

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington DC 20554

In re:)
)
Gray Television Licensee, LLC)
)
Petition for Rulemaking to Amend)
the DTV Table of Allotments for)
Station WJHG-TV, Panama City, Florida)

MB Docket No. _____

Rulemaking No. **FILED/ACCEPTED**

MAY 26 2011

To: Office of the Secretary
Attn: Chief, Media Bureau

Federal Communications Commission
Office of the Secretary

PETITION FOR RULEMAKING

Gray Television Licensee, LLC (“Gray”), licensee of Station WJHG-TV , Panama City, Florida (“WJHG”), by counsel hereby requests that the Commission amend the post-transition DTV Table of Allotments (the “DTV Table”)¹ to change WJHG’s digital allotment from VHF Channel 7 to UHF Channel 18 with the technical parameters as set forth in the attached Engineering Statement. This channel substitution serves the public interest by resolving significant over-the-air reception problems in certain areas of WJHG’s predicted service area and by improving the possibility for service to viewers using hand-held and mobile devices. WJHG requests expedited action on this request so that it can begin to operate with a more robust digital signal as soon as possible.

The attached Engineering Statement of Chesapeake RF Consultants, LLC sets forth in detail the specifications for WJHG’s proposed amendment of the DTV Table.² This proposal complies with all relevant technical requirements for amendment of the post-transition DTV Table, including the interference protection requirements of

¹ 47 C.F.R. §73.622(i).

² See Exhibit 1 (“Engineering Statement”).

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47 C.F.R. § 73.616 and the 0.5% *de minimis* interference standard with respect to all existing and proposed allotments and assignments. As demonstrated in the Engineering Statement, WJHG's proposed Channel 18 facility will provide full principal community coverage to Panama City, Florida.

Since WJHG ended analog broadcasts in June 2009, its viewers have complained of difficulty receiving the station's over-the-air digital signal. Despite two subsequent power increases,³ WJHG's viewers continue to experience problems receiving the station's VHF Channel 7 digital broadcasts. The digital reception issues on low-VHF channels have been well documented, and real-world experience shows that, overall, indoor antennas are better able to receive digital signals broadcast on UHF channels. WJHG's staff have worked diligently with viewers to attempt to resolve reception complaints, and it has become clear that the best solution to resolve the majority of viewers' reception problems is to move to a UHF channel.

The proposed Channel 18 facility specifies a directional antenna and a 1000 kW power level, the maximum power level allowed for a UHF channel allotment. At these parameters, the proposed facility provides a 238.2 percent match to the Appendix B facility and increases the net total population served by 514,963 persons. In addition, UHF channels provide better coverage for hand-held and mobile devices. While WJHG's primary concern is restoring service to its analog viewers, the station would embrace an opportunity to bring over-the-air mobile video programming to residents of Panama City. Accordingly, WJHG requests that the Commission authorize it to operate on Channel 18, a UHF channel, in order to restore over-the-air service to viewers experiencing indoor VHF reception problems.

³ See FCC File Nos. BMPCDT-20080611ABD and BPCDT-20100920AEA.

For the foregoing reasons, the proposed amendment to the DTV Table of Allotments will clearly serve the public interest. Gray therefore respectfully requests that the Commission amend the DTV Table in accordance with the specifications set forth in the attached Engineering Statement.

Respectfully submitted,

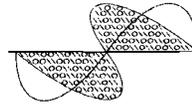
GRAY TELEVISION LICENSEE, LLC

A handwritten signature in black ink, appearing to read 'Joan Stewart', is written over a horizontal line.

