

ENGINEERING EXHIBIT

Incentive Auction Channel Reassignment

Application for Digital Television Station Construction Permit

prepared for

Hearst Properties Inc.

WMOR-TV Lakeland, FL

Facility ID 53819

Ch. 18 940 kW 478 m

Hearst Properties Inc. (“Hearst”) is the licensee of digital television station WMOR-TV, Channel 19, Facility ID 53819, Lakeland, FL. *Hearst* herein proposes construction of the WMOR-TV post-auction facility on Channel 18. Reassignment of WMOR-TV from Channel 19 to Channel 18 was specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“CCRPN”, DA 17-317, released April 13, 2017).

The proposed Channel 18 operation will employ a new broadband antenna system to be top-mounted on the WMOR-TV candelabra tower. The proposed antenna will be shared with several other post-auction facilities. The existing tower structure corresponds to FCC Antenna Structure Registration number 1057473. No change to the overall structure height will result.

Hearst proposes to operate WMOR-TV with an effective radiated power (“ERP”) of 940 kW at 478 meters antenna height above average terrain (“HAAT”). The proposed antenna is a nondirectional RFS model PEPL56D VPT.¹

A map is supplied as Figure 1 which depicts the standard predicted coverage contours. This map includes the location of Lakeland, WMOR-TV’s principal community. As

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. WMOR-TV will initially operate with horizontal polarization only. 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 940 kW and the vertically polarized ERP will not exceed the horizontally polarized ERP.

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 noise limited service contour (“NLSC”) extends beyond that of the *CCRPN* parameters of 976 kW ERP and 458 meters HAAT. The proposal complies with §73.3700(b)(ii) as described in the following.

WMOR-TV’s reassignment facility experiences a loss of interference-free coverage area within the NLSC when compared to that of its baseline² pre-auction facility. Detailed analysis shows that an area of 667.3 square kilometers having a population of 14,507 persons which received interference-free service from the baseline WMOR-TV facility does not receive interference-free service from the reassignment parameters. A map is supplied as Figure 2 which shows the interference-free results for the *CCRPN* parameters and the baseline interference-free individual cells that are lost at reassignment. Therefore, WMOR-TV qualifies under §73.3700(b)(ii)(A) for a contour extension due the loss of interference-free coverage area resulting from the new channel assignment.

Interference study per FCC OET Bulletin 69³ 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 3 supplies a coverage contour comparison of the proposed WMOR-TV facility to the reassignment

²“*Final Digital Television Baseline Coverage Area And Population Served Information Related To Incentive Auction Repacking*,” DA 15-1296, Public Notice, Released November 12, 2015.

³FCC 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.

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).

The proposed WMOR-TV facility's terrain-limited population provides a 100.7 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	5,387,190	5,426,969
Not affected by terrain losses	5,387,031	5,426,810
Match of Reassignment	---	100.74%

The proposed 940 kW ERP exceeds the maximum permitted by §73.622(f)(8)(i) for the proposed antenna HAAT of 478 meters. 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. As demonstrated in Figure 4, the total area within the proposed WMOR-TV NLSC is 39,563 square kilometers, which does not exceed the NLSC area of WTVT(DT) (43,998 sq. km, Ch. 12, Tampa FL, BLCDT-20080410AAF). Thus, the 940 kW ERP specified herein is in compliance with §73.622(f)(5) of the FCC's Rules.

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

Human Exposure to Radiofrequency Electromagnetic Field

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 antenna relative field in downward elevations (pattern data shows less than 10 percent relative field at angles 10 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 $1.4 \mu\text{W}/\text{cm}^2$, which is 0.4 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	Reassignment Service Loss
Figure 3	Proposed Contour Expansion
Figure 4	Maximum ERP per §73.622(f)
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



