

ENGINEERING EXHIBIT

Application for Modification of Digital Television Station Construction Permit

prepared for

Gray Television Licensee, LLC

WJHG-TV Panama City, FL

Facility ID 73136

Ch. 18 1000 kW 411 m

Gray Television Licensee, LLC (“Gray”) is licensee of WJHG-TV Channel 7, Panama City, FL. A Construction Permit (“CP” BPCDT-20120117ADK) authorizes WJHG-TV to change to Channel 18 pursuant to the FCC’s Report and Order in MB Docket 11-140¹. The CP specifies construction of a taller, replacement tower at the existing WJHG-TV Channel 7 site. *Gray* herein seeks to modify the CP to authorize the WJHG-TV Channel 18 facility to co-locate with another TV station at a nearby tall tower.

The existing WJHG-TV tower has an overall height above ground level (“AGL”) of 270.3 meters (887 feet). Under the current CP, a replacement tower would be constructed having an overall height of 457 meters (1500 feet) AGL at the existing site. *Gray* has determined that a replacement tower of that height cannot be constructed at the current site due to obstacles in acquiring adjacent land needed for the longer guy wire anchor runs.

The site proposed herein is the tower presently employed by station WMBB (Ch. 13, Panama City, FL), and associated with Antenna Structure Registration number 1043251. This tower has an overall height AGL of 446.7 meters (1466 feet) which includes the top-mounted WMBB Channel 13 antenna. This site is located 9.2 km from the current WJHG-TV site.

¹*Amendment of Section 73.622(i), Post-Transition Table of DTV Allotments, Television Broadcast Stations (Panama City, Florida)*, MB Docket No. 11-140, RM 11683, DA 11-1735, released October 19, 2011.

Gray proposes herein to side-mount the WJHG-TV Channel 18 antenna immediately beneath the WMBB antenna, centering the WJHG-TV antenna at 415 meters (1360 feet) AGL. The proposed height above average terrain (“HAAT”) is 411 meters, only a 39 meter reduction from the 450 meters HAAT presently authorized.

The proposed antenna is an elliptically polarized ERI model ATW26H3-ESWC-18H (50 percent vertical polarization). The maximum horizontally polarized effective radiated power (“ERP”) is 1000 kW, and the maximum vertically polarized ERP is 500 kW. The vertically polarized component will not exceed the horizontally polarized component at any azimuth. The directional antenna’s azimuthal patterns are depicted in Figures 1 and 1A for horizontal and vertical polarization, respectively. The antenna’s elevation pattern is depicted in Figures 2 and 2A.

A map is supplied as Figure 3, which depicts the standard predicted coverage contours. This map includes the boundaries of Panama City, 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.

The proposed WJHG-TV facility’s predicted service population provides a 203.8 percent match of the MB Docket 87-268 Seventh Report and Order 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	763,877
Not affected by terrain losses	374,076	759,411
Lost to all interference	1,424	0
Net DTV Service	372,652	759,411
Match of Appendix B	---	203.79%

The proposed 1000 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 411 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 34,263 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.

Contour Extension Freeze

The FCC's Public Notice² of April 5, 2013 (DA 13-618) imposed limitations on the filing and processing of full power station applications that propose an increase in their authorized noise-limited service contour ("NLSC"). A coverage contour comparison is provided in Figure 5, which shows that the proposal will not result in any extension of the WJHG-TV NLSC over land area. Some extension occurs over the waters of the Gulf of Mexico. Contour analysis over large bodies of water is customarily disregarded in evaluation for FCC licensing purposes.

Allocation and Interference

The proposed facility expands the WJHG-TV service contour beyond the technical parameters adopted in MB Docket 11-140 over water only (see Figure 5). A detailed interference study per OET Bulletin 69 shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby digital television and Class A television stations. The interference study output report is provided as Table 1.

The nearest FCC monitoring station is 394 km distant at Powder Springs, GA. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). There are no authorized AM stations within 3 kilometers of the site. The site location is beyond the border areas requiring international coordination.

² "Media Bureau Announces Limitations on the Filing and Processing of Full Power and Class A Television Station Modification Applications, Effective Immediately, and Reminds Stations of Spectrum Act Preservation Mandate," DA 13-618, Public Notice, released April 5, 2013.

Population and Coverage

Owing to the 9.2 km site relocation, there will be some areas of service contour coverage gain and loss. Figure 6 depicts the contour gain and loss resulting from the proposal when compared to the licensed WJHG-TV facility. The contour gain areas encompass 126,552 persons (2000 Census) and the contour loss area contains 23,413 persons as summarized in the following.

WJHG-TV Coverage Contour Gain-Loss

DTV Contour ³	Population (2000 Census)
Licensed WJHG-TV Ch. 7	657,572
Proposed WJHG-TV Ch. 18	760,711
Loss Area	23,413
Gain Area	126,552
Net Change (increase)	103,139

The contour comparison map of Figure 6 shows that the minor loss area is considered “well served” since at least five other television stations provide contour overlap. DTV service contours from 36 other licensed facilities overlap portions of the loss area (listed in Table 2), where most of the loss area is within the DTV service contour of at least eight other stations and all of the loss area is within the service contour of at least five other stations. Using OET Bulletin 69 analysis, the proposed WJHG-TV facility’s interference-free service population of 759,411 exceeds that of the presently licensed facility (657,968 persons) by 15.4 percent.

Nearly all of the loss area is within the service contour of another television station of the same network affiliation (NBC). Figure 7 supplies the overlapping contours from other nearby NBC Network stations. The overlapping NBC Network station contours cover all of the loss area except for a 76 square km area containing a population of 479 persons. This represents 0.07 percent of the population within the licensed WJHG-TV service contour (657,572 persons). As shown in Figure 6, of those 479 persons that might lose NBC Network service, at least seven other TV stations provide service to this area. The potential NBC Network loss area is beyond the Panama City, FL DMA and is located in the Dothan, AL DMA. Additionally, Figure 7 shows that the proposed Channel 18 facility will easily encompass all of WJHG-TV’s former analog Grade B (56 dBμ) contour.

³ Contour levels are pursuant to §73.622(e), utilizing dipole factor for UHF stations.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

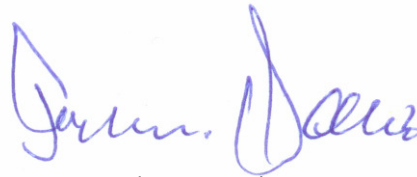
The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Based on OET-65 equation (10), and considering 10 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $2.9 \mu\text{W}/\text{cm}^2$, 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.

This exhibit is limited to the evaluation of exposure to RF electromagnetic field. The proposed transmitting antenna will be side-mounted on an existing antenna support structure which was constructed prior to March 16, 2001. No change in structure height is proposed.