Joan Stewart
Wiley Rein LLP
1776 K Street NW
Washington DC 20006
202.719.7000
Its Attorneys

Dated: May 26, 2011

Exhibit 1



Engineering Statement
Digital Television Channel Change
prepared for
Gray Television Licensee, LLC
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 450 m

This engineering statement has been prepared on behalf of *Gray Television Licensee, LLC* (“*Gray*”), licensee of WJHG-TV (Facility ID 73136, Panama City, FL) in support of a *Petition for Rulemaking* to change the WJHG-TV digital television (“DTV”) post-transition channel assignment and related technical parameters. WJHG-TV’s pre-transition operations were on analog VHF Channel 7 and digital VHF Channel 8. Post-transition, WJHG-TV operates as digital on VHF Channel 7 as established in Appendix B of the Seventh Report and Order in MB Docket 87-268. A license application is pending (BLCDDT-20101025AAT) to cover construction of the WJHG-TV digital Channel 7 facility. *Gray* herein requests a channel substitution for WJHG-TV.

Gray proposes herein to substitute UHF Channel 18 in lieu of the current VHF Channel 7 digital allotment. An increased antenna height at the existing WJHG-TV tower location¹ is specified with 1000 kW effective radiated power (“ERP”) using a directional antenna at 450 meters height above average terrain (“HAAT”). The channel substitution is intended to aid in recovering viewers that were lost when WJHG-TV ceased analog operation on the transition date.

Since the transition to digital and despite power increases already implemented,² many viewers continue to experience significant difficulty in receiving WJHG-TV’s digital signal as

¹Updated geographic coordinates (one-second change in Latitude) are specified in order to conform to the WJHG-TV tower’s Antenna Structure Registration data (#1029017).

²WJHG-TV commenced digital operation on Channel 7 at 40.4 kW effective radiated power (“ERP”) and 262 meters antenna height above average terrain in June 2009 pursuant to BMPCDDT-20090527ACZ. In August 2009 WJHG-TV’s ERP was increased to 49 kW as authorized by BMPCDDT-20080611ABD. The WJHG-TV ERP was raised to 67 kW in October 2010 as authorized by BPCDDT-20100920AEA. A license application is pending to cover the 67 kW operation (BLCDDT-20101025AAT).

described elsewhere in the *Petition for Rulemaking*. Gray believes that changing to a UHF channel and use of elliptical polarization will substantially restore service and especially improve indoor reception as well as offer better reception by mobile/handheld devices.

The proposal specifies use of the licensed WJHG-TV site location with increased antenna height, as summarized in the following.

Present Channel 7 Parameters (Appendix B)

Facility ID	State and City		NTSC	DTV								
				Chan	Chan	ERP (kW)	HAAT (m)	Antenna ID	Latitude (DDMMSS)	Longitude (DDDMMSS)	Area (sq km)	Population (thous)
73136	FL	PANAMA CITY	7	7	52	244	74969	302600	852451	25857	372	0.4

Antenna C/R AMSL: 283 meters

Proposed Channel 18 Parameters

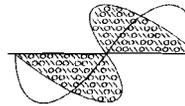
Facility ID	State and City		NTSC	DTV								
				Chan	Chan	ERP (kW)	HAAT (m)	Antenna ID	Latitude (DDMMSS)	Longitude (DDDMMSS)	Area (sq km)	Population (thous)
73136	FL	PANAMA CITY	7	18	1000	450	Fig-1	302559	852451	38613	888	0.0

Antenna C/R AMSL: 489 meters

The proposed Channel 18 directional antenna pattern data is provided in Figure 1.

A map is supplied as Figure 2 which depicts the standard predicted coverage contours. This map includes the boundaries of Panama City FL, WJHG-TV'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.

Figure 3 provides a coverage contour comparison, demonstrating that the channel substitution would not result in any loss area over land from the authorized digital, Appendix B, and former analog operations. The proposed WJHG-TV allotment's predicted service population provides a 238.2 percent match of the current Appendix B facility, as detailed in the following table.



Digital Television Population Summary

Population Summary (2000 Census) OET Bulletin 69 method	Appendix B	Proposed
Within Noise Limited Contour	375,293	891,313
Not affected by terrain losses	374,076	887,734
Lost to all interference	1,424	119
Net DTV Service	372,652	887,615
Match of Appendix B	---	238.19%

A detailed interference study per OET Bulletin 69³ shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby stations. The interference study output report is provided as Table 1. Protection requirements towards authorized Class A stations are also satisfied.