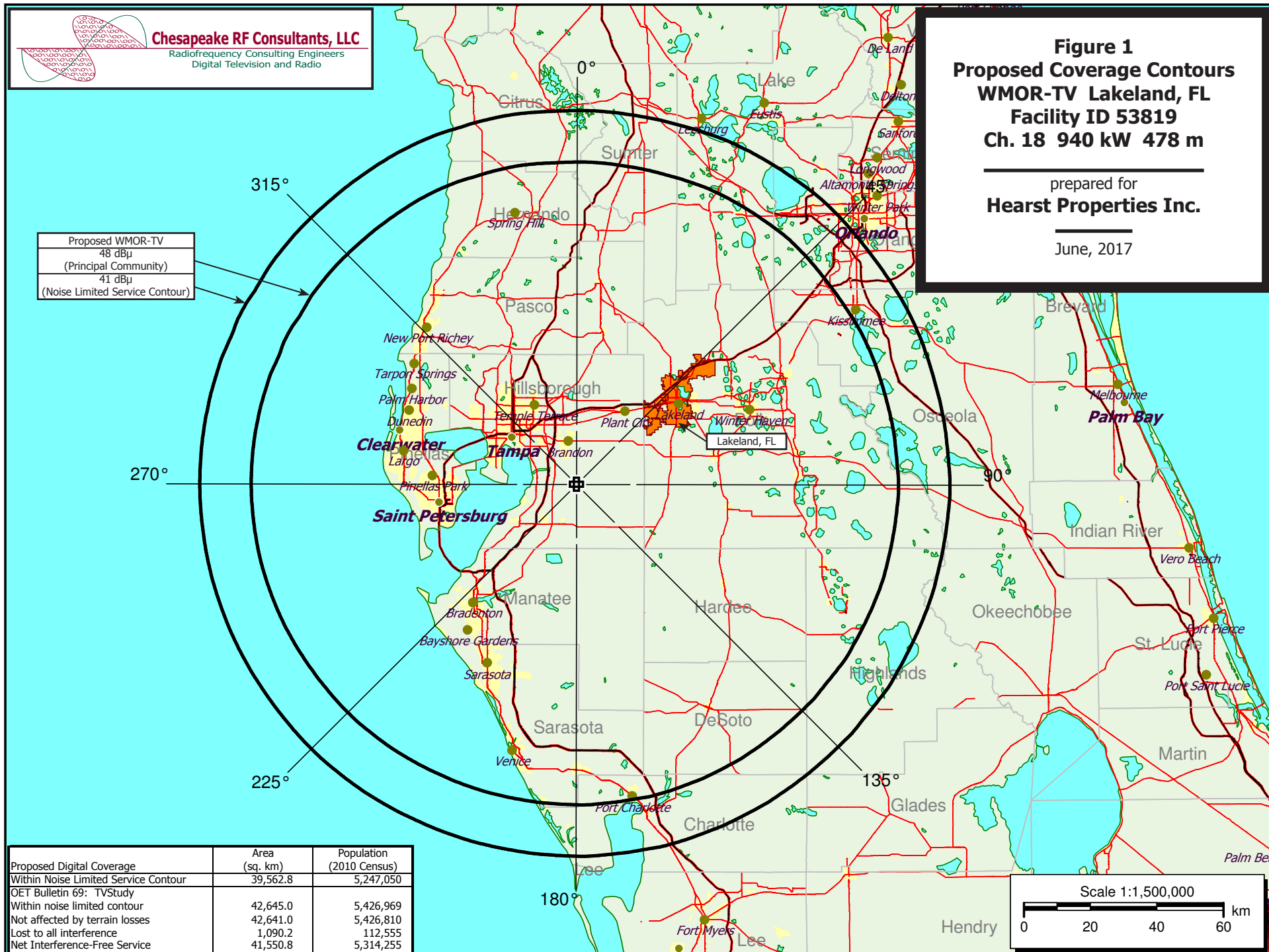
Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Proposed Coverage Contours
WMOR-TV Lakeland, FL
Facility ID 53819
Ch. 18 940 kW 478 m

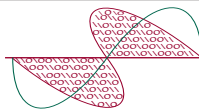
prepared for
Hearst Properties Inc.

June, 2017

Proposed WMOR-TV
48 dBu
(Principal Community)
41 dBu
(Noise Limited Service Contour)



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	39,562.8	5,247,050
OET Bulletin 69: TVStudy		
Within noise limited contour	42,645.0	5,426,969
Not affected by terrain losses	42,641.0	5,426,810
Lost to all interference	1,090.2	112,555
Net Interference-Free Service	41,550.8	5,314,255





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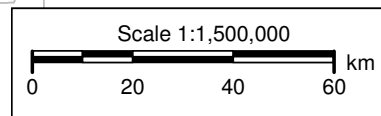
Figure 2
Reassignment Service Loss
WMOR-TV Lakeland, FL
Facility ID 53819
Ch. 18 940 kW 478 m

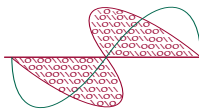
prepared for
Hearst Properties Inc.

