

ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Digital Television Station Construction Permit

prepared for

CBS Operations Inc.

WTOG(DT) St. Petersburg, FL

Facility ID 74112

Ch. 19 255 kW 478 m

CBS Operations Inc. (“*CBS*”) is the licensee of digital television station WTOG(DT), Channel 44, Facility ID 74112, St. Petersburg, FL. *CBS* herein proposes construction of the WTOG post-auction facility on Channel 19. Reassignment of WTOG from Channel 44 to Channel 19 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“*CCRPN*”, DA 17-317, released April 13, 2017).

As proposed herein, WTOG will be relocated to a different tower which is 1.2 km distant from the licensed WTOG site. The proposed Channel 19 operation will employ a new broadband antenna system to be top-mounted on the tower structure associated with FCC Antenna Structure Registration number 1057473. The proposed antenna will be shared with several other post-auction facilities. No change to the overall structure height will result.

CBS proposes to operate WTOG with an effective radiated power (“ERP”) of 255 kW at 478 meters antenna height above average terrain (“HAAT”). The proposed antenna is an elliptically polarized nondirectional RFS model PEPL56D VPT. *CBS* will employ 25 percent vertical polarization for WTOG, such that the horizontally polarized ERP is 255 kW and the vertically polarized ERP is 63.25 kW.¹

¹The proposed antenna provides for adjustable vertical polarization. The antenna provides separate inputs for horizontally polarized and vertically polarized radiators, which permits each of the television stations that share the antenna to individually choose how much vertical polarization to utilize. Following construction and licensing, any subsequent changes to the vertically polarized ERP will be described in a license modification application as necessary to show the revised system gains, losses, and transmitter power output. The horizontally polarized ERP will be maintained at 255 kW and the vertically polarized ERP will not exceed the horizontally polarized ERP.

A map is supplied as Figure 1 which depicts the standard predicted coverage contours. This map includes the location of St. Petersburg, WTOG'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 dB μ contour.

The proposed noise limited service contour ("NLSC") extends beyond that of the *CCRPN* parameters of 326 kW ERP and 454 meters HAAT. The proposal complies with §73.3700(b)(ii) as described in the following.

The 1.2 km change in transmitting location results in a corresponding shift in coverage contour. WTOG therefore qualifies under §73.3700(b)(ii)(A) for a contour extension due to the loss of coverage area that would otherwise result from use of the proposed site.

Interference study per FCC OET Bulletin 69² shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and Class A television stations and reassignments as required by §73.616. The interference study output report is provided as Table 1. This satisfies §73.3700(b)(ii)(C) for the proposed NLSC extension.

The amount of NLSC extension does not exceed one percent in any direction. Figure 2 supplies a coverage contour comparison of the proposed WTOG facility to the reassignment facility's contour and a one percent extension distance of the reassignment facility's contour. Here, the contour level is adjusted with the dipole factor to match FCC application processing. Table 1's results also demonstrate that the proposed contour is within the baseline contour plus one percent. Therefore the proposed contour extension complies with §73.3700(b)(ii)(B).

²FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). This analysis employed the FCC's current "TVStudy" software with the default application processing template settings, 2 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCC's implementation of TVStudy show excellent correlation.

The proposed WTOG facility’s terrain-limited population provides a 99.0 percent match of the *CCRPN* baseline facility, as detailed in the following table. The OET Bulletin 69 report summary in Table 1 also concludes that the proposed service area population is more than 95 percent of the baseline population.

Terrain Limited Population - Match of Reassignment

Population Summary (2010 Census) OET Bulletin 69: TVStudy	Reassignment Parameters	Proposed
Within Noise Limited Contour	4,796,964	4,747,365
Not affected by terrain losses	4,796,188	4,747,310
Match of Reassignment	---	98.98%

The nearest FCC monitoring station is 162 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). The site location is beyond the border areas requiring international coordination. There are no authorized AM stations within 3 kilometers of the site.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC’s OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent (typical) 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 0.5 $\mu\text{W}/\text{cm}^2$, which is 0.1 percent of the general population/uncontrolled maximum permitted exposure limit. This is well 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,

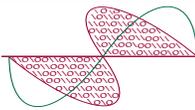
tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field. No increase in structure height is proposed.