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 450 meters currently permitted by §73.622(f)(8)(i). Section 73.622(f)(5) permits the maximum ERP to be exceeded in order to provide the same geographic coverage area as the largest station within the same market. The total area within the proposed WJHG-TV 41 dBμ contour is 35,646 square kilometers, which does not exceed the 35,812 square kilometers within the licensed WMBB(DT) (Ch. 13, Panama City, FL, BLCDT-20090220AAF) 36 dBμ service contour. A coverage contour comparison map is provided as Figure 4. Thus, the ERP specified herein is in compliance with §73.622(f)(5) of the Commission's Rules.

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.

Certification

The undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief.



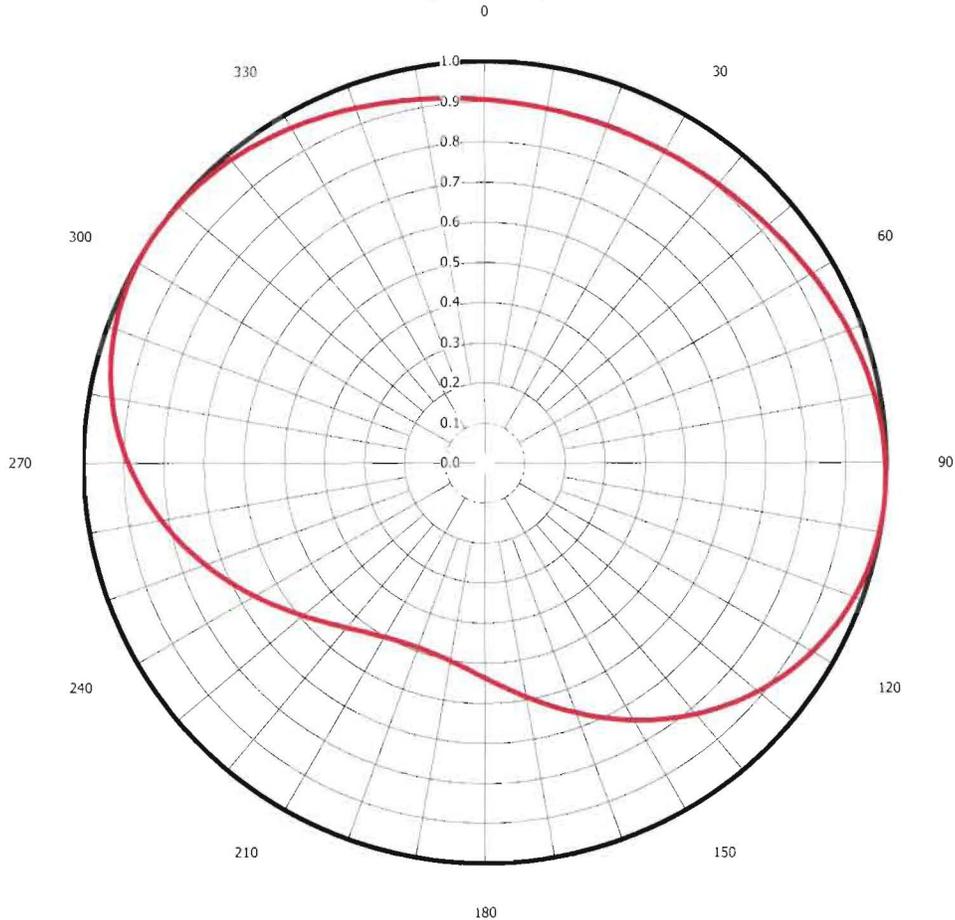
Joseph M. Davis, P.E.
February 8, 2011

Chesapeake RF Consultants, LLC
207 Old Dominion Road
Yorktown, VA 23692
703-650-9600

List of Attachments

- | | |
|----------|---------------------------------------|
| Figure 1 | Directional Antenna Azimuthal Pattern |
| Figure 2 | Proposed Coverage Contours |
| Figure 3 | Coverage Contour Comparison |
| Figure 4 | Maximum ERP per §73.622(f) |
| Table 1 | OET Bulletin 69 Interference Study |