June, 2017

Incentive Auction
Protected Contour Area

FCC "TVStudy" Analysis Incentive Auction Settings		Area (sq km)	Population (2010 Census)
	2017 Reassignment Parameters Total Interference-Free Service	40,834.4	5,290,025
	2015 Baseline Interference-Free Service Cells Lost at 2017 Reassignment	667.3	14,507





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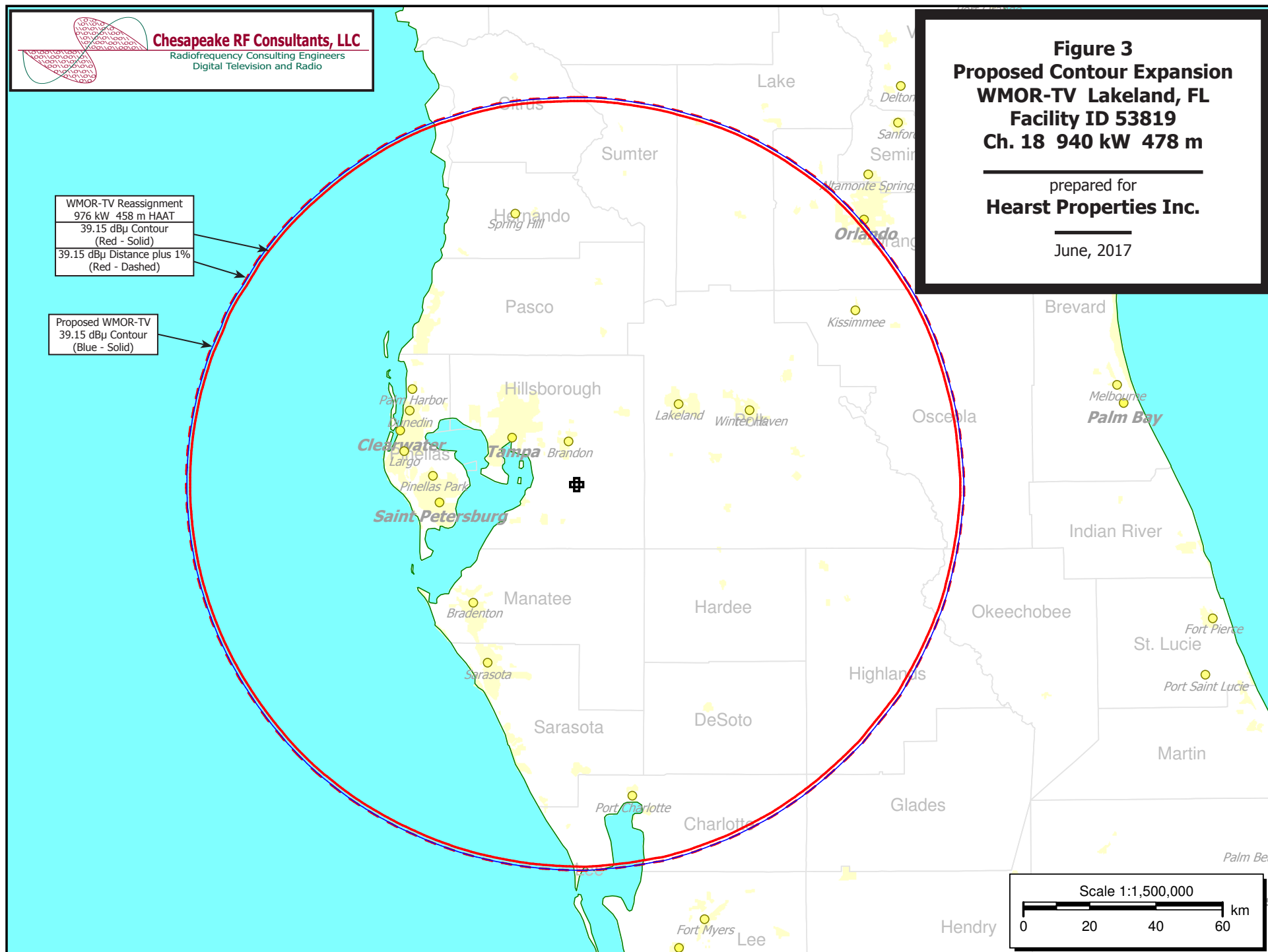
Figure 3
Proposed Contour Expansion
WMOR-TV Lakeland, FL
Facility ID 53819
Ch. 18 940 kW 478 m

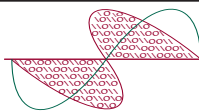
prepared for
Hearst Properties Inc.

