

ENGINEERING EXHIBIT

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

prepared for

Miami Television Station WBFS Inc.

WBFS-DT Miami, FL

Facility ID 12497

Ch. 32 1000 kW 308 m

Miami Television Station WBFS Inc. (“WBFS”) is the licensee of television station WBFS-TV, analog Channel 33 and digital Channel 32, Miami, FL. The licensed digital facility employs an effective radiated power (“ERP”) of 1000 kW at 263 meters antenna height above average terrain (“HAAT”), with a directional antenna. WBFS-DT will remain on its current Channel 32 for the post-transition period, as established in Appendix B of the Seventh Report and Order in MB Docket 87-278. *WBFS* herein seeks a Construction Permit to relocate and expand the post-transition WBFS-DT Channel 32 digital facility to 1000 kW ERP and 308 meters antenna HAAT. 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.¹

The proposed WBFS-DT facility will employ an existing shared tower structure currently utilized by other full-power television stations, located 1.3 km from the current site. The proposed WBFS-DT Channel 32 antenna system, a Dielectric model TFU-30DSC-R 3BP260DC (horizontally polarized), will be installed in place of an existing analog antenna on the shared tower. The directional antenna’s azimuthal pattern is depicted in **Figure 1**. **Figures 2** and **2A** provide the theoretical vertical plane (elevation) pattern².

¹Public 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.

² These patterns are supplied in terms of relative field. In recent years, FCC Staff have not required pattern data in dBk format however such patterns are available upon request.

The antenna will be installed on the shared tower structure (FCC Antenna Structure Registration number 1026553), as part of the replacement of certain top-mounted analog antennas. No change to the overall structure height will result from this proposal.

A map is supplied as **Figure 3**, which depicts the standard predicted coverage contours. This map includes the boundaries of Miami, WBFS-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 WBFS-DT facility's predicted service population provides a 102.6 percent match of the Appendix B facility, as detailed in the following table.

Post-Transition Population Summary		
Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	4,771,322	4,895,376
Not affected by terrain losses	4,771,322	4,895,376
Lost to all interference	0	0
Net DTV Service	4,771,322	4,895,376
Match of Appendix B	---	102.60%

A detailed interference study per OET Bulletin 69³ 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. The interference study output report is provided as **Table 1**. Protection requirements towards authorized Class A stations are also satisfied.

The nearest FCC monitoring station is 186 km distant at Vero Beach, FL. 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 AM stations within

³FCC 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 standard cell size of 2 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.

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 proposed transmitting antenna will be installed on an existing antenna support structure in place of the existing analog transmitting antenna arrangement. 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.

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 considering 10 percent antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 15 to 90 degrees below the antenna), the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $3.6 \mu\text{W}/\text{cm}^2$, which is 0.9 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.

The environmental subjects listed under §1.1307(a) are not considered herein. Section 1.1307(a) matters are covered by the structure owner as certified in the associated FCC Antenna Structure Registration number 1026553.

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 20, 2008

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

List of Attachments

Figure 1	Antenna Horizontal Plane Pattern
Figure 2, 2A	Antenna Vertical Plane (Elevation) Pattern
Figure 3	Proposed Coverage Contours
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 20, 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.



