30	WVLT-DT	KNOXVILLE TN	365.2	APP	USERRECORD	-01

Total scenarios = 8

Result key: 11

Scenario 1 Affected station 14  
Before Analysis

Results for: 30A VA ROANOKE BMP 20050329ACK | CP || HAAT 592.0 m, ATV ERP 950.0 kW |  |  |

	POPULATION	AREA (sq km)
within Noise Limited Contour	1375417	39076.5
not affected by terrain losses	1205066	32643.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	43659	1287.8
lost to ATV IX only	43659	1287.8
lost to all IX	43659	1287.8

Potential Interfering Stations Included in above Scenario 1

29A NC WINSTON-SALEM	BPCDT	19991101ACF	CP
30A VA GOLDVEIN	BLED	20031230AAR	LIC
31A NC WINSTON-SALEM	BLC	20050627AAU	LIC
30A TN KNOXVILLE	DTVPLN	DTVPl121	PLN

After Analysis

Results for: 30A VA ROANOKE BMP 20050329ACK | CP || HAAT 592.0 m, ATV ERP 950.0 kW |  |  |

	POPULATION	AREA (sq km)
within Noise Limited Contour	1375417	39076.5
not affected by terrain losses	1205066	32643.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	43696	1301.7
lost to ATV IX only	43696	1301.7
lost to all IX	43696	1301.7

Potential Interfering Stations Included in above Scenario 1

29A NC WINSTON-SALEM	BPCDT	19991101ACF	CP
30A VA GOLDVEIN	BLED	20031230AAR	LIC
31A NC WINSTON-SALEM	BLC	20050627AAU	LIC
30A TN KNOXVILLE	USERRECORD	01	APP

Percent new IX = 0.0032%

Worst case new IX 0.0032% Scenario 1

#####

Analysis of Interference to Affected Station 15

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 13 of 14)

**Cell Size = 1 km**

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
30	WSLS-TV	ROANOKE VA	DTVPLN	-DTVPL126

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WXLV-TV	WINSTON-SALEM NC	151.0	CP	BPCDT	-19991101ACF
29	WXLV-TV	WINSTON-SALEM NC	151.0	PLN	DTVPLN	-DTVPL1078
30	WSFX-TV	WILMINGTON NC	384.3	LIC	BLCDT	-20070213AAS
30	WSFX-TV	WILMINGTON NC	384.3	PLN	DTVPLN	-DTVPL1112
30	WVLT-TV	KNOXVILLE TN	365.2	PLN	DTVPLN	-DTVPL1121
30	WNVTV	GOLDVEIN VA	285.7	LIC	BLEDT	-20031230AAR
30	WNVTV	GOLDVEIN VA	285.7	PLN	DTVPLN	-DTVPL1125
31	WXII-TV	WINSTON-SALEM NC	93.9	LIC	BLCDT	-20050627AAU
31	WXII-TV	WINSTON-SALEM NC	93.9	PLN	DTVPLN	-DTVPL1153
30	WVLT-DT	KNOXVILLE TN	365.2	APP	USERRECORD-01	

Total scenarios = 8

Result key: 19

Scenario 1 Affected station 15  
Before Analysis

Results for: 30A VA ROANOKE DTVPLN DTVPL126 PLN

	POPULATION	AREA (sq km)
HAAT 592.0 m, ATV ERP 950.0 kW		
within Noise Limited Contour	1375417	39076.5
not affected by terrain losses	1205066	32643.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	43659	1287.8
lost to ATV IX only	43659	1287.8
lost to all IX	43659	1287.8

Potential Interfering Stations Included in above Scenario 1

29A NC WINSTON-SALEM	BPCDT	19991101ACF	CP
30A VA GOLDVEIN	BLEDT	20031230AAR	LIC
31A NC WINSTON-SALEM	BLCDT	20050627AAU	LIC
30A TN KNOXVILLE	DTVPLN	DTVPL1121	PLN

After Analysis

Results for: 30A VA ROANOKE DTVPLN DTVPL126 PLN

	POPULATION	AREA (sq km)
HAAT 592.0 m, ATV ERP 950.0 kW		
within Noise Limited Contour	1375417	39076.5
not affected by terrain losses	1205066	32643.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	43696	1301.7
lost to ATV IX only	43696	1301.7
lost to all IX	43696	1301.7

Potential Interfering Stations Included in above Scenario 1

29A NC WINSTON-SALEM	BPCDT	19991101ACF	CP
30A VA GOLDVEIN	BLEDT	20031230AAR	LIC
31A NC WINSTON-SALEM	BLCDT	20050627AAU	LIC
30A TN KNOXVILLE	USERRECORD01		APP