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.
April 4, 2014

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

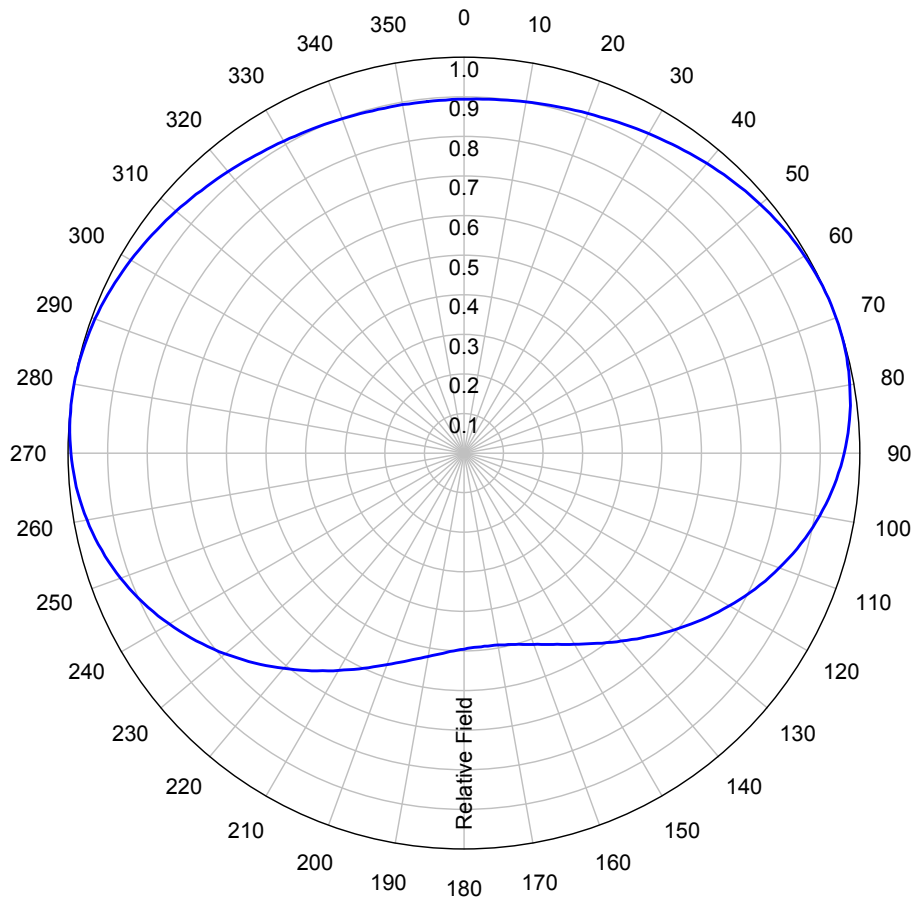
List of Attachments

Figure 1, 1A	Antenna Azimuthal Pattern
Figure 2, 2A	Antenna Elevation Pattern
Figure 3	Proposed Coverage Contours
Figure 4	Maximum ERP per §73.622(f)
Figure 5	Coverage Contour Comparison - Compliance with Freeze
Figure 6	Gain and Loss Areas - Alternative Services
Figure 7	Coverage Contour Comparison – Alternate NBC Network Services
Table 1	OET Bulletin 69 Interference Study
Table 2	Alternate DTV Services in Gain and Loss Areas
Form 301	Saved Version of Engineering Sections from FCC Form at Time of Upload

This material was entered April 4, 2014 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's account number 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.

AZIMUTH PATTERN

Type:	ATW-WC		Channel:	18
Directivity:	Numeric	dBd	Location:	
Peak(s) at:	1.40	1.46	Polarization:	Horizontal
			Note: Pattern shape and directivity may vary with channel and routing configuration.	



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. ERI®

Figure 1
Antenna Azimuthal Pattern
Horizontal Polarization
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

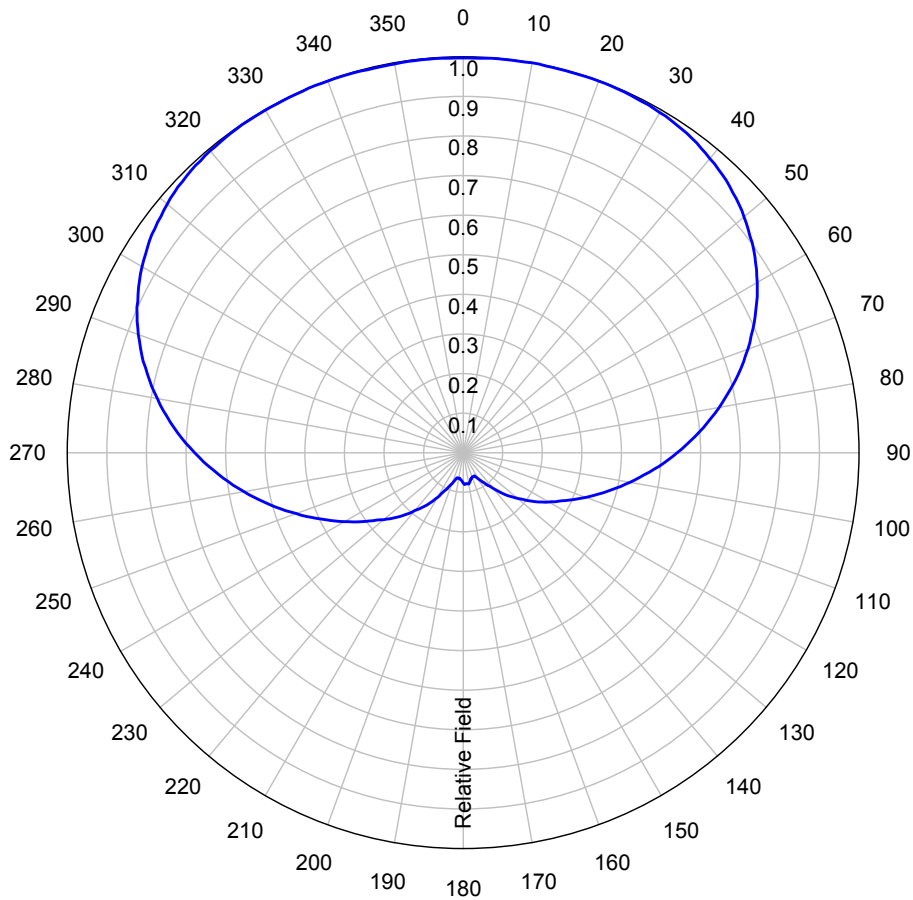
prepared for
Gray Television Licensee, LLC

April, 2014

AZIMUTH PATTERN

Type: ATW-V6
Numeric 2.16 dBd 3.34
Directivity:
Peak(s) at:

Channel: 18
Location:
Polarization: Vertical
Note: Pattern shape and directivity may vary with
channel and mouting configuration.



