

**WGOM-LP MINOR MODIFICATION TO DTV CP BDFCDVL-20140929ALX CH 10 3 kW DIRECTIONAL
FACILITY ID 39341 PANAMA CITY, FLORIDA
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
MAY 2020**

WGOM-LP is licensed on CH 10 analog and holds a construction for DTV operation on CH 10 as specified in BDFCDVL-20140929ALX. The modification proposed herein places the transmitter site at a location that will provide optimum signal over the Panama City, Florida market. The proposed facility is believed to qualify as a minor change as the proposed 48 dBu F(50,90) contour overlaps the licensed site and the proposed site location is 20.2 kilometers from the current licensed site in compliance with 74.787 (b) (iii). FCC TVStudy software was utilized to determine the interference levels associated with the proposed WGOM-LP CH 10 facility and the study results are pasted in below.

The applicant proposes herein to locate on the roof of a multi-story building which is 260', 79.2 meters, in height. The proposed antenna system is a PSI mode PSI-ALP0704710-4C-10 log periodic antenna with a directional pattern. The antenna is a VHF high band, elliptically polarized without beam tilt or null fill with a radiation center 76.5 meters above ground. The antenna is mounted on a mast 18' (5.5 meters in height) which does not extend above the tallest points of the building. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.5 has been used to calculate the power density 2 meters above ground. The maximum power density is 9 uw/cm squared calculated for an ERP of 3,000 watts H. polarization and 3,000 watts V. polarization. This value is 4.5% of the Public Exposure MPE per section 1.1310. Based on this analysis, it is believed that the proposed facility follows OET-65 Public Exposure Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 worker Guidelines.

The supporting building is existing and the roof is locked to prevent access by the general public.

Below is a copy of the TVStudy interference analysis for CH 10 based on the facilities described above. As can be seen at the conclusion of the report, there is no impermissible ISIX interference.

TVStudy Report: Proposed facility

Study created: 2020.05.26 19:16:58

Study build station data: LMS TV 2020-05-20

Proposal: WGOM-LP D10 LD CP PANAMA CITY, FL
File number: CONDO ROOF
Facility ID: 39341
Station data: User record
Record ID: 411
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WALA-TV	D9	DT	LIC	MOBILE, AL	BLCDT20050316ADI	199.3 km
No	WPGX	D9	DT	LIC	PANAMA CITY, FL	BLCDT20111122EBL	35.7
No	WWRP-LP	N9z	TX	LIC	TALLAHASSEE, FL	BLTVL19880927IC	149.2
No	WBIQ	D10	DT	LIC	BIRMINGHAM, AL	BLEDT20140612ABA	379.7
Yes	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	163.1
No	WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDT20090702AAK	408.5
No	WTSP	D10	DT	LIC	ST. PETERSBURG, FL	BLCDT20111014AAZ	432.8
Yes	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	225.7
Yes	WALB	D10	DT	LIC	ALBANY, GA	BLCDT20090622AAW	225.7
No	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDT20040302AAO	421.5
No	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDT20131113BGN	257.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D10
Mask: Full Service
Latitude: 30 10 34.90 N (NAD83)
Longitude: 85 48 20.00 W
Height AMSL: 79.9 m
HAAT: 0.0 m
Peak ERP: 3.00 kW
Antenna: PSI-ALP0704710-4C-10 55.0 deg
Elev Pattn: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.574 kW	78.9 m	30.9 km
45.0	2.82	78.8	41.4
90.0	1.67	74.5	37.1
135.0	0.091	79.9	21.0
180.0	0.011	79.9	12.5
225.0	0.009	79.9	11.9
270.0	0.011	79.9	12.4
315.0	0.022	71.9	14.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 78 m

Distance to Canadian border: 1308.6 km

Distance to Mexican border: 1185.4 km

Conditions at FCC monitoring station: Powder Springs GA
Bearing: 13.7 degrees Distance: 422.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 307.4 degrees Distance: 2075.3 km

Study cell size: 1.00 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%

No IX check failures found.