**Table 1 WVLT-DT OET Bulletin 69 Interference Study**  
(worst-case scenarios shown page 14 of 14)

**Cell Size = 1 km**

Percent new IX = 0.0032%

Worst case new IX 0.0032% Scenario 1

#####

Analysis of Interference to Affected Station 16

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
30	WVLT-DT	KNOXVILLE TN		USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
29	WTCI	CHATTANOOGA TN	148.4	LIC	BLEDT	-20060629ACO
29	WTCI	CHATTANOOGA TN	148.4	PLN	DTVPLN	-DTVPL1093
30	WIAT	BIRMINGHAM AL	381.7	LIC	BLCDT	-20021219AAV
30	WIAT	BIRMINGHAM AL	381.7	PLN	DTVPLN	-DTVPL1098
30	WAGT	AUGUSTA GA	347.1	LIC	BLCDT	-20030530AON
30	WAGT	AUGUSTA GA	347.1	PLN	DTVPLN	-DTVPL1106
30	WKOH	OWENSBORO KY	363.8	LIC	BLEDT	-20020304ALJ
30	WKOH	OWENSBORO KY	363.8	PLN	DTVPLN	-DTVPL1108
30	WRGT-TV	DAYTON OH	415.3	CP	BPCDT	-19991101ADJ
30	WRGT-TV	DAYTON OH	415.3	PLN	DTVPLN	-DTVPL1117
30	WSLS-TV	ROANOKE VA	365.2	CP MOD	BMPCDT	-20050329ACK
30	WSLS-TV	ROANOKE VA	365.2	PLN	DTVPLN	-DTVPL1126

Total scenarios = 32

Result key: 58

Scenario 32 Affected station 16  
Before Analysis

Results for: 30A TN KNOXVILLE USERRECORD01 APP

	POPULATION	AREA (sq km)
HAAT 552.0 m, ATV ERP 870.0 kW		
within Noise Limited Contour	1691367	43766.6
not affected by terrain losses	1457338	35005.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14838	445.4
lost to ATV IX only	14838	445.4
lost to all IX	14838	445.4

Potential Interfering Stations Included in above Scenario 32

29A TN CHATTANOOGA	DTVPLN	DTVPL1093	PLN
30A AL BIRMINGHAM	DTVPLN	DTVPL1098	PLN
30A GA AUGUSTA	DTVPLN	DTVPL1106	PLN
30A KY OWENSBORO	DTVPLN	DTVPL1108	PLN
30A VA ROANOKE	DTVPLN	DTVPL1126	PLN

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

<b>SECTION III-D - DTV Engineering</b>	
<b>Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.</b>	
<p><b>Pre-Transition Certification Checklist:</b> 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 permit application to change 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.</p> <p><b>Post-Transition Expedited Processing.</b> 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.</p>	
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.	<input checked="" type="radio"/> Yes <input type="radio"/> 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.	<input type="radio"/> Yes <input type="radio"/> 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.	<input type="radio"/> Yes <input type="radio"/> 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").	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> 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.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
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. Applicant must <b>submit the Exhibit</b> called for in Item 13.	<input checked="" type="radio"/> Yes <input type="radio"/> No
3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.	<input checked="" type="radio"/> Yes <input type="radio"/> 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.	<input checked="" type="radio"/> Yes <input type="radio"/> No
5. The antenna structure to be used by this facility has been registered by the Commission and will not require registration 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.	<input checked="" type="radio"/> Yes <input type="radio"/> No

<b>SECTION III-D - DTV Engineering</b>	
<b>TECHNICAL SPECIFICATIONS</b>	
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.	
<b>TECH BOX</b>	
1.	Channel Number: DTV 30 Analog TV, if any 8
2.	Zone: <input type="radio"/> I <input checked="" type="radio"/> II <input type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 35 Minutes 59 Seconds 44 <input checked="" type="radio"/> North <input type="radio"/> South  Longitude: Degrees 83 Minutes 57 Seconds 23 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1222895 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 400.8 meters
6.	Overall Tower Height Above Ground Level: 467.6 meters
7.	Height of Radiation Center Above Ground Level: 456.9 meters
8.	Height of Radiation Center Above Average Terrain : 551.3 meters
9.	Maximum Effective Radiated Power (average power): 870 kW
10.	Antenna Specifications:



a. Manufacturer AND Model ABBP16H3-HTO5-17/30H	
b. Electrical Beam Tilt: 0.75 degrees <input type="checkbox"/> Not Applicable	
c. Mechanical Beam Tilt: degrees toward azimuth degrees True <input checked="" type="checkbox"/> Not Applicable	
Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).	[Exhibit 42]
d. Polarization: <input checked="" type="radio"/> Horizontal <input type="radio"/> Circular <input type="radio"/> Elliptical	
e. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> Not applicable (Nondirectional)	
[For a composite directional (not off-the-shelf) antenna, press the following button to fill in the relative field values subform.] [Relative Field Values]	
If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. <b>Exhibit required.</b>	
	[Exhibit 43]
11. Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if <b>Certification Checklist</b> 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?	<input checked="" type="radio"/> Yes <input type="radio"/> No
If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.	[Exhibit 44]
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 <b>Certification Checklist</b> item 3 is answered "No.")	[Exhibit 45]
13. <b>Environmental Protection Act. Submit in an Exhibit</b> the following: If <b>Certification Checklist</b> 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 <b>Certification Checklist</b> 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 <b>Certification Checklist</b> Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R Section 1.1311.	[Exhibit 46]
<b>PREPARERS CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.</b>	

### 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 JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 6/17/2008	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	

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).