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. **ERI**



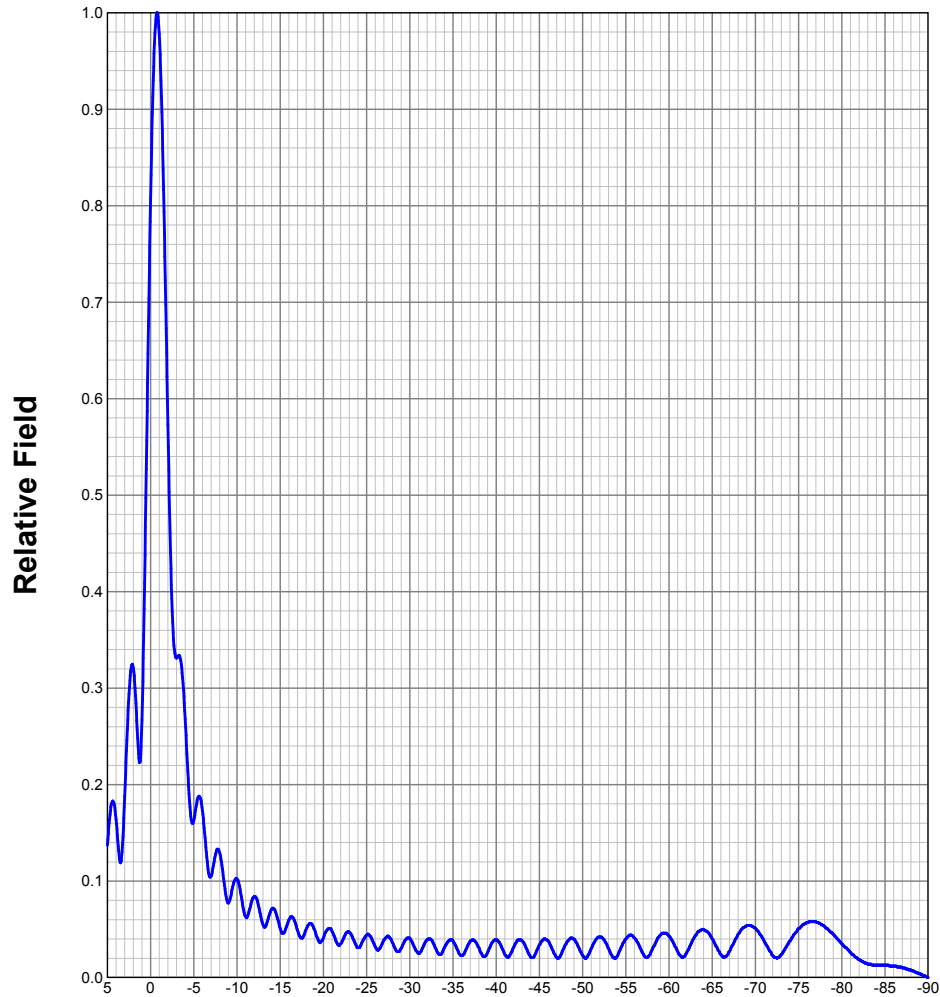
Figure 1A
Antenna Azimuthal Pattern
Vertical Polarization
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014

ELEVATION PATTERN

Type:	ATW26H3H		Channel:	18
Directivity:	Numeric	dBd	Location:	
Main Lobe:	26.00	14.15	Beam Tilt:	-0.75
Horizontal:	17.02	12.31	Polarization:	Horizontal



Preliminary, subject to final design and review.

ELECTRONICS RESEARCH, INC. **ERI**



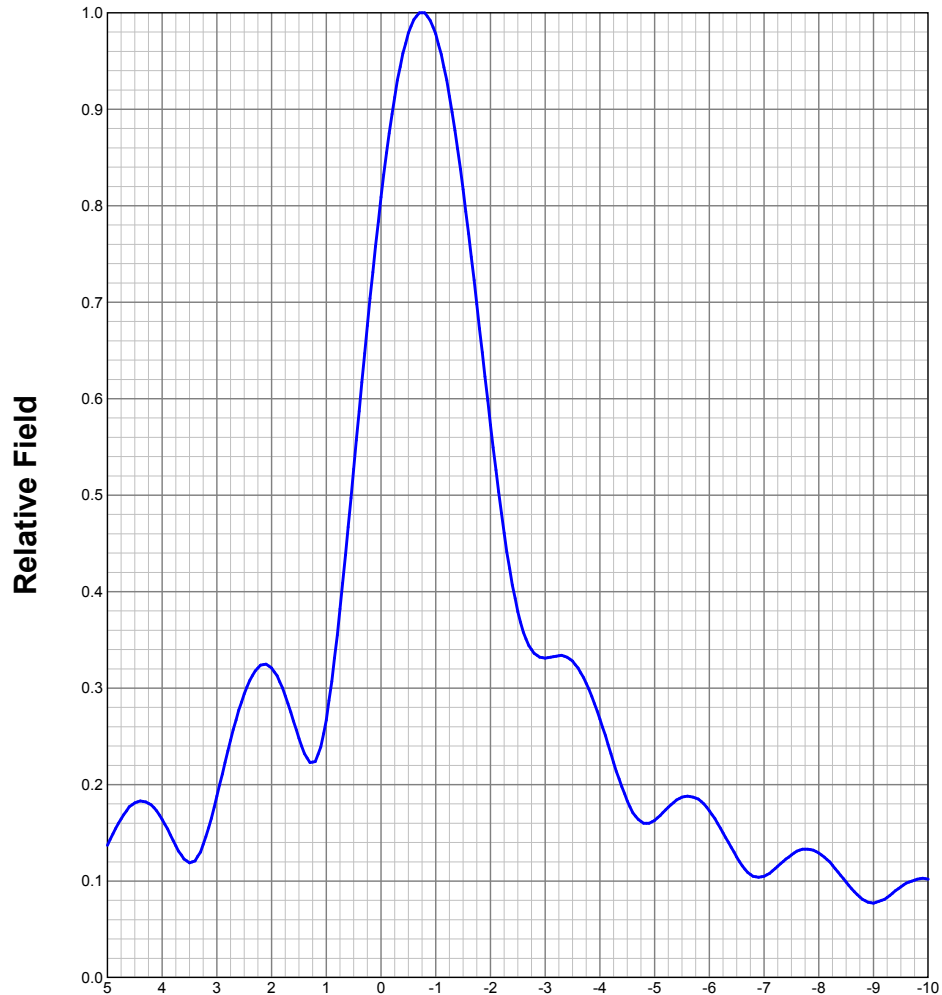
Figure 2
Antenna Elevation Pattern
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014

ELEVATION PATTERN

Type:	ATW26H3H		Channel:	18
Directivity:	Numeric	dBd	Location:	
Main Lobe:	26.00	14.15	Beam Tilt:	-0.75
Horizontal:	17.02	12.31	Polarization:	Horizontal



Preliminary, subject to final design and review.