Proposal Number

Revision

Date

04 Sep 2001

Call Letters

WBFS-DT

Channel

32

Location

Miami, FL

Customer

Antenna Type

TFU-30DSC-R 3BP260 DC

Figure 1
Antenna Horizontal
Plane Pattern

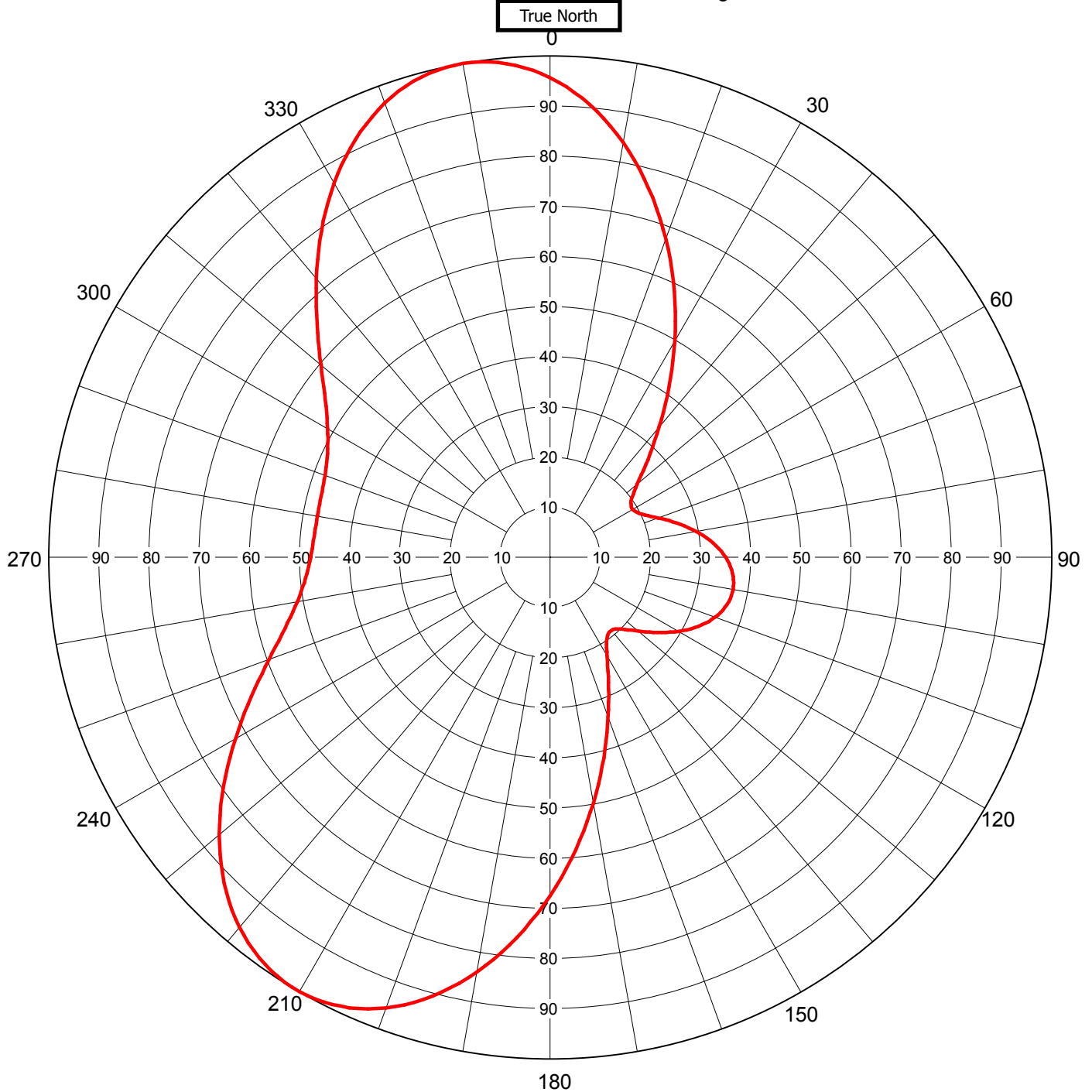
AZIMUTH PATTERN

RMS Gain at Main Lobe
Calculated / Measured

2.60 (4.15 dB)
Calculated

Frequency
Drawing #

581 MHz
TFU-3BP260-33-32



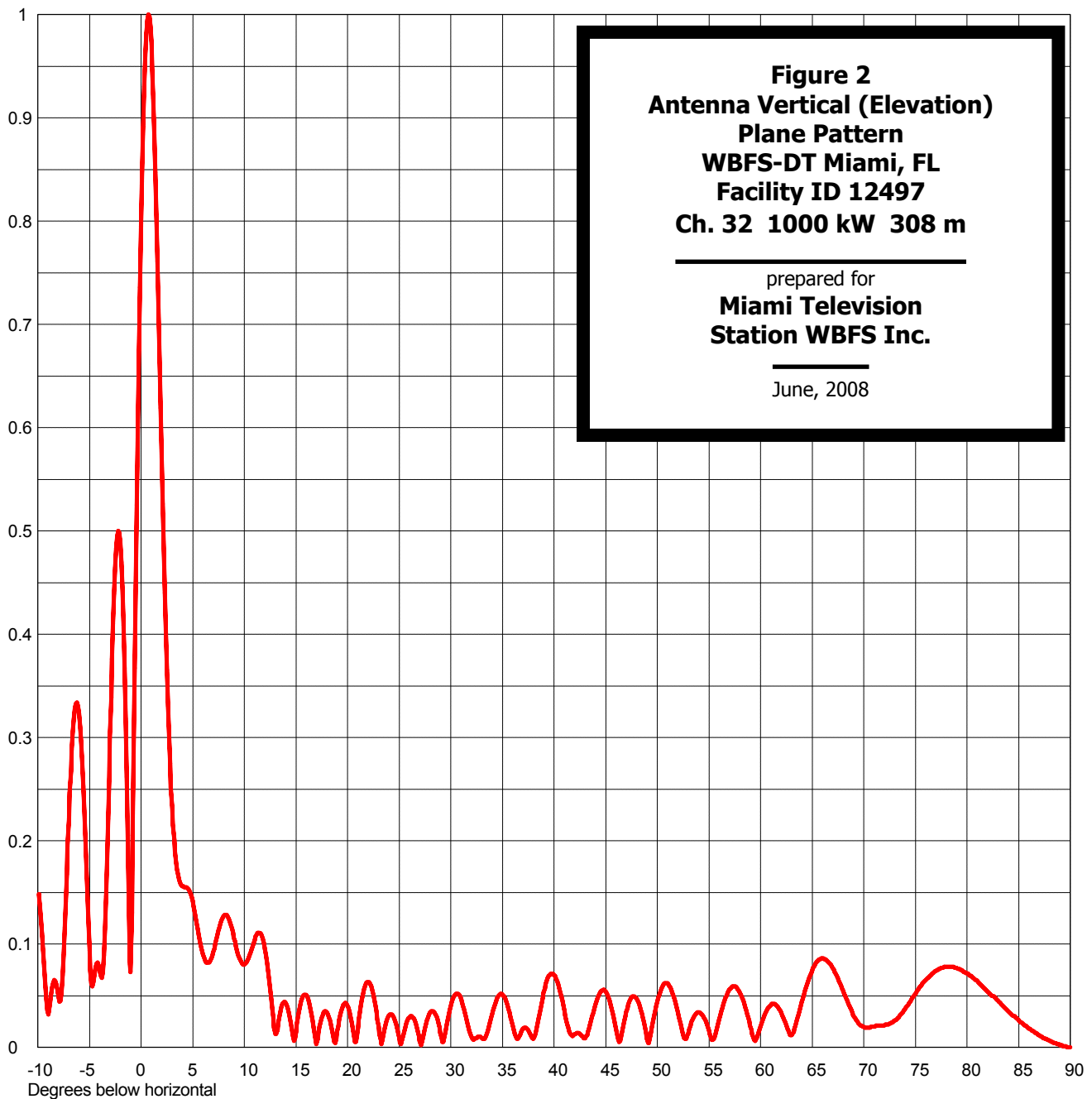
Remarks:



Proposal Number		Revision	
Date	04 Sep 2001		
Call Letters	WBFS-DT	Channel	32
Location	Miami, FL		
Customer			
Antenna Type	TFU-30DSC-R 3BP260 DC		

ELEVATION PATTERN

RMS Gain at Main Lobe	22.0 (13.42 dB)	Beam Tilt	0.70 Degrees
RMS Gain at Horizontal	13.9 (11.43 dB)	Frequency	581.00 MHz
Calculated / Measured	Calculated	Drawing #	30Q220070





Proposal Number

Revision

Date

04 Sep 2001

Call Letters

WBFS-DT

Channel

32

Location

Miami, FL

Customer

Antenna Type

TFU-30DSC-R 3BP260 DC

ELEVATION PATTERN

RMS Gain at Main Lobe

22.0 (13.42 dB)

Beam Tilt

0.70 Degrees

RMS Gain at Horizontal

13.9 (11.43 dB)