June, 2017

WMOR-TV Reassignment
976 kW 458 m HAAT
39.15 dBμ Contour
(Red - Solid)
39.15 dBμ Distance plus 1%
(Red - Dashed)

Proposed WMOR-TV
39.15 dBμ Contour
(Blue - Solid)





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

Figure 4
Maximum ERP per §73.622(f)
WMOR-TV Lakeland, FL
Facility ID 53819
Ch. 18 940 kW 478 m

prepared for
Hearst Properties Inc.

June, 2017

WTVT Ch. 12 Tampa, FL
BLCDT-20080410AAF
36 dBμ Contour (NLSC)
Area: 43,998 sq. km

Proposed WMOR-TV
41 dBμ Contour (NLSC)
Area: 39,563 sq. km

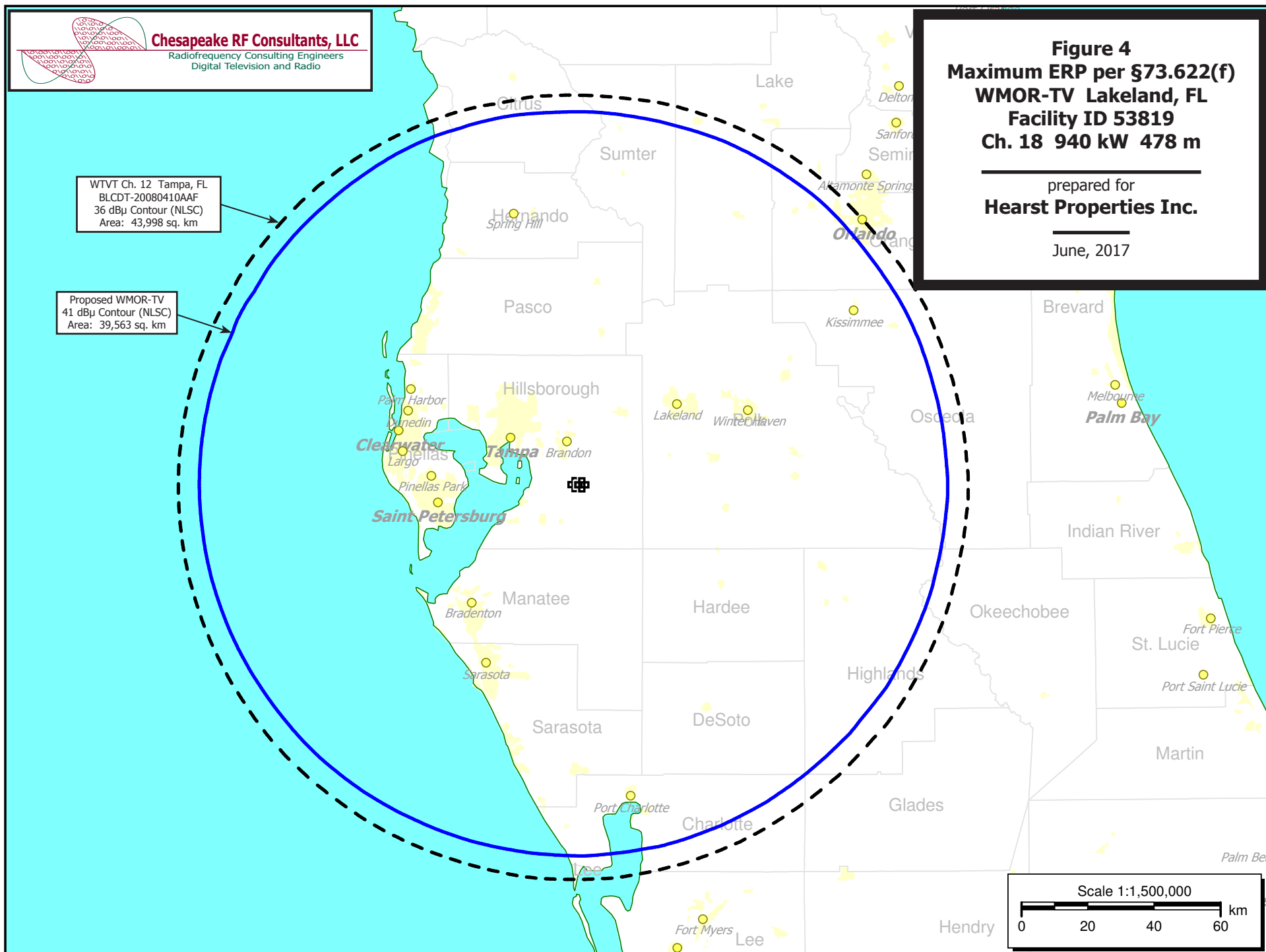
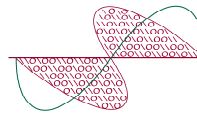