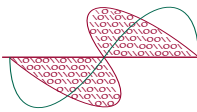
ELECTRONICS RESEARCH, INC. **ERI**



Figure 2A
Antenna Elevation Pattern - Detail
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014

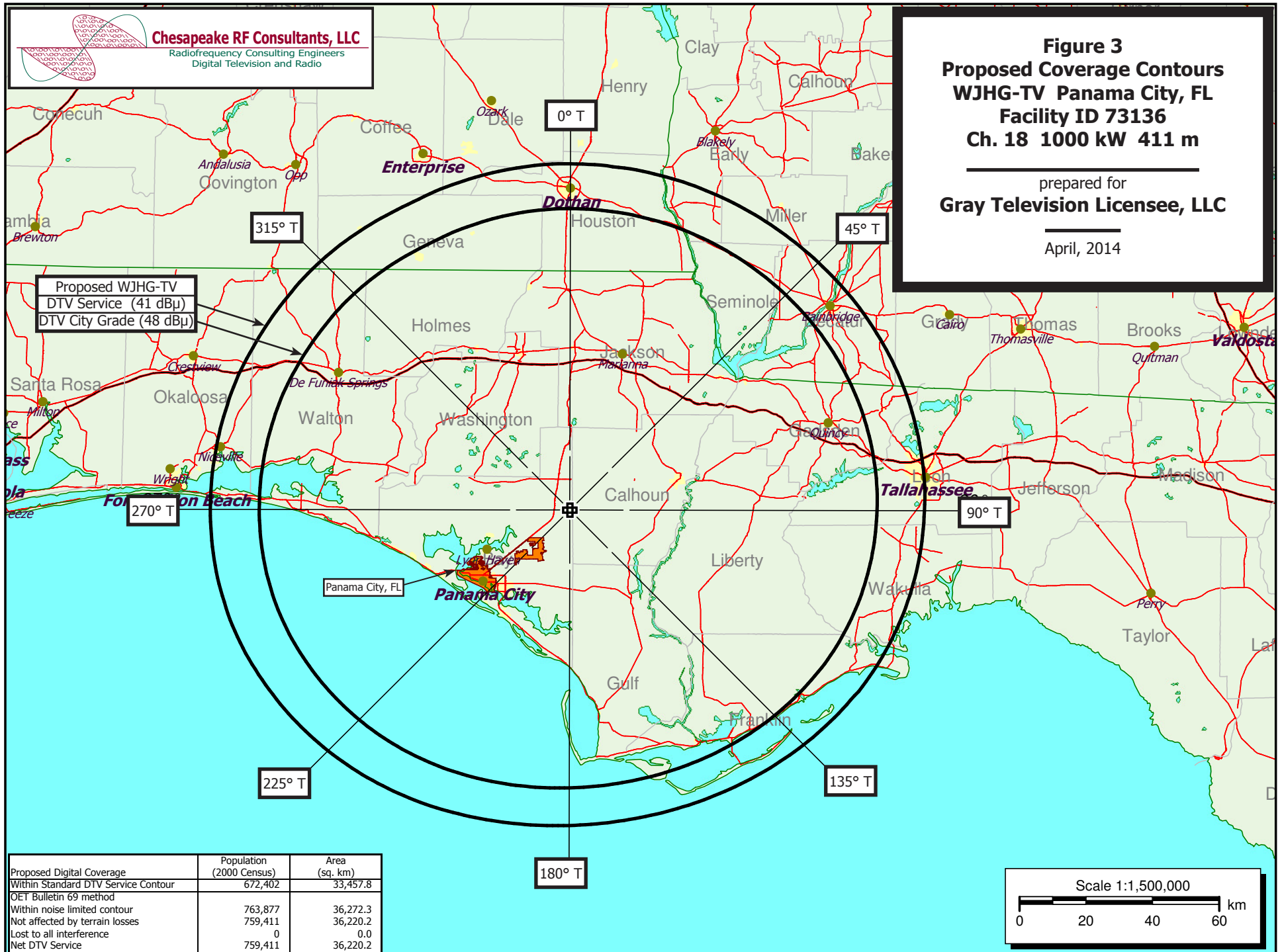


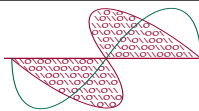
Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 3
Proposed Coverage Contours
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014





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

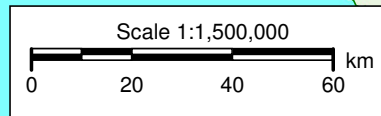
Figure 4
Maximum ERP per §73.622(f)
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014

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

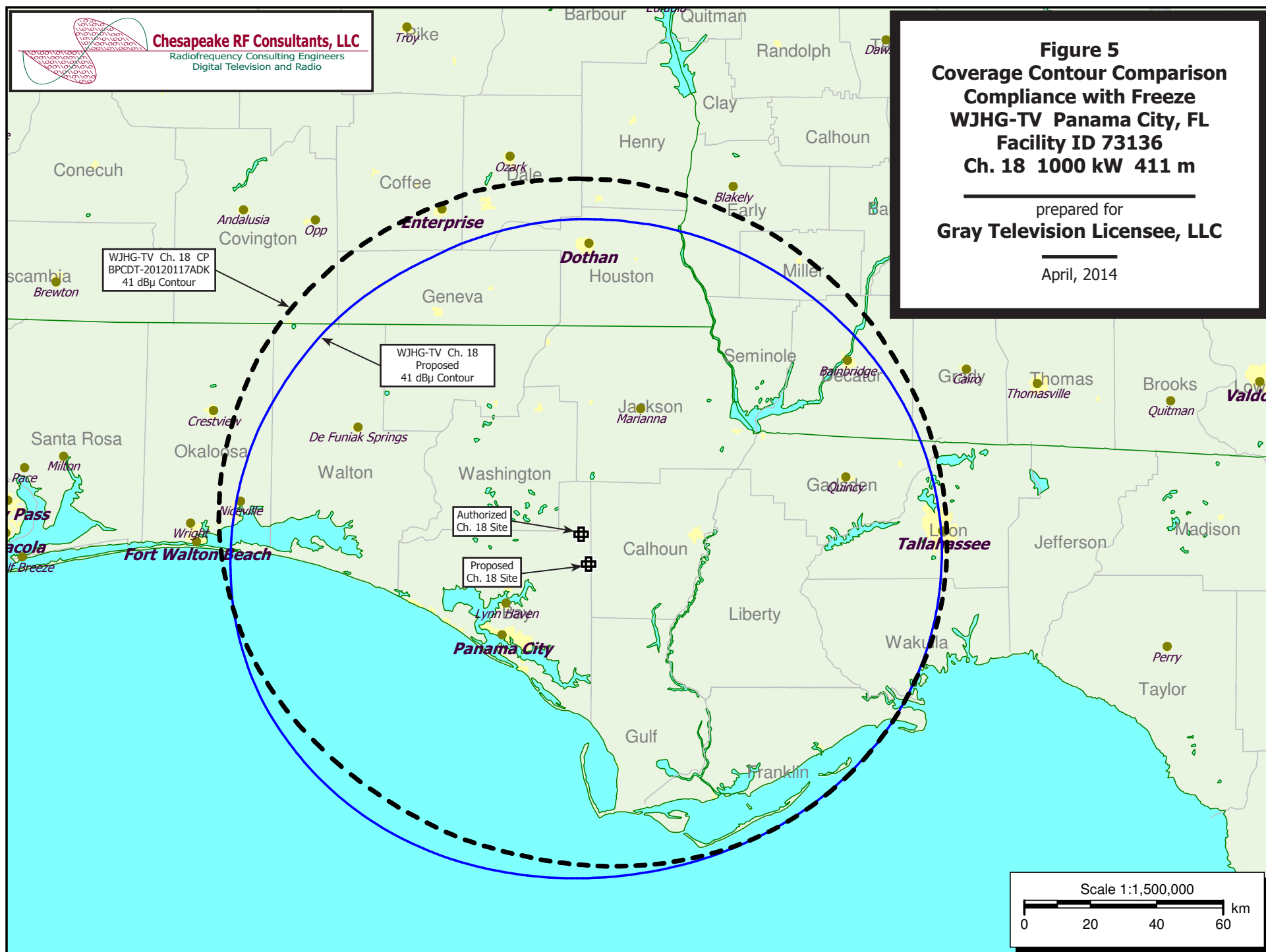
Proposed WJHG-TV
41 dBu Contour
Area: 34,263 sq. km