Frequency

581.00 MHz

Calculated / Measured

Calculated

Drawing #

30Q220070

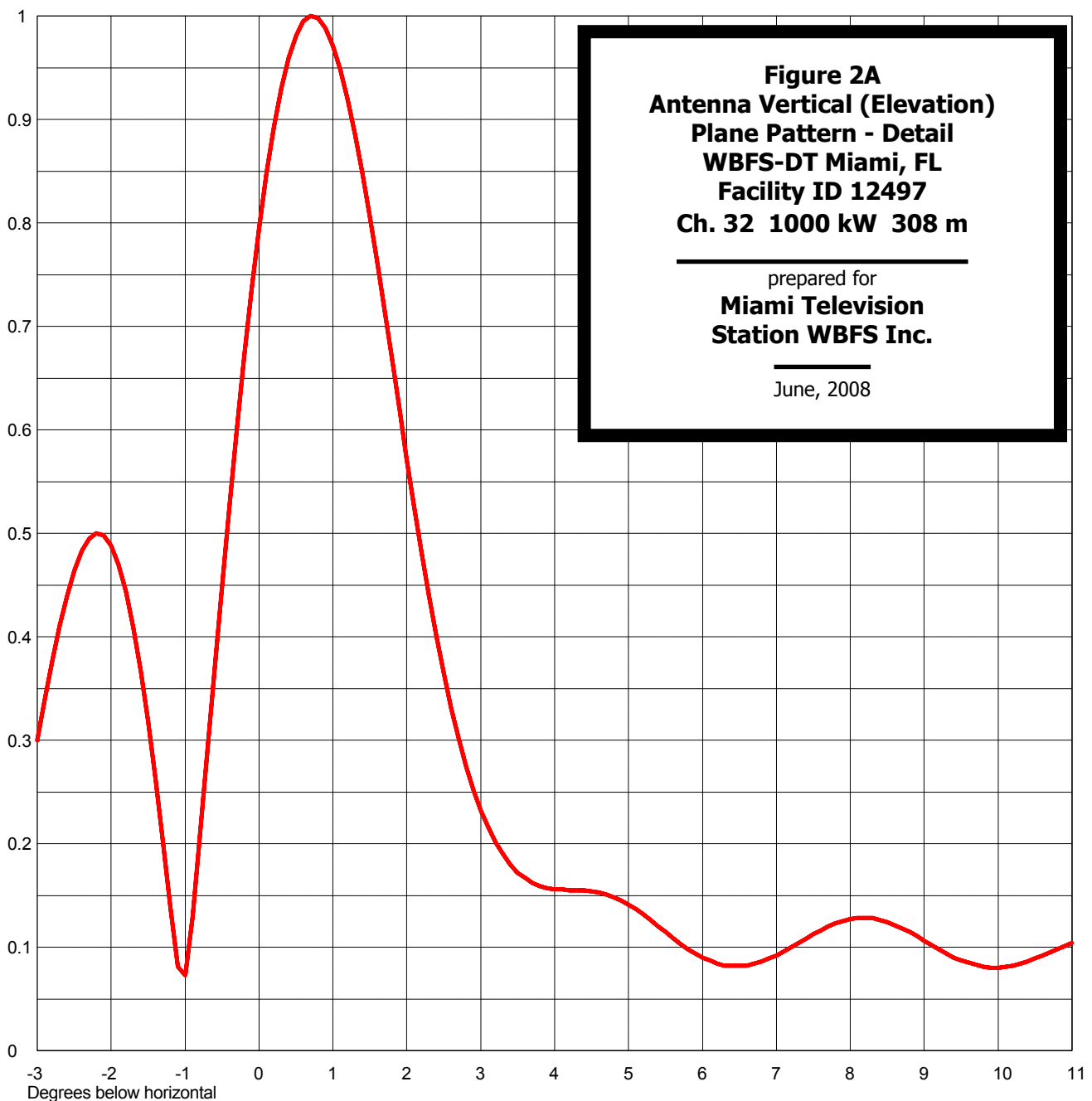


Figure 3
Proposed Coverage Contours
WBFS-DT Miami, FL
Facility ID 12497
Ch. 32 1000 kW 308 m

prepared for
Miami Television
Station WBFS Inc.