TVIX

tvstudy v2.2.5 (4uoc83)
Database: 127.0.0.1, Study: CONDO ROOF, Model: Longley-Rice
Start: 2020.05.26 19:16:58

Study created: 2020.05.26 19:16:58

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No	WPGX	D9	DT	LIC	PANAMA CITY, FL	BLCDT20111122EBL	35.7
No	WWRP-LP	N9z	TX	LIC	TALLAHASSEE, FL	BLTVL19880927IC	149.2
No	WBIQ	D10	DT	LIC	BIRMINGHAM, AL	BLEDT20140612ABA	379.7
Yes	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	163.1
No	WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDT20090702AAK	408.5
No	WTSP	D10	DT	LIC	ST. PETERSBURG, FL	BLCDT20111014AAZ	432.8
Yes	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	225.7
Yes	WALB	D10	DT	LIC	ALBANY, GA	BLCDT20090622AAW	225.7
No	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDT20040302AAO	421.5
No	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDT20131113BGN	257.1

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Antenna: PSI-ALP0704710-4C-10 55.0 deg
Elev Pattn: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.574 kW	78.9 m	30.9 km
45.0	2.82	78.8	41.4
90.0	1.67	74.5	37.1
135.0	0.091	79.9	21.0
180.0	0.011	79.9	12.5
225.0	0.009	79.9	11.9
270.0	0.011	79.9	12.4
315.0	0.022	71.9	14.1

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Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 307.4 degrees Distance: 2075.3 km

Study cell size: 1.00 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 BLEDT20091006ADJ LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	151.9 km
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	163.1
	WBIQ	D10	DT	LIC	BIRMINGHAM, AL	BLEDT20140612ABA	218.0
	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	241.2
	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDDT20040302AAO	311.6
	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDDT20131113BGN	173.4
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
30139.7	663,571	28476.5	623,083	26488.8	528,712	26496.7 537,831	-0.03 -1.72
Undesired			Total IX	Unique IX, before		Unique IX, after	
WGOM-LP N10- TX LIC		133.8	11,185	67.0	9,745		
WGOM-LP D10 LD CP		285.5	4,292			59.1	626
WBIQ D10 DT LIC		403.5	37,176	158.1	16,858	158.1	16,858
WALB D10 DT CP		1102.3	39,288	708.7	27,273	554.2	25,724
WXIA-TV D10 DT LIC		969.8	38,900	494.3	12,971	494.3	12,971
WTVM D11 DT LIC		52.5	413	4.0	62	4.0	62

Interference to BLEDT20091006ADJ LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	151.9 km
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	163.1
	WBIQ	D10	DT	LIC	BIRMINGHAM, AL	BLEDT20140612ABA	218.0
	WALB	D10	DT	LIC	ALBANY, GA	BLCDDT20090622AAW	241.2
	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDDT20040302AAO	311.6
	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDDT20131113BGN	173.4
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
30139.7	663,571	28476.5	623,083	26597.6	532,237	26600.2 541,387	-0.01 -1.72
Undesired			Total IX	Unique IX, before		Unique IX, after	
WGOM-LP N10- TX LIC		133.8	11,185	78.1	9,851		
WGOM-LP D10 LD CP		285.5	4,292			75.5	701

WBIQ D10 DT LIC	403.5	37,176	158.1	16,858	158.1	16,858
WALB D10 DT LIC	931.2	32,652	600.0	23,748	450.8	22,168
WXIA-TV D10 DT LIC	969.8	38,900	533.6	14,803	533.6	14,803
WTVM D11 DT LIC	52.5	413	5.0	62	5.0	62

Interference to BLANK0000035649 CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	207.0 km
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	225.7
	WMUM-TV	D9	DT	CP	COCHRAN, GA	BLANK0000034191	138.9
	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	241.2
	WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDDT20090702AAK	249.8
	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDDT20040302AAO	273.1
	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDDT20131113BGN	140.7
	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	31525.6	801,804	31307.6	793,740	30033.3	779,155	0.01 0.00

Undesired		Total IX	Unique IX, before	Unique IX, after
WGOM-LP N10- TX LIC	0.0	0	0	
WGOM-LP D10 LD CP	14.0	90		2.0 0
WMUM-TV D9 DT CP	514.0	4,680	38.3 96	38.3 96
WDIQ D10 DT LIC	94.5	1,303	55.3 803	47.3 738
WJXX D10 DT LIC	357.0	7,138	258.1 6,290	257.1 6,290
WXIA-TV D10 DT LIC	855.2	6,901	289.5 1,799	289.5 1,799
WTVM D11 DT LIC	80.7	298	48.4 72	48.4 72