List of Attachments

Figure 1	Proposed Coverage Contours
Figure 2	Proposed Contour Expansion
Table 1	OET Bulletin 69 Interference Study
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E.	June 30, 2017	
207 Old Dominion Road	Yorktown, VA 23692	703-650-9600



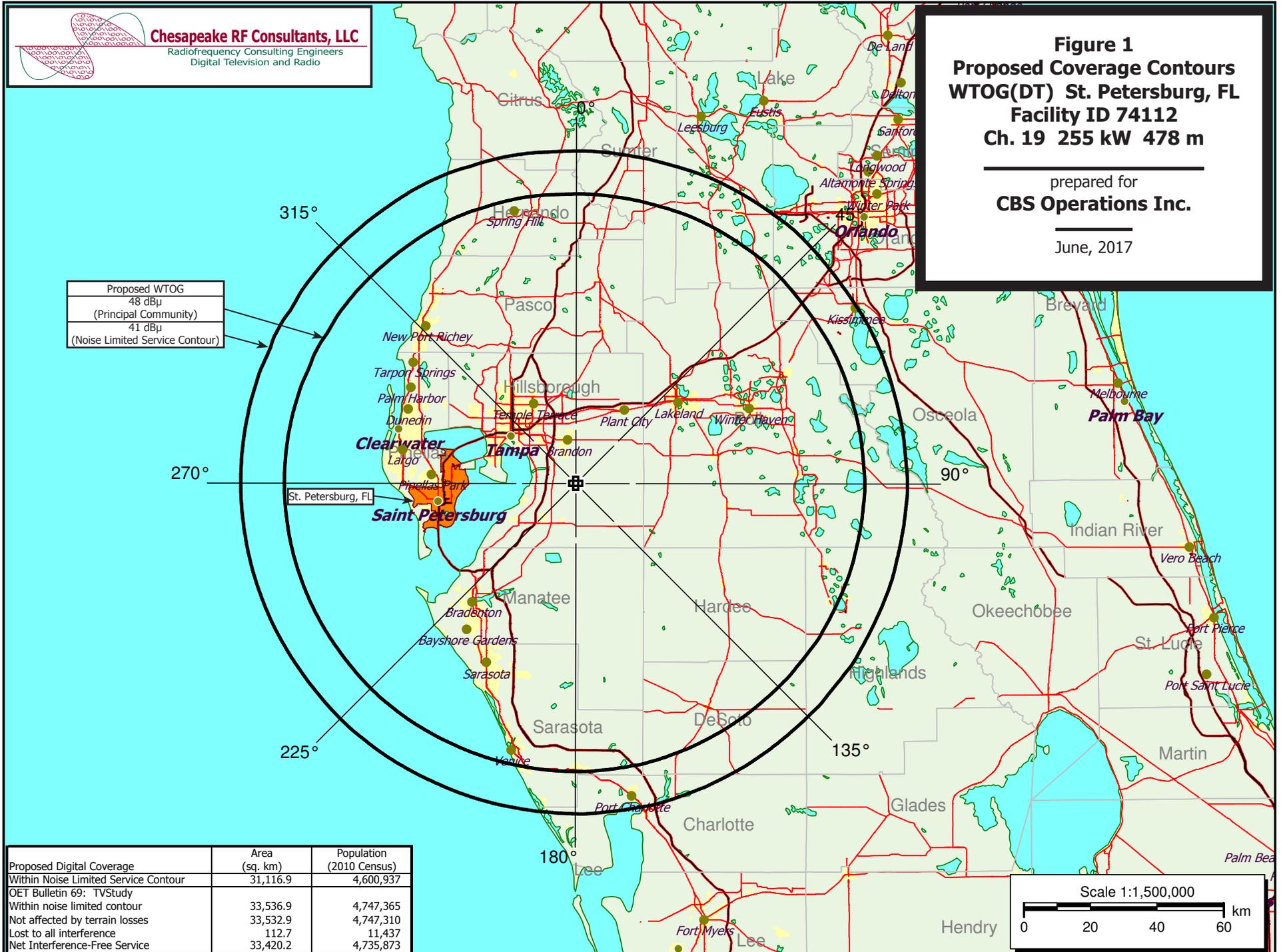
Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Proposed Coverage Contours
WTOG(DT) St. Petersburg, FL
Facility ID 74112
Ch. 19 255 kW 478 m