June, 2008

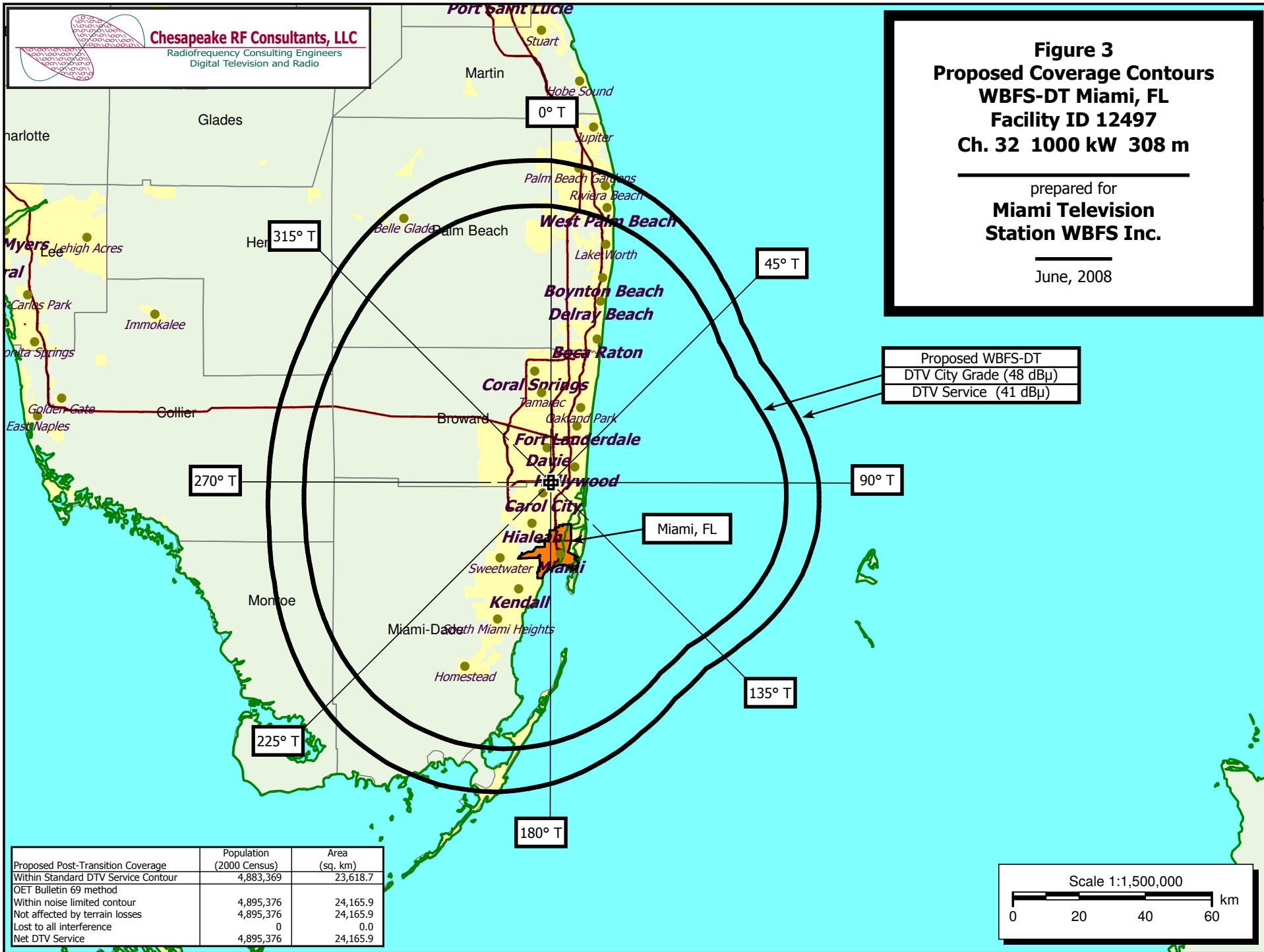


Table 1 WBFS-DT OET Bulletin 69 Interference Study
(worst-case scenarios shown page 1 of 6)

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

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-20-2008 Time: 08:46:47

Record Selected for Analysis

WBFS-DT USERRECORD-01 MIAMI FL US
Channel 32 ERP 1000. kW HAAT 308. m RCAMSL 00310 m
Latitude 025-58-07 Longitude 0080-13-20
Status APP Zone 3 Border
Dir Antenna Make CDB Model 00000000041330 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	913.936	307.0	96.8
45.0	80.089	307.8	77.8
90.0	122.500	309.2	80.6
135.0	43.890	308.9	74.3
180.0	455.625	308.0	90.6
225.0	832.656	307.9	96.1
270.0	227.529	307.0	84.7
315.0	436.260	307.0	90.1

Evaluation toward Class A Stations

Station inside contour of Class A station
WIMP-CA 25 MIAMI FL BLTTA 20061201BRA

Contour overlap to Class A station
WYDT-CA 32 NAPLES FL BLTTL 19980130JC

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

Table 1 WBFS-DT OET Bulletin 69 Interference Study
(worst-case scenarios shown page 2 of 6)

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call City/State	ARN
32	WBFS-DT MIAMI FL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
25	WIMP-CA	MIAMI FL	3.4	LIC	BLTTA	-20061201BRA
31	WVCU	FORT MYERS FL	179.9	LIC	BLEDT	-20030310AQX
31	WVCU	FORT MYERS FL	179.9	CP	BPEDT	-20080317AFZ
31	WVCU	FORT MYERS FL	179.9	PLN	DTVPLN	-DTVP1135
31	WTVJ	MIAMI FL	0.0	LIC	BLCDT	-20030707ABG
31	WTVJ	MIAMI FL	0.0	PLN	DTVPLN	-DTVP1136
32	WYDT-CA	NAPLES FL	161.0	LIC	BLTTL	-19980130JC
33	WRXY-TV	TICE FL	181.0	LIC	BLCDT	-20060627ABA
33	WRXY-TV	TICE FL	181.0	PLN	DTVPLN	-DTVP1214