Table 1 WMOR-TV OET Bulletin 69 Interference Study
(page 1 of 6)



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

tvstudy v2.2.2

Database: localhost, Study: WMOR-TV 940KW TOP, Model: Longley-Rice
Start: 2017.06.30 15:25:51

Study created: 2017.06.30 15:25:44

Study build station data: LMS TV 2017-06-29 LMSTV

Proposal: WMOR-TV D18 DT APP LAKELAND, FL
File number: WMOR-TV 940KW TOP
Facility ID: 53819
Station data: User record
Record ID: 704
Country: U.S.
Zone: III

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	2.5 km
WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	223.6
WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	281.3
WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	1.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18
Latitude: 27 49 10.80 N (NAD83)
Longitude: 82 15 38.00 W
Height AMSL: 497.9 m
HAAT: 477.7 m
Peak ERP: 940 kW
Antenna: Omnidirectional

39.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	940 kW	477.5 m	116.5 km
45.0	940	481.1	116.7
90.0	940	474.7	116.3
135.0	940	464.5	115.5
180.0	940	469.0	115.9
225.0	940	479.2	116.6
270.0	940	488.3	117.2
315.0	940	486.9	117.1

ERP exceeds maximum

ERP: 940 kW ERP maximum: 577 kW

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: 940 kW Field strength: 32.1 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

Study cell size: 2.00 km

Profile point spacing: 1.00 km

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

Table 1 WMOR-TV OET Bulletin 69 Interference Study
(page 2 of 6)



Maximum new IX to LPTV: 2.00%

Interference to DTVBL64588 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	2.5 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	2.5
	WCJB-TV	D16	DT	LIC	GAINESVILLE, FL	BLCDT20071119AJB	188.8
	WRCF-CD	D16	DC	CP	ORLANDO, FL	BLANK0000024682	142.1
	WPBF	D16	DT	LIC	TEQUESTA, FL	BLANK0000001052	200.8
	WFUX	D17	DT	BL	LIVE OAK, FL	DTVBL22245	309.6
	WPMF-CD	D17	DC	CP	MIAMI, FL	BLANK0000024932	290.3
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	224.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38252.8 5,077,970		38236.8 5,077,719		38200.9 5,070,985		38196.8 5,070,831	0.01 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMOR-TV D18 DT BL		28.0 6,402		28.0 6,402			
WMOR-TV D18 DT APP		32.0 6,556				32.0 6,556	
WTCN-CA D17 DC BL		7.9 332		7.9 332		7.9 332	

Interference to DTVBL64588 BL, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	2.5 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	2.5
	WCJB-TV	D16	DT	LIC	GAINESVILLE, FL	BLCDT20071119AJB	188.8
	WRCF-CD	D16	DC	BL	ORLANDO, FL	DTVBL10549	129.3
	WPBF	D16	DT	LIC	TEQUESTA, FL	BLANK0000001052	200.8
	WFUX	D17	DT	BL	LIVE OAK, FL	DTVBL22245	309.6
	WPMF-CD	D17	DC	CP	MIAMI, FL	BLANK0000024932	290.3
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	224.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38252.8 5,077,970		38236.8 5,077,719		38200.9 5,070,985		38196.8 5,070,831	0.01 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMOR-TV D18 DT BL		28.0 6,402		28.0 6,402			
WMOR-TV D18 DT APP		32.0 6,556				32.0 6,556	
WTCN-CA D17 DC BL		7.9 332		7.9 332		7.9 332	