**Azimuth Pattern - Relative Field
(True North)**



Azimuth (°T)	Relative Field	Azimuth (°T)	Relative Field	Azimuth (°T)	Relative Field	Azimuth (°T)	Relative Field
0	0.905	90	0.998	180	0.537	270	0.888
10	0.896	100	0.998	190	0.502	280	0.943
20	0.893	110	0.980	200	0.490	290	0.980
30	0.896	120	0.943	210	0.502	300	0.998
40	0.905	130	0.888	220	0.537	310	0.998
50	0.920	140	0.818	230	0.593	320	0.985
60	0.941	150	0.741	240	0.663	330	0.964
70	0.964	160	0.663	250	0.741	340	0.941
80	0.985	170	0.593	260	0.818	350	0.920

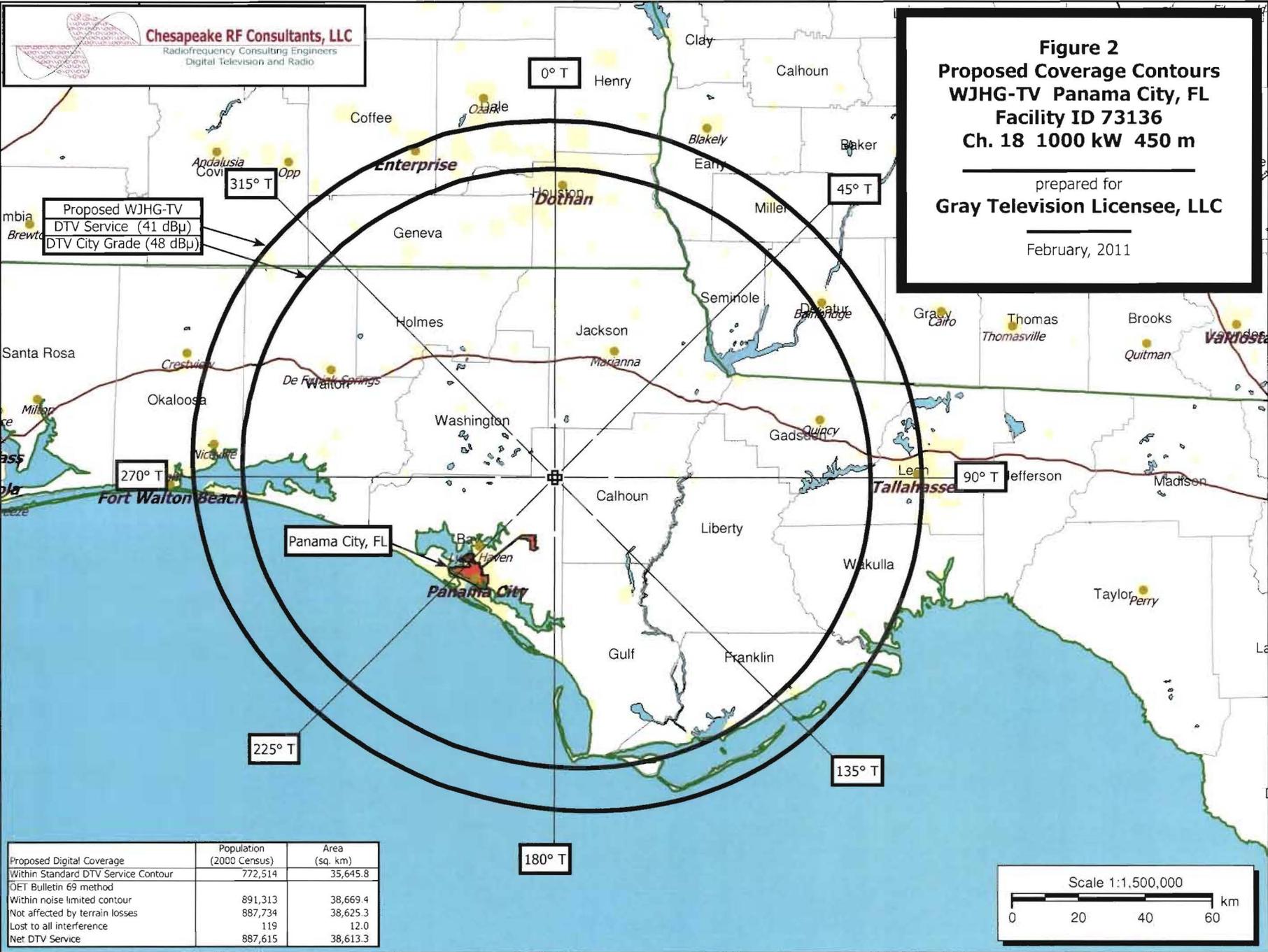
Special Radials	
95	1.000
305	1.000

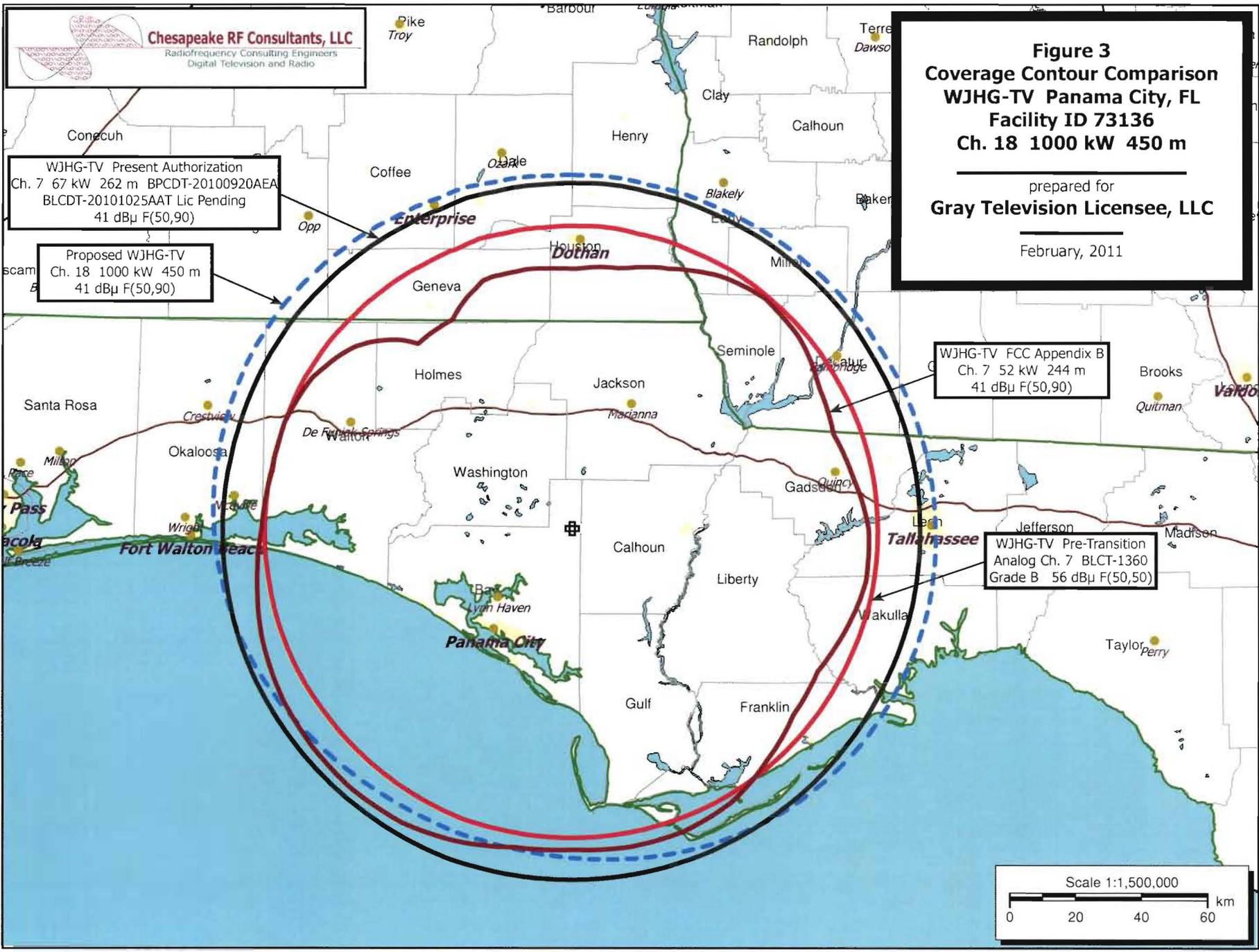


Figure 1
Directional Antenna Azimuth Pattern
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 450 m

prepared for
Gray Television Licensee, LLC

February, 2011