Interference to BLANK0000035649 CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	207.0 km
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	225.7
	WMUM-TV	D9	DT	BL	COCHRAN, GA	DTVBL23935	138.9
	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	241.2
	WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDDT20090702AAK	249.8
	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDDT20040302AAO	273.1
	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDDT20131113BGN	140.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31525.6 801,804	31307.6 793,740	30047.4 779,234	30045.4 779,234	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WGOM-LP N10- TX LIC	0.0 0	0.0 0	
WGOM-LP D10 LD CP	14.0 90		2.0 0
WMUM-TV D9 DT BL	426.3 4,366	24.2 17	24.2 17
WDIQ D10 DT LIC	94.5 1,303	55.3 803	47.3 738
WJXX D10 DT LIC	357.0 7,138	258.1 6,290	257.1 6,290
WXIA-TV D10 DT LIC	855.2 6,901	361.1 2,032	361.1 2,032
WTVM D11 DT LIC	80.7 298	48.4 72	48.4 72

Interference to BLCDT20090622AAW LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WALB	D10	DT	LIC	ALBANY, GA	BLCDT20090622AAW	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	207.0 km
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	225.7
	WMUM-TV	D9	DT	CP	COCHRAN, GA	BLANK0000034191	138.9
	WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	241.2
	WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDT20090702AAK	249.8
	WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDT20040302AAO	273.1
	WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDT20131113BGN	140.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
30309.9 772,154	30073.7 767,167	28930.1 752,401	28930.1 752,401	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WGOM-LP N10- TX LIC	0.0 0	0.0 0	
WGOM-LP D10 LD CP	18.0 276		0.0 0
WMUM-TV D9 DT CP	438.5 4,534	27.2 44	27.2 44
WDIQ D10 DT LIC	93.6 2,602	58.4 2,040	44.5 2,013
WJXX D10 DT LIC	363.1 6,641	223.9 5,204	222.9 5,199
WXIA-TV D10 DT LIC	789.8 6,933	276.4 2,055	276.4 2,055
WTVM D11 DT LIC	54.5 140	29.3 30	29.3 30

Interference to BLCDT20090622AAW LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WALB	D10	DT	LIC	ALBANY, GA	BLCDT20090622AAW	
Undesireds:	WGOM-LP	N10-	TX	LIC	PANAMA CITY, FL	BLTVL20060208AEC	207.0 km

WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	225.7
WMUM-TV	D9	DT	BL	COCHRAN, GA	DTVBL23935	138.9
WDIQ	D10	DT	LIC	DOZIER, AL	BLEDT20091006ADJ	241.2
WJXX	D10	DT	LIC	ORANGE PARK, FL	BLCDT20090702AAK	249.8
WXIA-TV	D10	DT	LIC	ATLANTA, GA	BLCDT20040302AAO	273.1
WTVM	D11	DT	LIC	COLUMBUS, GA	BLCDT20131113BGN	140.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
30309.9 772,154	30073.7 767,167	28939.2 752,431	28939.2 752,431	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WGOM-LP N10- TX LIC	0.0 0	0.0 0	
WGOM-LP D10 LD CP	18.0 276	0.0 0	
WMUM-TV D9 DT BL	368.9 4,121	18.1 14	18.1 14
WDIQ D10 DT LIC	93.6 2,602	58.4 2,040	44.5 2,013
WJXX D10 DT LIC	363.1 6,641	223.9 5,204	222.9 5,199
WXIA-TV D10 DT LIC	789.8 6,933	333.9 2,400	333.9 2,400
WTVM D11 DT LIC	54.5 140	29.3 30	29.3 30


Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WGOM-LP	D10	LD	CP	PANAMA CITY, FL	CONDO ROOF	
Undesireds:	WPGX	D9	DT	LIC	PANAMA CITY, FL	BLCDT20111122EBL	35.7 km
	WALB	D10	DT	CP	ALBANY, GA	BLANK0000035649	225.7

Service area	Terrain-limited	IX-free	Percent IX
2031.6 159,199	2031.6 159,199	1914.6 157,878	5.76 0.83

Undesired	Total IX	Unique IX	Prcnt Unique IX
WPGX D9 DT LIC	117.0 1,321	117.0 1,321	5.76 0.83

The foregoing was prepared on behalf of Spectrum Solutions, LLC by Clarence M. Beverage of Communications Technologies, Inc., Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey
May 26, 2020