Interference to DTVBL64588 BL, scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	2.5 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	2.5
	WCJB-TV	D16	DT	LIC	GAINESVILLE, FL	BLCDT20071119AJB	188.8
	WRCF-CD	D16	DC	CP	ORLANDO, FL	BLANK0000024682	142.1
	WPBF	D16	DT	LIC	TEQUESTA, FL	BLANK0000001052	200.8
	WFUX	D17	DT	BL	LIVE OAK, FL	DTVBL22245	309.6
	WPMF-CD	D17	DC	BL	MIAMI, FL	DTVBL30129	290.3
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	224.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
38252.8 5,077,970		38236.8 5,077,719		38200.9 5,070,985		38196.8 5,070,831	0.01 0.00
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMOR-TV D18 DT BL		28.0 6,402		28.0 6,402			
WMOR-TV D18 DT APP		32.0 6,556				32.0 6,556	
WTCN-CA D17 DC BL		7.9 332		7.9 332		7.9 332	

Interference to DTVBL64588 BL, scenario 4

Table 1 WMOR-TV OET Bulletin 69 Interference Study
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	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	2.5 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	2.5
	WCJB-TV	D16	DT	LIC	GAINESVILLE, FL	BLCDT20071119AJB	188.8
	WRCF-CD	D16	DC	BL	ORLANDO, FL	DTVBL10549	129.3
	WPBF	D16	DT	LIC	TEQUESTA, FL	BLANK0000001052	200.8
	WFXU	D17	DT	BL	LIVE OAK, FL	DTVBL22245	309.6
	WPMF-CD	D17	DC	BL	MIAMI, FL	DTVBL30129	290.3
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	224.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
38252.8 5,077,970	38236.8 5,077,719	38200.9 5,070,985	38196.8 5,070,831	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.0 6,402	28.0 6,402	
WMOR-TV D18 DT APP	32.0 6,556		32.0 6,556
WTCN-CA D17 DC BL	7.9 332	7.9 332	7.9 332

Interference to DTVBL29715 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	223.6 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	223.6
	WPMF-CD	D17	DC	CP	MIAMI, FL	BLANK0000024932	117.5
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	0.0
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	385.1
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	115.5

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23780.9 2,600,584	23780.9 2,600,584	23777.0 2,600,541	23777.0 2,600,541	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	4.0 43	4.0 43	
WMOR-TV D18 DT APP	4.0 43		4.0 43

Interference to DTVBL29715 BL, scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	223.6 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	223.6
	WPMF-CD	D17	DC	BL	MIAMI, FL	DTVBL30129	117.5
	WTCN-CA	D17	DC	BL	PALM BEACH, FL	DTVBL70865	0.0
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	385.1
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	115.5

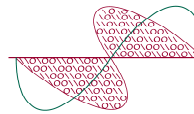
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23780.9 2,600,584	23780.9 2,600,584	23777.0 2,600,541	23777.0 2,600,541	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	4.0 43	4.0 43	
WMOR-TV D18 DT APP	4.0 43		4.0 43

Interference to DTVBL53116 BL, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	281.3 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	281.3
	WFXU	D17	DT	BL	LIVE OAK, FL	DTVBL22245	143.3
	WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	385.1
	WLCN-CD	D18	DC	LIC	CHARLESTON, SC	BLDTA20090616AAY	334.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	1.8

Table 1 WMOR-TV OET Bulletin 69 Interference Study
(page 4 of 6)



Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26461.0 1,608,682	26461.0 1,608,682	26261.3 1,602,715	26273.3 1,602,856	-0.05 -0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	199.7 5,967	199.7 5,967	
WMOR-TV D18 DT APP	187.7 5,826		187.7 5,826

Interference to DTVBL74112 BL, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.2
	WZZX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.5
	WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	2.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33824.6 4,796,964	33804.5 4,796,188	33667.8 4,785,111	33639.5 4,784,862	0.08 0.01

Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1 2,998	28.1 2,998	
WMOR-TV D18 DT APP	56.4 3,247		56.4 3,247
WJAX-TV D19 DT LIC	104.6 8,073	104.6 8,073	104.6 8,073
WTLH D19 DT BL	4.0 6	4.0 6	4.0 6

Interference to DTVBL74112 BL, scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.2
	WZZX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	130.5
	WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	2.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33824.6 4,796,964	33804.5 4,796,188	33667.8 4,785,111	33639.5 4,784,862	0.08 0.01

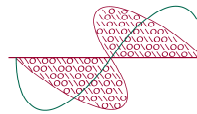
Undesired	Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1 2,998	28.1 2,998	
WMOR-TV D18 DT APP	56.4 3,247		56.4 3,247
WJAX-TV D19 DT LIC	104.6 8,073	104.6 8,073	104.6 8,073
WTLH D19 DT BL	4.0 6	4.0 6	4.0 6