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

Figure 3
Coverage Contour Comparison
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 450 m

prepared for
Gray Television Licensee, LLC

February, 2011

WJHG-TV Present Authorization
 Ch. 7 67 kW 262 m BPCDT-20100920AEA
 BLCDT-20101025AAT Lic Pending
 41 dBμ F(50,90)

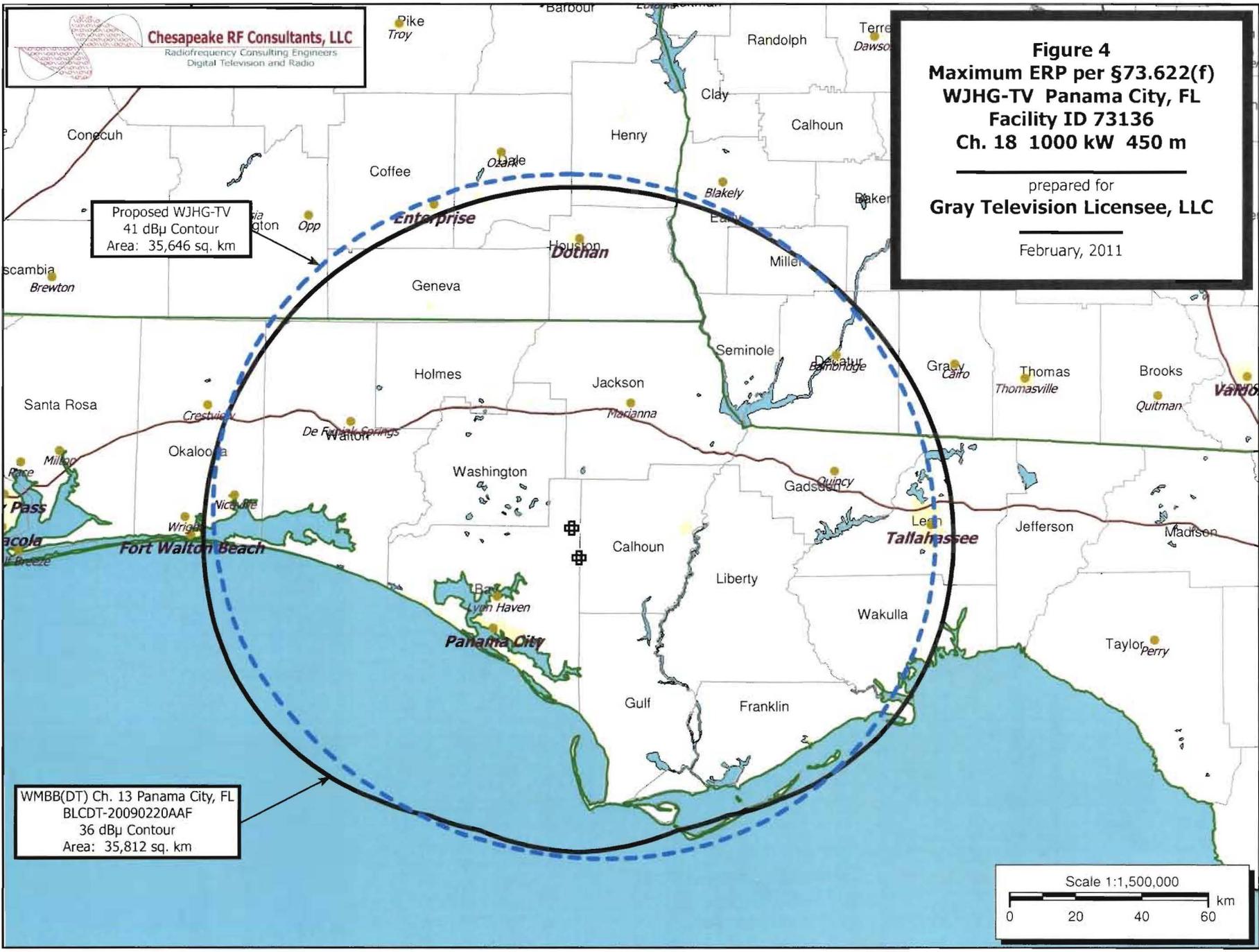
Proposed WJHG-TV
 Ch. 18 1000 kW 450 m
 41 dBμ F(50,90)