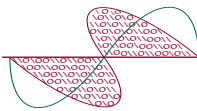




prepared for
Gray Television Licensee, LLC

April, 2014



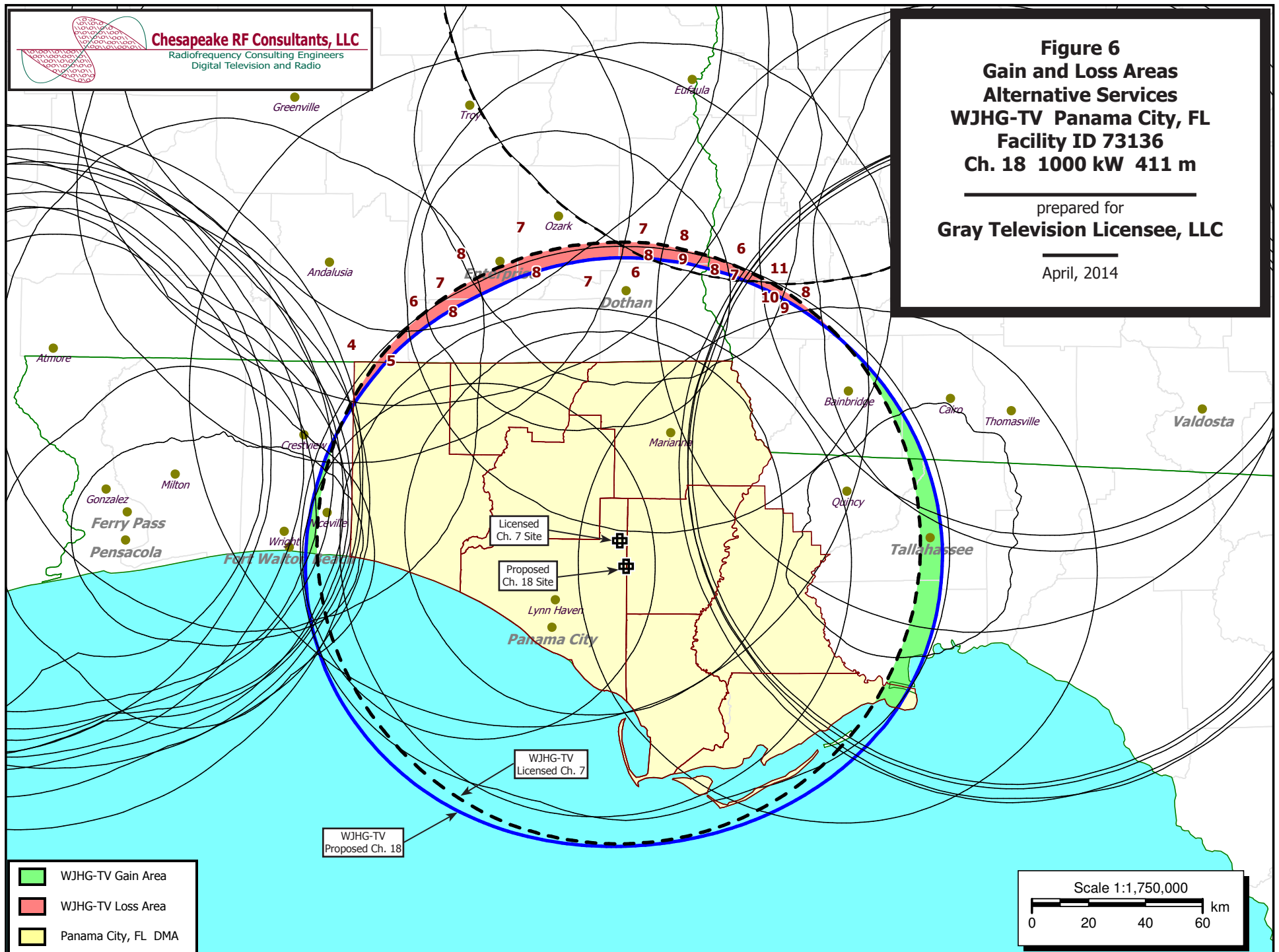


Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 6
Gain and Loss Areas
Alternative Services
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014