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
25	WIMP-CA	MIAMI FL	BLTTA	-20061201BRA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	WPBT	MIAMI FL	3.6	LIC	BLEDT	-20010712AGD
18	WPBT	MIAMI FL	3.6	PLN	DTVPLN	-DTVP0636
22	WFOR-TV	MIAMI FL	3.4	LIC	BLCDT	-20011023ABS
22	WFOR-TV	MIAMI FL	3.4	PLN	DTVPLN	-DTVP0796
23	WLTW	MIAMI FL	3.4	CP	BPCDT	-20080312AEX
23	WLTW	MIAMI FL	3.4	PLN	DTVPLN	-DTVP0838
23	WLTW	MIAMI FL	3.4	LIC	BLCT	-19950710KF
25	WPBF	TEQUESTA FL	127.8	LIC	BLCT	-19990817LC
25	WVEA-TV	VENICE FL	289.0	LIC	BLCDT	-20060627ABX
25	WVEA-TV	VENICE FL	289.0	PLN	DTVPLN	-DTVP0918
27	WXEL-TV	WEST PALM BEACH FL	65.9	LIC	BLEDT	-20040713AAJ
27	WXEL-TV	WEST PALM BEACH FL	65.9	PLN	DTVPLN	-DTVP0994
28	WFLX	WEST PALM BEACH FL	65.9	LIC	BLCDT	-20020417AAP
28	WFLX	WEST PALM BEACH FL	65.9	PLN	DTVPLN	-DTVP1033
29	WFLX	WEST PALM BEACH FL	65.9	LIC	BLCT	-19860514KH
32	WBFS-TV	MIAMI FL	2.6	LIC	BLCDT	-20021025AAM
32	WBFS-TV	MIAMI FL	2.6	PLN	DTVPLN	-DTVP1176
39	WSFL-TV	MIAMI FL	3.4	LIC	BLCT	-19970401LW
40	WBEC-TV	BOCA RATON FL	0.0	CP MOD	BMEDT	-20060705ACF
40	WBEC-TV	BOCA RATON FL	2.1	PLN	DTVPLN	-DTVP1430
32	WBFS-DT	MIAMI FL	3.4	APP	USERRECORD-01	

Proposal causes no interference

Table 1 WBFS-DT OET Bulletin 69 Interference Study
(worst-case scenarios shown page 3 of 6)

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
31	WGPU	FORT MYERS FL	BLEDT	-20030310AQX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	WBCC	COCOA FL	211.1	LIC	BLEDT	-20030429ABH
30	WBCC	COCOA FL	211.1	PLN	DTVPLN	-DTVP1104
30	WSCV	FORT LAUDERDALE FL	181.3	CP	BPCDT	-20080317AIK
30	WSCV	FORT LAUDERDALE FL	181.3	PLN	DTVPLN	-DTVP1105
31	WTVJ	MIAMI FL	179.9	LIC	BLCDT	-20030707ABG
31	WTVJ	MIAMI FL	179.9	PLN	DTVPLN	-DTVP1136
31	WOGX	OCALA FL	288.2	LIC	BLCDT	-20020730ABS
31	WOGX	OCALA FL	288.2	PLN	DTVPLN	-DTVP1137
32	WBFS-TV	MIAMI FL	181.0	PLN	DTVPLN	-DTVP1176
32	WBFS-DT	MIAMI FL	179.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
31	WGPU	FORT MYERS FL	BPEDT	-20080317AFZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	WBCC	COCOA FL	211.1	LIC	BLEDT	-20030429ABH
30	WBCC	COCOA FL	211.1	PLN	DTVPLN	-DTVP1104
30	WSCV	FORT LAUDERDALE FL	181.3	CP	BPCDT	-20080317AIK
30	WSCV	FORT LAUDERDALE FL	181.3	PLN	DTVPLN	-DTVP1105
31	WTVJ	MIAMI FL	179.9	LIC	BLCDT	-20030707ABG
31	WTVJ	MIAMI FL	179.9	PLN	DTVPLN	-DTVP1136
31	WOGX	OCALA FL	288.2	LIC	BLCDT	-20020730ABS
31	WOGX	OCALA FL	288.2	PLN	DTVPLN	-DTVP1137
32	WBFS-TV	MIAMI FL	181.0	PLN	DTVPLN	-DTVP1176
32	WBFS-DT	MIAMI FL	179.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
31	WGPU	FORT MYERS FL	DTVPLN	-DTVP1135

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
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Table 1 WBFS-DT OET Bulletin 69 Interference Study
(worst-case scenarios shown page 4 of 6)

30	WBCC	COCOA FL	211.1	LIC	BLEDT	-20030429ABH
30	WBCC	COCOA FL	211.1	PLN	DTVPLN	-DTVP1104
30	WSCV	FORT LAUDERDALE FL	181.3	CP	BPCDT	-20080317AIK
30	WSCV	FORT LAUDERDALE FL	181.3	PLN	DTVPLN	-DTVP1105
31	WTVJ	MIAMI FL	179.9	LIC	BLCDT	-20030707ABG
31	WTVJ	MIAMI FL	179.9	PLN	DTVPLN	-DTVP1136
31	WOGX	OCALA FL	288.2	LIC	BLCDT	-20020730ABS
31	WOGX	OCALA FL	288.2	PLN	DTVPLN	-DTVP1137
32	WBFS-TV	MIAMI FL	181.1	PLN	DTVPLN	-DTVP1176
32	WBFS-DT	MIAMI FL	179.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
31	WTVJ	MIAMI FL	BLCDT	-20030707ABG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	WSCV	FORT LAUDERDALE FL	3.4	CP	BPCDT	-20080317AIK
30	WSCV	FORT LAUDERDALE FL	3.4	PLN	DTVPLN	-DTVP1105
31	WGPU	FORT MYERS FL	179.9	LIC	BLEDT	-20030310AQX
31	WGPU	FORT MYERS FL	179.9	CP	BPEDT	-20080317AFZ
31	WGPU	FORT MYERS FL	179.9	PLN	DTVPLN	-DTVP1135
32	WBFS-TV	MIAMI FL	1.3	PLN	DTVPLN	-DTVP1176
32	WBFS-DT	MIAMI FL	0.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
31	WTVJ	MIAMI FL	DTVPLN	-DTVP1136