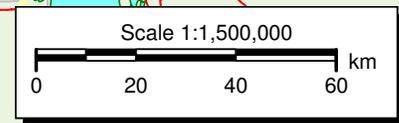
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CBS Operations Inc.

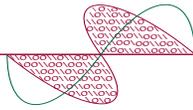
June, 2017

Proposed WTOG
48 dBμ
(Principal Community)
41 dBμ
(Noise Limited Service Contour)



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	31,116.9	4,600,937
OET Bulletin 69: TVStudy		
Within noise limited contour	33,536.9	4,747,365
Not affected by terrain losses	33,532.9	4,747,310
Lost to all interference	112.7	11,437
Net Interference-Free Service	33,420.2	4,735,873





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

Figure 2
Proposed Contour Expansion
WTOG(DT) St. Petersburg, FL
Facility ID 74112
Ch. 19 255 kW 478 m

prepared for
CBS Operations Inc.

June, 2017

WTOG Reassignment
326 kW 454 m HAAT
39.25 dBμ Contour
(Red - Solid)
39.25 dBμ Distance plus 1%
(Red - Dashed)

Proposed WTOG
39.25 dBμ Contour
(Blue - Solid)

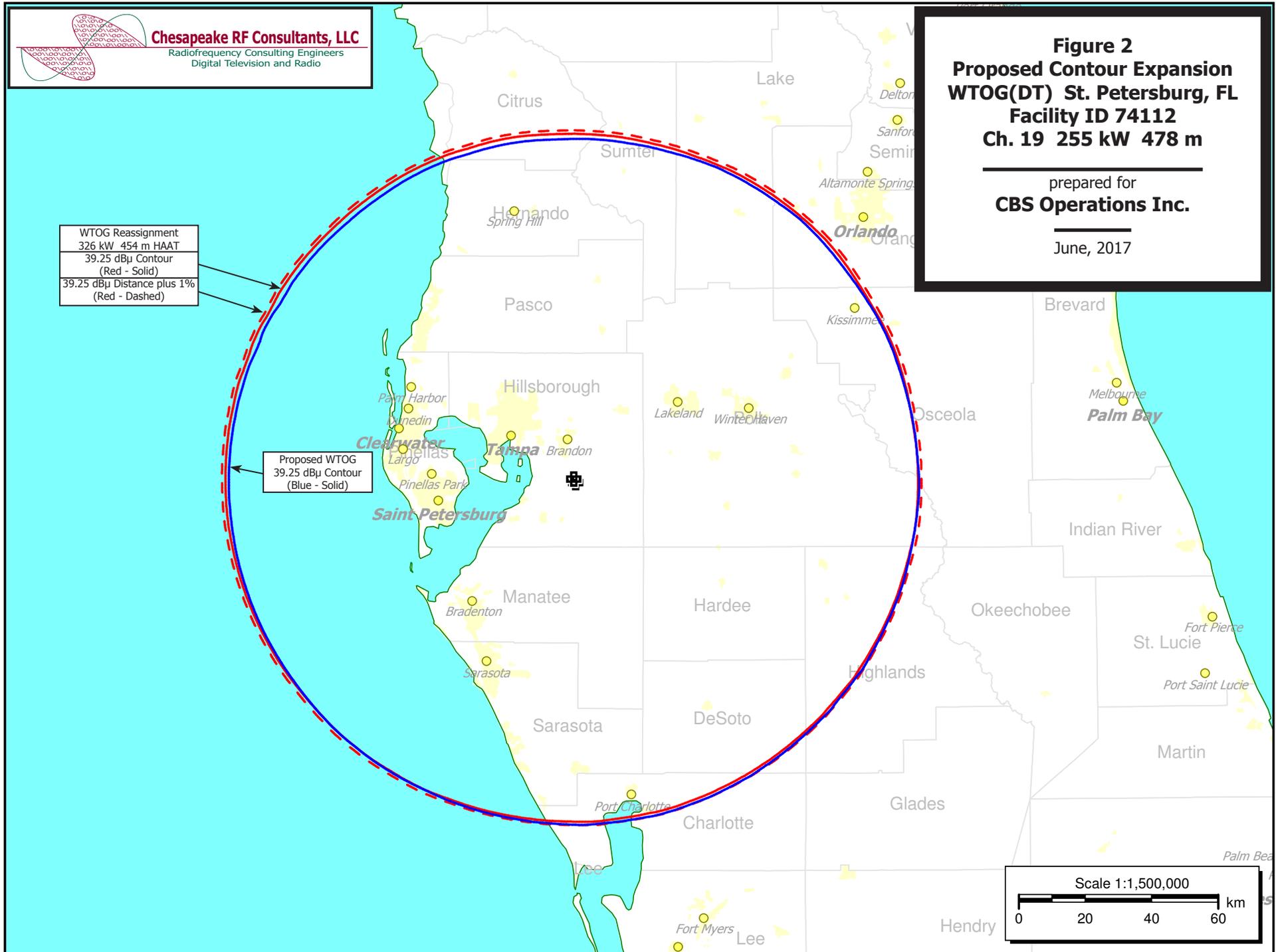
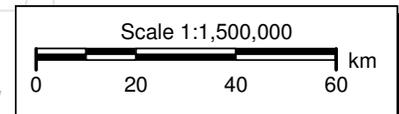


Table 1 WTOG OET Bulletin 69 Interference Study
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tvstudy v2.2.2
Database: localhost, Study: WTOG ATC 255KW, Model: Longley-Rice
Start: 2017.06.30 15:54:50

Study created: 2017.06.30 15:54:45

Study build station data: LMS TV 2017-06-28 LMSTV

Proposal: WTOG D19 DT APP ST. PETERSBURG, FL
File number: WTOG ATC 255KW
Facility ID: 74112
Station data: User record
Record ID: 705
Country: U.S.
Zone: III

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	223.6 km
WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	0.0
WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	281.7
WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	289.0
WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	358.7
WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	200.2
WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	200.2
WZXX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.7
WZXX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	130.7
WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	3.1
WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	3.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D19
Latitude: 27 49 10.80 N (NAD83)
Longitude: 82 15 38.00 W
Height AMSL: 497.9 m
HAAT: 477.7 m
Peak ERP: 255 kW
Antenna: Omnidirectional

39.3 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	255 kW	477.5 m	103.3 km
45.0	255	481.1	103.6
90.0	255	474.7	103.1
135.0	255	464.5	102.2
180.0	255	469.0	102.6
225.0	255	479.2	103.5
270.0	255	488.3	104.3
315.0	255	486.9	104.1

Proposal service area is within baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1540.2 km

Distance to Mexican border: 1467.0 km

Conditions at FCC monitoring station: Vero Beach FL
Bearing: 98.1 degrees Distance: 161.7 km
ERP: 255 kW Field strength: 26.4 dBu, 0.0 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 309.0 degrees Distance: 2508.0 km

No land mobile station failures found

Table 1 WTOG OET Bulletin 69 Interference Study
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Study cell size: 2.00 km
 Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
 Maximum new IX to LPTV: 2.00%

 Interference to DTVBL29715 BL, scenario 1
 Proposal causes no interference.