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

Figure 7
Coverage Contour Comparison
Alternate NBC Network Services
WJHG-TV Panama City, FL
Facility ID 73136
Ch. 18 1000 kW 411 m

prepared for
Gray Television Licensee, LLC

April, 2014

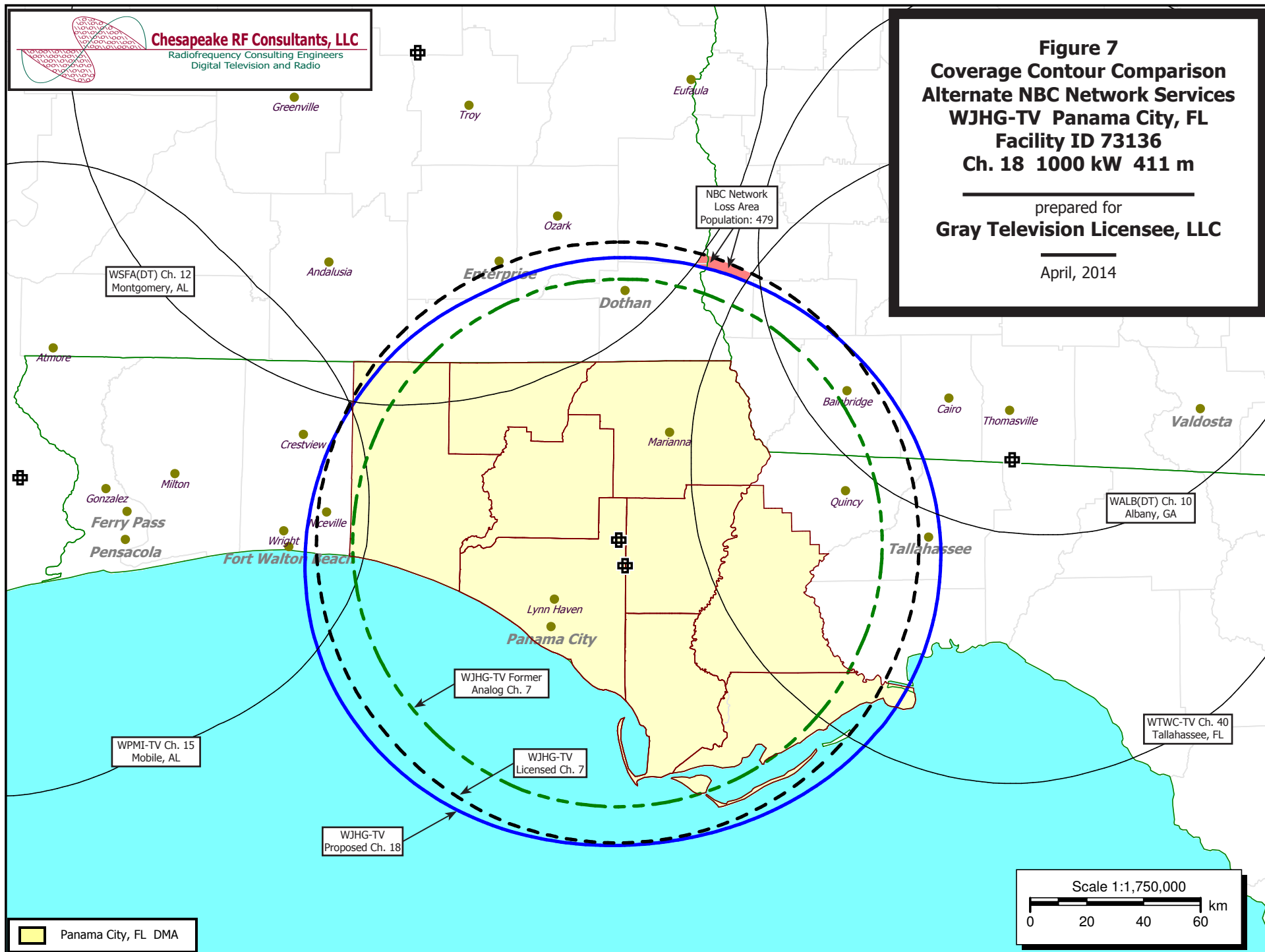
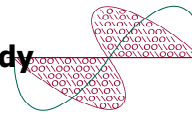


Table 1 WJHG-TV OET Bulletin 69 Interference Study
(worst-case scenarios shown page 1 of 4)



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

TW Census data selected 2000
Data Base Selected
/space/software/cdbb/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-02-2014 Time: 16:52:08

Record Selected for Analysis

WJHG-TV USERRECORD-01 PANAMA CITY FL US
Channel 18 ERP 1000. kW HAAT 411. m RCAMSL 00439 m
Latitude 030-21-08 Longitude 0085-23-28
Status APP Zone 3 Border Site number: 01
Dir Antenna Make usr Model WJHG-WMBB_18 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 (site # 01) does not meet maximum height/power limits
Channel 18 ERP = 1000.00 HAAT = 411.

Site number	1		
Azimuth	ERP	HAAT	41.0 dBu F(50,90)
(Deg)	(kW)	(m)	(km)
0.0	799.236	398.3	103.8
45.0	933.156	396.5	105.1
90.0	921.600	411.0	106.3
135.0	430.992	415.7	99.5
180.0	245.025	416.4	94.8
225.0	560.252	421.4	102.3
270.0	986.049	419.3	107.8
315.0	881.721	407.7	105.6

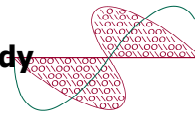
Evaluation toward Class A Stations from site # 01

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

Class A Evaluation Complete

Checks to Site Number 01

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



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

Proposed facility OK to FCC Monitoring Stations
Proposed facility OK toward West Virginia quiet zone
Proposed facility OK toward Table Mountain
Proposed facility is beyond the Canadian coordination distance
Proposed facility is beyond the Mexican coordination distance
Proposed station is OK toward AM broadcast stations

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	217.8	LIC	BLCDT	20050627AAK
18	WDBB	BESSEMER AL	396.1	LIC	BLCDT	20060421ABG
22	WPFN-CA	PANAMA CITY FL	41.7	LIC	BLTTL	19970408JA

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

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	LIC	BLEDT	-20110404AGM
18	WJHG-TV	PANAMA CITY FL	214.5	PLN	DTVPLN	-DTVP0622
18	WJHG-TV	PANAMA CITY FL	217.8	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

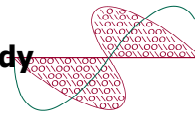
Analysis of current record

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

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	WJHG-TV	PANAMA CITY FL	387.1	PLN	DTVPLN	-DTVP0622
18	WKYU-TV	BOWLING GREEN KY	407.7	LIC	BLEDT	-20040803AAG

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



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
19	WHNT-TV	HUNTSVILLE AL	161.0	LIC	BLCDT	-20111118COZ
18	WJHG-TV	PANAMA CITY FL	396.1	APP	USERRECORD-01	

Total scenarios = 3

Result key: 1
Scenario 1 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	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 1

18A KY BOWLING GREEN	BLEDT	20040803AAG	LIC
18A MS BUDE	BLEDT	20090327ABW	LIC
19A AL DEMOPOLIS	BLEDT	20090511AHE	LIC
19A AL HUNTSVILLE	BLCDT	20111118COZ	LIC
18A FL PANAMA CITY	DTVPLN	DTVP0622	PLN

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	30364	1394.7
lost to ATV IX only	30364	1394.7
lost to all IX	30364	1394.7