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
30	WSCV	FORT LAUDERDALE FL	3.4	CP	BPCDT	-20080317AIK
30	WSCV	FORT LAUDERDALE FL	3.4	PLN	DTVPLN	-DTVP1105
31	WGPU	FORT MYERS FL	179.9	LIC	BLEDT	-20030310AQX
31	WGPU	FORT MYERS FL	179.9	CP	BPEDT	-20080317AFZ
31	WGPU	FORT MYERS FL	179.9	PLN	DTVPLN	-DTVP1135
32	WBFS-TV	MIAMI FL	1.3	PLN	DTVPLN	-DTVP1176
32	WBFS-DT	MIAMI FL	0.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 7

Table 1 WBFS-DT OET Bulletin 69 Interference Study
(worst-case scenarios shown page 5 of 6)

Analysis of current record
Channel Call City/State Application Ref. No.
32 WYDT-CA NAPLES FL BLTTL -19980130JC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	WGPU	FORT MYERS FL	68.3	LIC	BLEDT -20030310AQX
31	WGPU	FORT MYERS FL	68.3	CP	BPEDT -20080317AFZ
31	WGPU	FORT MYERS FL	68.3	PLN	DTVPLN -DTVPI1135
32	WMOR-TV	LAKELAND FL	182.3	LIC	BLCT -19961018KF
32	WBFS-TV	MIAMI FL	162.3	LIC	BLCDDT -20021025AAM
32	WBFS-TV	MIAMI FL	162.3	PLN	DTVPLN -DTVPI1176
33	WRXY-TV	TICE FL	64.9	LIC	BLCDDT -20060627ABA
33	WRXY-TV	TICE FL	64.9	PLN	DTVPLN -DTVPI2114
35	WFTX	CAPE CORAL FL	65.9	LIC	BLCDDT -20050311ACY
35	WFTX	CAPE CORAL FL	65.9	PLN	DTVPLN -DTVPI284
46	WXCW	NAPLES FL	64.9	LIC	BLCT -20020418AAA
32	WBFS-DT	MIAMI FL	161.0	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 8

Analysis of current record
Channel Call City/State Application Ref. No.
33 WRXY-TV TICE FL BLCDDT -20060627ABA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	WBFS-TV	MIAMI FL	182.2	PLN	DTVPLN -DTVPI1176
33	WCEU	NEW SMYRNA BEACH FL	215.3	LIC	BLEDT -20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	215.3	PLN	DTVPLN -DTVPI2113
34	WTVX	FORT PIERCE FL	144.2	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	144.2	PLN	DTVPLN -DTVPI244
34	WUSF-TV	TAMPA FL	126.8	LIC	BLEDT -20060913ABQ
34	WUSF-TV	TAMPA FL	126.8	PLN	DTVPLN -DTVPI247
32	WBFS-DT	MIAMI FL	181.0	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 9

Analysis of current record
Channel Call City/State Application Ref. No.
33 WRXY-TV TICE FL DTVPLN -DTVPI2114

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
32	WBFS-TV	MIAMI FL	182.2	PLN	DTVPLN -DTVPI1176
33	WCEU	NEW SMYRNA BEACH FL	215.3	LIC	BLEDT -20050121AKU
33	WCEU	NEW SMYRNA BEACH FL	215.3	PLN	DTVPLN -DTVPI2113
34	WTVX	FORT PIERCE FL	144.2	CP	BPCDDT -20080325AHT
34	WTVX	FORT PIERCE FL	144.2	PLN	DTVPLN -DTVPI244

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

34	WUSF-TV	TAMPA FL	126.8	LIC	BLEDT	-20060913ABQ
34	WUSF-TV	TAMPA FL	126.8	PLN	DTVPLN	-DTVPI247
32	WBFS-DT	MIAMI FL	181.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record
Channel Call City/State Application Ref. No.
32 WBFS-DT MIAMI FL USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
31	WGPU	FORT MYERS FL	179.9	LIC	BLEDT -20030310AQX
31	WGPU	FORT MYERS FL	179.9	CP	BPEDT -20080317AFZ
31	WGPU	FORT MYERS FL	179.9	PLN	DTVPLN -DTVPI1135
31	WTVJ	MIAMI FL	0.0	LIC	BLCDDT -20030707ABG
31	WTVJ	MIAMI FL	0.0	PLN	DTVPLN -DTVPI1136
33	WRXY-TV	TICE FL	181.0	LIC	BLCDDT -20060627ABA
33	WRXY-TV	TICE FL	181.0	PLN	DTVPLN -DTVPI2114