 Interference to DTVBL29715 BL, scenario 2
 Proposal causes no interference.

 Interference to DTVBL53819 BL, scenario 1
 Proposal causes no interference.

 Interference to BLCDT20030328ANV LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV				
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	280.7 km			
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	281.7			
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	1.8			
	WBPI-CD	D19	DC	BL	AUGUSTA, GA	DTVBL17464	361.1			
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	234.4			
	WCSC-TV	D19	DT	APP	CHARLESTON, SC	BLANK0000025160	343.1			
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	0.8			
	WXXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	193.1			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	27334.3	1,630,782	27334.3	1,630,782	27057.5	1,628,163	27061.5	1,628,360	-0.01	-0.01
Undesired			Total IX	Unique IX, before	Unique IX, after					
WTOG D19 DT BL		23.9	1,163	12.0	880					
WTOG D19 DT APP		15.9	957			8.0	683			
WTLH D19 DT BL		264.8	1,739	252.9	1,456	256.9	1,465			

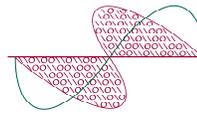
 Interference to BLCDT20030328ANV LIC, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV				
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	280.7 km			
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	281.7			
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	1.8			
	WBPI-CD	D19	DC	BL	AUGUSTA, GA	DTVBL17464	361.1			
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	234.4			
	WCSC-TV	D19	DT	APP	CHARLESTON, SC	BLANK0000025160	343.1			
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	0.8			
	WXXZ-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	193.1			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	27334.3	1,630,782	27334.3	1,630,782	27057.5	1,628,163	27061.5	1,628,360	-0.01	-0.01
Undesired			Total IX	Unique IX, before	Unique IX, after					
WTOG D19 DT BL		23.9	1,163	12.0	880					
WTOG D19 DT APP		15.9	957			8.0	683			
WTLH D19 DT BL		264.8	1,739	252.9	1,456	256.9	1,465			

 Interference to BLCDT20030328ANV LIC, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	

Table 1 WTOG OET Bulletin 69 Interference Study
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Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	280.7 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	281.7
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	1.8
	WBPI-CD	D19	DC	BL	AUGUSTA, GA	DTVBL17464	361.1
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	234.4
	WCSC-TV	D19	DT	BL	CHARLESTON, SC	DTVBL71297	343.1
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	0.8
	WZZX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	193.1

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	27334.3	1,630,782	27334.3	1,630,782	27057.5	1,628,163	27061.5	1,628,360	-0.01 -0.01

Undesired				Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL		23.9		1,163	12.0	880
WTOG D19 DT APP		15.9		957		8.0 683
WTLH D19 DT BL	264.8		1,739	252.9	1,456	256.9 1,465

Interference to BLCDT20030328ANV LIC, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	280.7 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	281.7
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	1.8
	WBPI-CD	D19	DC	BL	AUGUSTA, GA	DTVBL17464	361.1
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	234.4
	WCSC-TV	D19	DT	BL	CHARLESTON, SC	DTVBL71297	343.1
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	0.8
	WZZX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	193.1

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	27334.3	1,630,782	27334.3	1,630,782	27057.5	1,628,163	27061.5	1,628,360	-0.01 -0.01

Undesired				Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL		23.9		1,163	12.0	880
WTOG D19 DT APP		15.9		957		8.0 683
WTLH D19 DT BL	264.8		1,739	252.9	1,456	256.9 1,465

Interference to DTVBL29547 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL29547 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL23486 BL, scenario 1
Proposal causes no interference.

Interference to BLANK0000025128 APP, scenario 1
Proposal causes no interference.

Interference to BLANK0000025128 APP, scenario 2
Proposal causes no interference.

Interference to BLANK0000025128 APP, scenario 3
Proposal causes no interference.