Potential Interfering Stations Included in above Scenario 1

18A KY BOWLING GREEN	BLEDT	20040803AAG	LIC
18A MS BUDE	BLEDT	20090327ABW	LIC
19A AL DEMOPOLIS	BLEDT	20090511AHE	LIC
19A AL HUNTSVILLE	BLCDT	20111118COZ	LIC
18A FL PANAMA CITY	USERRECORD01		APP

Percent new IX = -0.0183%

Worst case new IX -0.0183% Scenario 1

#####

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



Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
22	WPFN-CA	PANAMA CITY FL	BLTTL -19970408JA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
18	WJHG-TV	PANAMA CITY FL	44.6	PLN	DTVPLN -DTVP0622
21	WDHN	DOTHAN AL	125.7	LIC	BLCDDT -20090303ACR
22	WBMM	TUSKEGEE AL	210.1	LIC	BLCDDT -20090428ABH
22	WHLT	HATTIESBURG MS	357.1	LIC	BLCDDT -20091216AAL
23	NEW	PANAMA CITY FL	25.9	APP	BNPDTL -20090825ASZ
24	WTLF	TALLAHASSEE FL	135.1	LIC	BLCDDT -20030303ABF
36	WTVY	DOTHAN AL	82.0	LIC	BLCDDT -20090901AAL
18	WJHG-TV	PANAMA CITY FL	41.7	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	217.8	LIC	BLCDDT -20050627AAK
18	WDBB	BESSEMER AL	396.1	LIC	BLCDDT -20060421ABG

Total scenarios = 1

Result key: 4
Scenario 1 Affected station 4
Before Analysis

Results for: 18A FL PANAMA CITY USERRECORD01 APP
HAAT 411.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	763877	36272.3
not affected by terrain losses	759411	36220.2
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

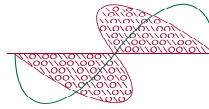
Table 2

Alternate DTV Services in Gain and Loss Areas

prepared for

Gray Television Licensee, LLC

WJHG-TV Panama City, FL

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

Callsign	Status	Ch.	Location	File Number
WABW-TV	LIC	6	Pelham, GA	BLEDT-20090612ACC
WALA-TV	LIC	9	Mobile, AL	BLCDDT-20050316ADI
WALB	LIC	10	Albany, GA	BLCDDT-20090622AAW
WAWD	LIC	49	Fort Walton Beach, FL	BLCDDT-20100429AAK
WBIF	LIC	51	Marianna, FL	BLCDDT-20091201ASB
WCOV-TV	LIC	20	Montgomery, AL	BLCDDT-20090312AAO
WCTV	LIC	46	Thomasville, GA	BLCDDT-20050815AAA
WDFX-TV	LIC	33	Ozark, AL	BLCDDT-20050915APH
WDHN	LIC	21	Dothan, AL	BLCDDT-20090303ACR
WDIQ	LIC	10	Dozier, AL	BLEDT-20091006ADJ
WDPM-DT	LIC	23	Mobile, AL	BLCDDT-20090420AAD
WEAR-TV	LIC	17	Pensacola, FL	BLCDDT-20050627AAK
WFBD	LIC	48	Destin, FL	BLCDDT-20050906AAT
WFGX	LIC	50	Fort Walton Beach, FL	BLCDDT-20100806AAW
WFNA	LIC	25	Gulf Shores, AL	BLCDDT-20100614AQJ
WFSG	LIC	38	Panama City, FL	BLEDT-20030303AAP
WFSU-TV	LIC	32	Tallahassee, FL	BLEDT-20030730ACW
WFXL	LIC	12	Albany, GA	BLCDDT-20070725AFF
WGIQ	LIC	44	Louisville, AL	BLEDT-20031121ANL
WHBR	LIC	34	Pensacola, FL	BLCDDT-20060627AAV
WJTC	LIC	45	Pensacola, FL	BLCDDT-20021025ABG
WKRG-TV	LIC	27	Mobile, AL	BLCDDT-20100125ADI
WMBB	LIC	13	Panama City, FL	BLCDDT-20090220AAF
WMPV-TV	LIC	20	Mobile, AL	BLCDDT-20100420AAK
WPAN	LIC	40	Fort Walton Beach, FL	BLCDDT-20081106AEL
WPGX	LIC	9	Panama City, FL	BLCDDT-20111122EBL
WPMI-TV	LIC	15	Mobile, AL	BLCDDT-20090618ABA
WRBL	LIC	15	Columbus, GA	BLCDDT-20061013ABV
WSFA	LIC	12	Montgomery, AL	BLCDDT-20090622ABN
WSRE	LIC	31	Pensacola, FL	BLEDT-20060621AAS
WTLF	LIC	24	Tallahassee, FL	BLCDDT-20030303ABF
WTLH	LIC	50	Bainbridge, GA	BLCDDT-20090206ADS
WTVM	LIC	11	Columbus, GA	BLCDDT-20131113BGN
WTVY	LIC	36	Dothan, AL	BLCDDT-20090901AAL
WTWC-TV	LIC	40	Tallahassee, FL	BLCDDT-20100216ADC
WTXL-TV	LIC	27	Tallahassee, FL	BLCDDT-20090217ABY

36 stations total

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.	
<p>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.</p> <p>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.</p>	
1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:	
(a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.	<input checked="" type="radio"/> Yes <input type="radio"/> No
(b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.	<input type="radio"/> Yes <input type="radio"/> No
(d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B").	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
(e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A
2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. Applicant must 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 18 Analog TV, if any
2.	Zone: <input type="radio"/> I <input type="radio"/> II <input checked="" type="radio"/> III
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 30 Minutes 21 Seconds 08 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 85 Minutes 23 Seconds 28 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: 1043251 <input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 24 meters
6.	Overall Tower Height Above Ground Level: 446.7 meters
7.	Height of Radiation Center Above Ground Level: 415 meters