WJHG-TV FCC Appendix B
 Ch. 7 52 kW 244 m
 41 dBμ F(50,90)

WJHG-TV Pre-Transition
 Analog Ch. 7 BLCT-1360
 Grade B 56 dBμ F(50,50)

Scale 1:1,500,000

0 20 40 60 km



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

Figure 4
Maximum ERP per §73.622(f)
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 450 m

prepared for
Gray Television Licensee, LLC

February, 2011

Proposed WJHG-TV
 41 dBμ Contour
 Area: 35,646 sq. km

WMBB(DT) Ch. 13 Panama City, FL
 BLCDT-20090220AAF
 36 dBμ Contour
 Area: 35,812 sq. km

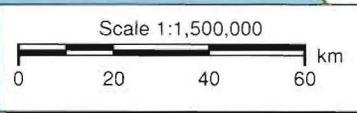


Table 1 WJHG-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 1 of 4)

TW Census data selected 2000
Data Base Selected
/space/software/cdbs/pt_tvdb.sff
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 02-07-2011 Time: 11:52:33

Record Selected for Analysis

WJHG-TV USERRECORD-01 PANAMA CITY FL US
Channel 18 ERP 1000. kW HAAT 450. m RCAMSL 00469 m
Latitude 030-25-59 Longitude 0085-24-51
Status APP Zone 3 Border Site number: 01
Dir Antenna Make usr Model AND WC Beam tilt N Ref Azimuth 20.
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 (site # 01) does not meet maximum height/power limits
Channel 18 ERP = 1000.00 HAAT = 450.

Site number	ERP	HAAT	41.0 dBu F(50,90)
Azimuth (Deg)	(kW)	(m)	(km)
0.0	819.025	432.1	107.0
45.0	832.656	436.5	107.6
90.0	996.004	445.0	110.2
135.0	727.609	457.8	108.0
180.0	288.369	463.8	99.5
225.0	319.225	462.9	100.4
270.0	788.544	459.0	109.0
315.0	983.072	443.0	109.9

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap
to Class A stations from site # 01

Class A Evaluation Complete

Checks to Site Number 01

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Table 1 WJHG-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 2 of 4)

Proposed facility OK toward Table Mountain
Proposed facility is beyond the Canadian coordination distance
Proposed facility is beyond the Mexican coordination distance
Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
18	WJHG-TV	PANAMA CITY FL	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WEAR-TV	PENSACOLA FL	214.5	LIC	BLCDT	20050627AAK
18	WDBB	BESSEMER AL	387.1	LIC	BLCDT	20060421ABG
18	WSVT-CA	TAMPA FL	422.0	CP MOD	BMPDTA	20101109ADQ

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Analysis of Interference to Affected Station 1

Channel	Call	City/State	Application	Ref. No.
17	WEAR-TV	PENSACOLA FL	BLCDT	-20050627AAK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WMAH-TV	BILOXI MS	125.3	CP MOD	BMPEDT	-20100813BUX
16	WMAH-TV	BILOXI MS	125.3	LIC	BMLEDT	-20080930AGR
18	WJHG-TV	PANAMA CITY FL	214.5	APP	USERRECORD-01	