Interference to BLANK0000025128 APP, scenario 4
Proposal causes no interference.

Interference to DTVBL35575 BL, scenario 1
Proposal causes no interference.

Table 1 WTOG OET Bulletin 69 Interference Study
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Interference to DTVBL35575 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL35575 BL, scenario 3
Proposal causes no interference.

Interference to DTVBL35575 BL, scenario 4
Proposal causes no interference.

Interference to BLANK0000025143 CP, scenario 1
Proposal causes no interference.

Interference to BLANK0000025143 CP, scenario 2
Proposal causes no interference.

Interference to BLANK0000025143 CP, scenario 3
Proposal causes no interference.

Interference to BLANK0000025143 CP, scenario 4
Proposal causes no interference.

Interference to DTVBL70415 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL70415 BL, scenario 2
Proposal causes no interference.

Interference to DTVBL70415 BL, scenario 3
Proposal causes no interference.

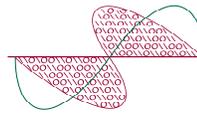
Interference to DTVBL70415 BL, scenario 4
Proposal causes no interference.

Interference to BLANK0000025106 CP, scenario 1

Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired: WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106			
Undesireds: WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km		
WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1		
WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.7		
WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5		
WXXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	129.0		
WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4		
WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDT20060627AAQ	3.1		
WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.7		
WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0		
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
28065.7	4,296,601	28057.7	4,296,540	27568.6	4,255,287	27548.5	4,254,485	0.07 0.02
Undesired	Total IX		Unique IX, before		Unique IX, after			
WTOG D19 DT BL	72.6	15,512	60.5	14,412				
WTOG D19 DT APP	129.2	16,656			80.5	15,214		
WTVX D20 DT APP	392.3	23,950	246.8	14,433	218.4	13,880		
WCWJ D20 DT BL	24.1	527	8.0	427	8.0	427		
WXXZ-CD D20 DC CP	4.0	91	0.0	0	0.0	0		
WCTV D20 DT BL	12.1	69	0.0	0	0.0	0		
WKME-CD D21 DC BL	141.5	11,790	20.2	1,301	16.2	1,603		

Interference to BLANK0000025106 CP, scenario 2

Table 1 WTOG OET Bulletin 69 Interference Study
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Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	
Undesireds: WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.7
WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
WZXZ-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	129.0
WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDDT20060627AAQ	3.1
WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.7
WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
28065.7 4,296,601	28057.7 4,296,540	27568.6 4,255,287	27548.5 4,254,485	0.07 0.02		

Undesired	Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL	72.6 15,512	60.5 14,412	
WTOG D19 DT APP	129.2 16,656		80.5 15,214
WTVX D20 DT APP	392.3 23,950	246.8 14,433	218.4 13,880
WCWJ D20 DT BL	24.1 527	8.0 427	8.0 427
WZXZ-CD D20 DC BL	4.0 91	0.0 0	0.0 0
WCTV D20 DT BL	12.1 69	0.0 0	0.0 0
WKME-CD D21 DC BL	141.5 11,790	20.2 1,301	16.2 1,603

Interference to BLANK0000025106 CP, scenario 3

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	
Undesireds: WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.7
WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
WZXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	129.0
WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDDT20060627AAQ	3.1
WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.7
WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
28065.7 4,296,601	28057.7 4,296,540	27576.7 4,255,289	27556.6 4,254,487	0.07 0.02		

Undesired	Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL	72.6 15,512	60.5 14,412	
WTOG D19 DT APP	129.2 16,656		80.5 15,214
WTVX D20 DT BL	380.2 23,948	238.7 14,431	210.3 13,878
WCWJ D20 DT BL	24.1 527	8.0 427	8.0 427
WZXZ-CD D20 DC CP	4.0 91	0.0 0	0.0 0
WCTV D20 DT BL	12.1 69	4.0 0	4.0 0
WKME-CD D21 DC BL	141.5 11,790	20.2 1,301	16.2 1,603