8.	Height of Radiation Center Above Average Terrain :	411 meters																																																																																																
9.	Maximum Effective Radiated Power (average power):	1000 kW																																																																																																
10.	<div>Antenna Specifications:</div> <div>a. Manufacturer ERI Model ATW26H3-ESWC-18H</div> <div>b. Electrical Beam Tilt: 0.75 degrees <input type="checkbox"/> Not Applicable</div> <div>c. Mechanical Beam Tilt: degrees toward azimuth degrees True <input checked="" type="checkbox"/> Not Applicable</div> <div style="text-align: right;">[Exhibit 46]</div> <div>Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).</div> <div>d. Polarization: <input type="radio"/> Horizontal <input type="radio"/> Circular <input checked="" 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.]</div> <div>[Relative Field Values]</div> <div style="text-align: center; padding: 10px;">10c. 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>0.894</td><td>10</td><td>0.901</td><td>20</td><td>0.913</td><td>30</td><td>0.932</td><td>40</td><td>0.955</td><td>50</td><td>0.977</td></tr><tr><td>60</td><td>0.994</td><td>70</td><td>1</td><td>80</td><td>0.989</td><td>90</td><td>0.96</td><td>100</td><td>0.912</td><td>110</td><td>0.847</td></tr><tr><td>120</td><td>0.772</td><td>130</td><td>0.694</td><td>140</td><td>0.619</td><td>150</td><td>0.557</td><td>160</td><td>0.514</td><td>170</td><td>0.492</td></tr><tr><td>180</td><td>0.495</td><td>190</td><td>0.521</td><td>200</td><td>0.568</td><td>210</td><td>0.633</td><td>220</td><td>0.709</td><td>230</td><td>0.788</td></tr><tr><td>240</td><td>0.861</td><td>250</td><td>0.923</td><td>260</td><td>0.967</td><td>270</td><td>0.993</td><td>280</td><td>1</td><td>290</td><td>0.992</td></tr><tr><td>300</td><td>0.973</td><td>310</td><td>0.95</td><td>320</td><td>0.928</td><td>330</td><td>0.91</td><td>340</td><td>0.899</td><td>350</td><td>0.894</td></tr><tr><td colspan="2">Additional Azimuths</td><td>68</td><td>1</td><td>278</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table><div style="text-align: center; color: red; font-weight: bold;">Relative Field Polar Plot</div></div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"><div>If a directional antenna is proposed, the requirements of 47 C.F.R. Sections 73.625(c) must be satisfied. Exhibit required. [Exhibit 47]</div></div>		Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0	0.894	10	0.901	20	0.913	30	0.932	40	0.955	50	0.977	60	0.994	70	1	80	0.989	90	0.96	100	0.912	110	0.847	120	0.772	130	0.694	140	0.619	150	0.557	160	0.514	170	0.492	180	0.495	190	0.521	200	0.568	210	0.633	220	0.709	230	0.788	240	0.861	250	0.923	260	0.967	270	0.993	280	1	290	0.992	300	0.973	310	0.95	320	0.928	330	0.91	340	0.899	350	0.894	Additional Azimuths		68	1	278	1						
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11.	<div>Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if Certification Checklist Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616? <input checked="" type="radio"/> Yes <input type="radio"/> No</div> <div style="text-align: right;">[Exhibit 48]</div> <div>If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.</div>																																																																																																	
12.	<div>If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if Certification Checklist item 3 is answered "No.") [Exhibit 49]</div>																																																																																																	
13.	<div>Environmental Protection Act. Submit in an Exhibit the following: [Exhibit 50]</div> <div>If Certification Checklist Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.</div> <div>By checking "Yes" to Certification Checklist Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</div> <div>If Certification Checklist Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R Section 1.1311.</div>																																																																																																	
PREPARERS CERTIFICATION ON SECTION III MUST BE COMPLETED AND SIGNED.																																																																																																		

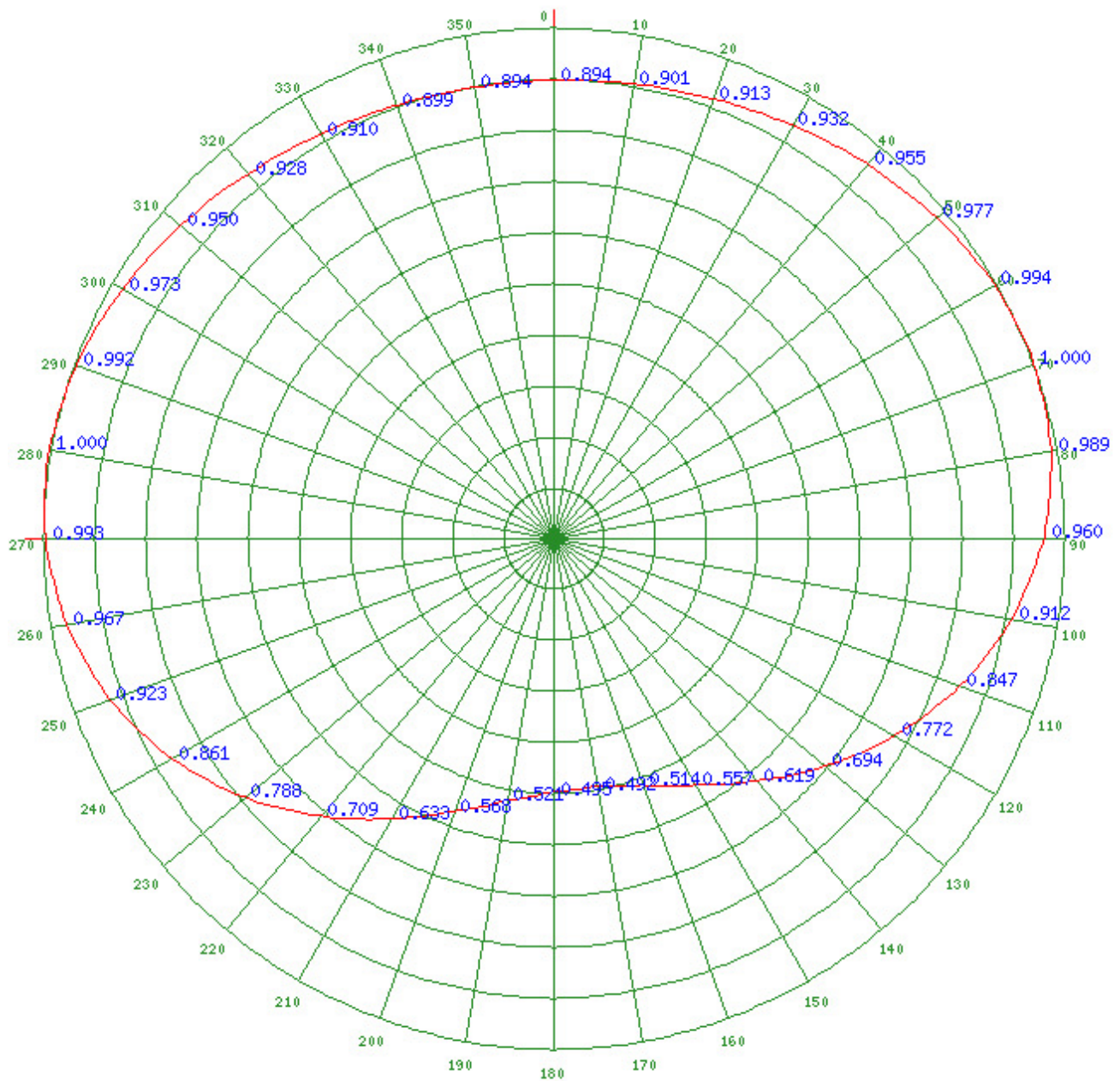
SECTION III - PREPARER'S CERTIFICATION

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 4/4/2014	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 207 OLD DOMINION ROAD		
City YORKTOWN	State or Country (if foreign address) VA	Zip Code 23692 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	

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.

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