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Analysis of Interference to Affected Station 2

Channel	Call	City/State	Application	Ref. No.
18	WDBB	BESSEMER AL	BLCDT	-20060421ABG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	WKYU-TV	BOWLING GREEN KY	407.7	LIC	BLEDT	-20040803AAG
18	WMAU-TV	BUDE MS	392.0	LIC	BLEDT	-20090327ABW
19	WIIQ	DEMOPOLIS AL	131.9	LIC	BLEDT	-20090511AHE
19	WHNT-DR	HUNTSVILLE AL	161.0	APP	BPRM	-20090423ADN
18	WJHG-TV	PANAMA CITY FL	387.1	APP	USERRECORD-01	

Total scenarios = 3

Table 1 WJHG-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 3 of 4)

Result key: 2
Scenario 2 Affected station 2
Before Analysis

Results for: 18A AL BESSEMER BLCDT 20060421ABG LIC
HAAT 675.0 m, ATV ERP 350.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1591742	39621.4
not affected by terrain losses	1571861	38666.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	29893	1358.5
lost to ATV IX only	29893	1358.5
lost to all IX	29893	1358.5

Potential Interfering Stations Included in above Scenario 2

18A KY BOWLING GREEN	BLEDT	20040803AAG	LIC
18A MS BUDE	BLEDT	20090327ABW	LIC
19A AL DEMOPOLIS	BLEDT	20090511AHE	LIC
19A AL HUNTSVILLE	BPRM	20090423ADN	APP

After Analysis

Results for: 18A AL BESSEMER BLCDT 20060421ABG LIC
HAAT 675.0 m, ATV ERP 350.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1591742	39621.4
not affected by terrain losses	1571861	38666.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	30646	1402.8
lost to ATV IX only	30646	1402.8
lost to all IX	30646	1402.8

Potential Interfering Stations Included in above Scenario 2

18A KY BOWLING GREEN	BLEDT	20040803AAG	LIC
18A MS BUDE	BLEDT	20090327ABW	LIC
19A AL DEMOPOLIS	BLEDT	20090511AHE	LIC
19A AL HUNTSVILLE	BPRM	20090423ADN	APP
18A FL PANAMA CITY	USERRECORD01		APP

Percent new IX = 0.0488%

Worst case new IX 0.0488% Scenario 2

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
18	WSVT-CA	TAMPA FL	BMPDTA -20101109ADQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
18	WTLE-LP	FORT MYERS FL	151.5	LIC	BLTTL -20030415AAI
18	WPBT	MIAMI FL	289.9	LIC	BLEDT -20010712AGD
18	WESH	ORANGE CITY FL	154.9	CP	BDRTCDT -20090819AAB

Table 1 WJHG-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 4 of 4)

18	NEW	SEBASTIAN FL	177.4	APP	BNPDTL -20100402ACV
18	W63DB	WILLISTON FL	191.3	CP	BDISTTL -20071205ABG
19	WMOR-TV	LAKELAND FL	0.0	LIC	BLCDT -20050726ABO
18	WJHG-TV	PANAMA CITY FL	422.0	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.
18	WJHG-TV	PANAMA CITY FL	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	WEAR-TV	PENSACOLA FL	214.5	LIC	BLCDT -20050627AAK
18	WDBB	BESSEMER AL	387.1	LIC	BLCDT -20060421ABG

Total scenarios = 1

Result key: 4
Scenario 1 Affected station 4
Before Analysis

Results for: 18A FL PANAMA CITY USERRECORD01 APP
HAAT 450.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	891313	38669.4
not affected by terrain losses	887734	38625.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	119	12.0
lost to ATV IX only	119	12.0
lost to all IX	119	12.0

Potential Interfering Stations Included in above Scenario 1

18A AL BESSEMER	BLCDT	20060421ABG	LIC
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