Interference to BLANK0000025106 CP, scenario 4

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	
Undesireds: WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.7
WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
WZXZ-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	129.0
WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDDT20060627AAQ	3.1
WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.7
WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
28065.7 4,296,601	28057.7 4,296,540	27576.7 4,255,289	27556.6 4,254,487	0.07 0.02		

Table 1 WTOG OET Bulletin 69 Interference Study
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Undesired	Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL 72.6	15,512	60.5	14,412
WTOG D19 DT APP 129.2	16,656		80.5 15,214
WTVX D20 DT BL 380.2	23,948	238.7	14,431 210.3 13,878
WCWJ D20 DT BL 24.1	527	8.0	427 8.0 427
WZXZ-CD D20 DC BL 4.0	91	0.0	0 0.0 0
WCTV D20 DT BL 12.1	69	4.0	0 4.0 0
WKME-CD D21 DC BL 141.5	11,790	20.2	1,301 16.2 1,603

Interference to DTVBL60559 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.7
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
	WZXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	129.0
	WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
	WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDT20060627AAQ	3.1
	WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.8
	WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	27773.3	4,283,915	27765.2 4,283,854	27220.3 4,239,002	27196.3 4,237,140	0.09	0.04

Undesired	Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL 117.0	20,577	96.7	18,024
WTOG D19 DT APP 177.5	22,781		120.7 19,886
WTVX D20 DT APP 399.7	22,260	258.2	14,103 229.8 13,550
WCWJ D20 DT BL 24.1	527	8.0	427 8.0 427
WZXZ-CD D20 DC CP 4.0	91	0.0	0 0.0 0
WCTV D20 DT BL 12.1	69	0.0	0 0.0 0
WCLF D21 DT LIC 8.1	1,677	8.1	1,677 8.1 1,677
WKME-CD D21 DC BL 137.4	8,977	24.2	1,301 20.2 1,603

Interference to DTVBL60559 BL, scenario 2

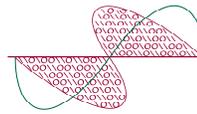
Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.7
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
	WZXZ-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	129.0
	WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
	WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDT20060627AAQ	3.1
	WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.8
	WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX		
	27773.3	4,283,915	27765.2 4,283,854	27220.3 4,239,002	27196.3 4,237,140	0.09	0.04

Undesired	Total IX	Unique IX, before	Unique IX, after
WTOG D19 DT BL 117.0	20,577	96.7	18,024
WTOG D19 DT APP 177.5	22,781		120.7 19,886
WTVX D20 DT APP 399.7	22,260	258.2	14,103 229.8 13,550
WCWJ D20 DT BL 24.1	527	8.0	427 8.0 427
WZXZ-CD D20 DC BL 4.0	91	0.0	0 0.0 0
WCTV D20 DT BL 12.1	69	0.0	0 0.0 0
WCLF D21 DT LIC 8.1	1,677	8.1	1,677 8.1 1,677
WKME-CD D21 DC BL 137.4	8,977	24.2	1,301 20.2 1,603

Interference to DTVBL60559 BL, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	

Table 1 WTOG OET Bulletin 69 Interference Study
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Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.7
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
	WZXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	129.0
	WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
	WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDDT20060627AAQ	3.1
	WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.8
	WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	27773.3	4,283,915	27765.2	4,283,854	27232.2	4,239,006	27208.2	4,237,144	0.09 0.04

Undesired				Total IX	Unique IX, before	Unique IX, after	
WTOG D19 DT BL	117.0			20,577	100.8	19,477	
WTOG D19 DT APP	177.5			22,781		124.8	21,339
WTVX D20 DT BL	383.8			20,803	246.3	14,099	217.9 13,546
WCWJ D20 DT BL	24.1			527	8.0	427	8.0 427
WZXZ-CD D20 DC CP	4.0			91	0.0	0	0.0 0
WCTV D20 DT BL	12.1			69	0.0	0	0.0 0
WCLF D21 DT LIC	8.1			1,677	8.1	1,677	8.1 1,677
WKME-CD D21 DC BL	137.4			8,977	24.2	1,301	20.2 1,603