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 10
Before Analysis

Results for: 32A FL MIAMI	USERRECORD01	APP
HAAT 308.0 m, ATV ERP 1000.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	4895376	24165.9
not affected by terrain losses	4895376	24165.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

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 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.

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.	<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 submit the Exhibit 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

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 32 Analog TV, if any 33
2.	Zone: <input type="radio"/> I <input type="radio"/> II <input checked="" type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 25 Minutes 58 Seconds 07 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 80 Minutes 13 Seconds 20 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1026553 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 2.4 meters
6.	Overall Tower Height Above Ground Level: 317.3 meters
7.	Height of Radiation Center Above Ground Level: 307.5 meters
8.	Height of Radiation Center Above Average Terrain : 307.6 meters

9.	Maximum Effective Radiated Power (average power):	1000 kW																																																																																																
10.	<div>Antenna Specifications:</div> <div>a. Manufacturer DIE Model TFU-30DSC-R 3BP260 DC</div> <div>b. Electrical Beam Tilt: 0.7 degrees <input type="checkbox"/> Not Applicable</div> <div>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]</div> <div>d. Polarization: <input checked="" type="radio"/> Horizontal <input type="radio"/> Circular <input type="radio"/> Elliptical</div> <div>e. Directional Antenna Relative Field Values: <input type="checkbox"/> Not applicable (Nondirectional)</div> <div>[For a composite directional (not off-the-shelf) antenna, press the following button to fill in the relative field values subform.] [Relative Field Values]</div> <div style="text-align: center; padding: 10px;">10e. Directional Antenna Relative Field Values [Fill in this subform for a composite directional (not off-the-shelf) antenna, only.]</div> <div style="border: 1px solid black; padding: 5px;"><div>e. Directional Antenna Relative Field Values:</div><div>Rotation (Degrees): <input checked="" type="checkbox"/> No Rotation</div><table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"><thead><tr><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th></tr></thead><tbody><tr><td>0</td><td>0.956</td><td>10</td><td>0.84</td><td>20</td><td>0.675</td><td>30</td><td>0.497</td><td>40</td><td>0.339</td><td>50</td><td>0.227</td></tr><tr><td>60</td><td>0.19</td><td>70</td><td>0.229</td><td>80</td><td>0.296</td><td>90</td><td>0.35</td><td>100</td><td>0.371</td><td>110</td><td>0.35</td></tr><tr><td>120</td><td>0.296</td><td>130</td><td>0.229</td><td>140</td><td>0.19</td><td>150</td><td>0.227</td><td>160</td><td>0.339</td><td>170</td><td>0.497</td></tr><tr><td>180</td><td>0.675</td><td>190</td><td>0.84</td><td>200</td><td>0.956</td><td>210</td><td>1</td><td>220</td><td>0.964</td><td>230</td><td>0.861</td></tr><tr><td>240</td><td>0.725</td><td>250</td><td>0.596</td><td>260</td><td>0.512</td><td>270</td><td>0.477</td><td>280</td><td>0.471</td><td>290</td><td>0.477</td></tr><tr><td>300</td><td>0.512</td><td>310</td><td>0.596</td><td>320</td><td>0.725</td><td>330</td><td>0.861</td><td>340</td><td>0.964</td><td>350</td><td>1</td></tr><tr><td colspan="2">Additional Azimuths</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table><div style="text-align: center; color: blue; margin-top: 5px;">Relative Field Polar Plot</div></div>		Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0	0.956	10	0.84	20	0.675	30	0.497	40	0.339	50	0.227	60	0.19	70	0.229	80	0.296	90	0.35	100	0.371	110	0.35	120	0.296	130	0.229	140	0.19	150	0.227	160	0.339	170	0.497	180	0.675	190	0.84	200	0.956	210	1	220	0.964	230	0.861	240	0.725	250	0.596	260	0.512	270	0.477	280	0.471	290	0.477	300	0.512	310	0.596	320	0.725	330	0.861	340	0.964	350	1	Additional Azimuths											
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If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. **Exhibit required.** [Exhibit 43]

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 6/20/2008	
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).

Any specified rotation has already been applied to the plotted pattern.

Field strength values shown on a rotated pattern may differ from the listed values because intermediate azimuths are interpolated between entered azimuths.