Interference to DTVBL74112 BL, scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.2
	WZZX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.5
	WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	2.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
33824.6 4,796,964	33804.5 4,796,188	33667.8 4,785,111	33639.5 4,784,862	0.08 0.01

Table 1 WMOR-TV OET Bulletin 69 Interference Study
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Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to DTVBL74112 BL, scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.2
	WZZX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	130.5
	WFTT-DT	D20	DT	CP	TAMPA, FL	BLANK0000025106	2.0

	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	33824.6	4,796,964	33804.5	4,796,188	33667.8	4,785,111	33639.5
							4,784,862
							0.08
							0.01

Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to DTVBL74112 BL, scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.2
	WZZX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.5
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	2.0

	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	33824.6	4,796,964	33804.5	4,796,188	33667.8	4,785,111	33639.5
							4,784,862
							0.08
							0.01

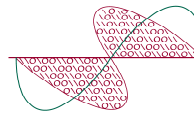
Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to DTVBL74112 BL, scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	APP	FORT PIERCE, FL	BLANK0000025128	201.2
	WZZX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	130.5
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	2.0

	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	33824.6	4,796,964	33804.5	4,796,188	33667.8	4,785,111	33639.5
							4,784,862
							0.08
							0.01

Table 1 WMOR-TV OET Bulletin 69 Interference Study
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Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to DTVBL74112 BL, scenario 7

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.2
	WZZX-CD	D20	DC	CP	ORLANDO, ETC., FL	BLANK0000025143	130.5
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	2.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
33824.6	4,796,964	33804.5	4,796,188	33667.8	4,785,111	33639.5	4,784,862
							0.08 0.01

Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to DTVBL74112 BL, scenario 8

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	
Undesireds:	WMOR-TV	D18	DT	BL	LAKELAND, FL	DTVBL53819	1.2 km
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	1.3
	WJAX-TV	D19	DT	LIC	JACKSONVILLE, FL	BLCDDT20030328ANV	280.7
	WSBS-CD	D19	DC	BL	MIAMI, ETC., FL	DTVBL29547	290.2
	WTLH	D19	DT	BL	BAINBRIDGE, GA	DTVBL23486	357.5
	WTVX	D20	DT	BL	FORT PIERCE, FL	DTVBL35575	201.2
	WZZX-CD	D20	DC	BL	ORLANDO, ETC., FL	DTVBL70415	130.5
	WFTT-DT	D20	DT	BL	TAMPA, FL	DTVBL60559	2.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
33824.6	4,796,964	33804.5	4,796,188	33667.8	4,785,111	33639.5	4,784,862
							0.08 0.01

Undesired		Total IX	Unique IX, before	Unique IX, after
WMOR-TV D18 DT BL	28.1	2,998	28.1	2,998
WMOR-TV D18 DT APP	56.4	3,247		56.4
WJAX-TV D19 DT LIC	104.6	8,073	104.6	8,073
WTLH D19 DT BL	4.0	6	4.0	6

Interference to proposal, scenario 1
2.07% interference

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMOR-TV	D18	DT	APP	LAKELAND, FL	WMOR-TV 940KW TOP	
Undesireds:	WFTS-TV	D17	DT	BL	TAMPA, FL	DTVBL64588	2.5 km
	WTCE-TV	D18	DT	BL	FORT PIERCE, FL	DTVBL29715	223.6
	WJXT	D18	DT	BL	JACKSONVILLE, FL	DTVBL53116	281.3
	WTOG	D19	DT	BL	ST. PETERSBURG, FL	DTVBL74112	1.3

Service area	Terrain-limited	IX-free	Percent IX
42645.0	5,426,969	42641.0	5,426,810
		41550.8	5,314,255
			2.56 2.07

Undesired		Total IX	Unique IX	Prct Unique IX
WFTS-TV D17 DT BL	8.1	28	8.1	28
WTCE-TV D18 DT BL	832.8	31,962	736.0	16,561
WJXT D18 DT BL	346.1	95,966	249.3	80,565
				0.02 0.00
				1.73 0.31
				0.58 1.48

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	53819
	State	Florida
	City	LAKELAND
	DTV Channel	18
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	2

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	475.0 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	940 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	Horizontal
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
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	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.	No
	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.	Yes
	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.	Yes
Environmental Effect	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.)	No
Broadcast Facility	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.	Yes