Interference to DTVBL60559 BL, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	
Undesireds:	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	2.0 km
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	3.1
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.7
	WCWJ	D20	DT	BL	JACKSONVILLE, FL	DTVBL29712	278.5
	WZXZ-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	129.0
	WCTV	D20	DT	BL	THOMASVILLE, GA	DTVBL31590	353.4
	WCLF	D21	DT	LIC	CLEARWATER, FL	BLCDDT20060627AAQ	3.1
	WDYB-CD	D21	DC	BL	DAYTONA BEACH, FL	DTVBL41375	157.8
	WKME-CD	D21	DC	BL	KISSIMMEE, FL	DTVBL61702	93.0

	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
	27773.3	4,283,915	27765.2	4,283,854	27232.2	4,239,006	27208.2	4,237,144	0.09 0.04

Undesired				Total IX	Unique IX, before	Unique IX, after	
WTOG D19 DT BL	117.0			20,577	100.8	19,477	
WTOG D19 DT APP	177.5			22,781		124.8	21,339
WTVX D20 DT BL	383.8			20,803	246.3	14,099	217.9 13,546
WCWJ D20 DT BL	24.1			527	8.0	427	8.0 427
WZXZ-CD D20 DC BL	4.0			91	0.0	0	0.0 0
WCTV D20 DT BL	12.1			69	0.0	0	0.0 0
WCLF D21 DT LIC	8.1			1,677	8.1	1,677	8.1 1,677
WKME-CD D21 DC BL	137.4			8,977	24.2	1,301	20.2 1,603

Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	APP	ST. PETERSBURG, FL	WTOG ATC 255KW	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	0.0 km
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDDT20030328ANV	281.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	289.0
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	358.7
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	200.2
	WZXZ-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.7
	WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	3.1

	Service area		Terrain-limited		IX-free		Percent IX
	33536.9	4,747,365	33532.9	4,747,310	33420.2	4,735,873	0.34 0.24

Undesired				Total IX	Unique IX	Prct Unique IX	
WJAX-TV D19 DT LIC	100.6			11,059	96.6	11,053	0.29 0.23
WTLH D19 DT BL	8.0			12	4.0	6	0.01 0.00
WFTT-DT D20 DT CP	8.1			372	8.1	372	0.02 0.01

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	74112
	State	Florida
	City	ST. PETERSBURG
	DTV Channel	19
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	3

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1057473
Coordinates (NAD83)	Latitude	27° 49' 10.8" N+
	Longitude	082° 15' 38.0" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	485.5 meters
	Support Structure Height	440.1 meters
	Ground Elevation (AMSL)	22.9 meters
Antenna Data	Height of Radiation Center Above Ground Level	475 meters
	Height of Radiation Center Above Average Terrain	477.7 meters
	Height of Radiation Center Above Mean Sea Level	497.9 meters
	Effective Radiated Power	255 kW

**Antenna
Technical Data**

Section	Question	Response
Antenna Type	Antenna Type	Non-Directional
	Do you have an Antenna ID?	
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	RFS
	Model	PEPL56D VPT
	Rotation	
	Electrical Beam Tilt	0.75
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Elliptical
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

**Construction
Permit
Certifications**

Section	Question	Response
<p>Post-Incentive Auction Expedited Processing</p>	<p>It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.</p>	<p>Yes</p>
	<p>It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.</p>	<p>No</p>
	<p>It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.</p>	<p>Yes</p>
	<p>The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect 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.</p>	<p>Yes</p>
<p>Environmental Effect</p>	<p>Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)</p>	<p>No</p>
<p>Broadcast Facility</p>	<p>The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C.F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.</p>	<p>Yes</p>