



**STATEMENT OF JOHN E. HIDLE, P.E.  
IN SUPPORT OF AN APPLICATION FOR  
A MINOR MODIFICATION OF A  
POST REPACK CONSTRUCTION PERMIT  
FILE # 0000027383  
WFGX - FORT WALTON BEACH, FLORIDA  
DTV - CH. 14 - 1000 kW - 582.8 m HAAT**

Prepared for: WFGX LICENSEE, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Licensed Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

#### **GENERAL**

This office has been authorized by WFGX LICENSEE, LLC, licensee of WFGX, channel 50, facility ID number 6554, licensed to Fort Walton Beach, Florida, to prepare this statement, FCC Form 2100, Schedule A, its technical sections, and the associated exhibits in support of an application for modification of its post-reassignment construction permit that authorizes WFGX to use channel 14 for its post-reassignment broadcasting. The instant application proposes only to increase WFGX's ERP, according to Section 73.622(f)(5), to achieve a coverage area on par with the "largest station in the market", which appears to be WEAR-TV, Channel 17, licensed to Pensacola, Florida.

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**DETERMINATION OF THE "LARGEST STATION IN THE MARKET"**

It appears from an analysis of the stations that are licensed to communities located in the Mobile, AL-Pensacola, FL (Fort Walton Beach) FL Designated Market Area (DMA) that the largest station is WEAR-TV, channel 17, Pensacola, FL with a coverage area of 47,928 square kilometers. The instant application for an increase in ERP to 1000 kW results in a coverage area of 43,879 square kilometers for WFGX. Clearly WFGX is entitled, according to Section 73.622(f)(5), to the proposed increase in its ERP.

**DIRECTIONAL ANTENNA**

The applicant proposes to install a new Dielectric model TFU-19ETT/VP-R 4C170 elliptically polarized directional transmitting antenna with its center of radiation located at a height above ground of 574.9 meters, and a height above average terrain of 582.8 meters. The antenna manufacturer's horizontal plane azimuth radiation pattern for the horizontally polarized component is shown and tabulated in exhibit 2. The manufacturer's horizontal plane azimuth pattern for the vertically polarized component is shown and tabulated in exhibit 3. The manufacturer's vertical plane elevation radiation pattern, illustrating the antenna's radiation characteristics above and below the horizontal plane is shown and tabulated in Exhibit 4.

**PREDICTED COVERAGE CONTOURS**

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated Power, and antenna height above average terrain as determined for each profile radial. The average

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terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site, was determined using the NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 shows the predicted Noise Limited (38.72 dBu) contour, and the principal community (48 dBu) contour, which will again be able to completely encompass the principal community of license, Fort Walton Beach, Florida.

**ALLOCATION CONSIDERATIONS**

***Post-Transition DTV Considerations***

A study was performed, using the FCC's software, tv\_study, v. 2.2.3, to determine if the instant application for construction permit is predicted to cause new prohibited interference to post reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations. The study results, shown in Appendix B, indicate that the instant application for construction permit is predicted to cause no new interference exceeding 0.5% to the populations served by any post-reassignment DTV station, construction permit, allotment or Class A DTV stations. (See Appendix B)

***International DTV Considerations***

The WFGX site is located more than 1000 kilometers from the nearest points on both the US/Canadian and US/Mexican borders. Therefore there are no international considerations.

**BLANKETING AND INTERMODULATION INTERFERENCE**

Other broadcast and non-broadcast facilities are either co-located with, or located within 10 km of the proposed WFGX site. The applicant does recognize its responsibility

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to remedy complaints of interference that might result from this proposal in accordance with applicable Rules.

**RADIO FREQUENCY IMPACT**

The FCC's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986) and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines define a maximum permissible exposure (MPE) level for occupational or "controlled" situations, and for "uncontrolled" environments that apply in all other cases that might affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance to determine whether FCC-regulated transmitting facilities, operations or devices comply with guidelines for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. OET Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines.

The Maximum Permitted Exposure (MPE) level for broadcast facilities that operate on a frequency between 30 MHZ and 300 MHZ is 200 microwatts per centimeter squared ( $\mu\text{W}/\text{cm}^2$ ) for an "uncontrolled" environment, and is 1000 microwatts per centimeter squared ( $\mu\text{W}/\text{cm}^2$ ) for a "controlled" environment. The MPE level for broadcast facilities that operate on a frequency between 300 MHZ and 1500 MHZ, primarily UHF TV stations,

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is determined, in  $\mu\text{W}/\text{cm}^2$ , for an "uncontrolled" environment by dividing the operating frequency in MHZ by 1.500, and is similarly determined for a "controlled" environment by dividing the operating frequency in MHZ by 0.300.

The predicted emissions of WFGX must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WFGX, which will operate on television Channel 14 (470-476 MHZ), the MPE is 315.33 microwatts per centimeter squared ( $\mu\text{W}/\text{cm}^2$ ) in an "uncontrolled" environment and 1,576.7  $\mu\text{W}/\text{cm}^2$  in a "controlled" environment. The proposed WFGX facility will operate with a maximum ERP of 1000 kW from an elliptically polarized directional transmitting antenna with a centerline height of 574.9 meters above ground level (AGL). Considering a predicted vertical plane relative field factor of 0.300 the WFGX facility is predicted to produce a power density at two meters above ground level of 18.323  $\mu\text{W}/\text{cm}^2$ , which is 5.81% of the FCC guideline value for an "uncontrolled" environment, and 1.162% of the FCC's guideline value for "controlled" environments. There are two other full-power DTV facilities and three LPTV DTV facilities that are located at the WFGX site. Therefore, the total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations within the relevant proximity, is 15.68% of the limit applicable to "uncontrolled" environments, and 3.14% of the limit for "controlled" environments. (See Appendix A)

**OCCUPATIONAL SAFETY**

The licensee of WFGX is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WFGX antenna, and is committed to

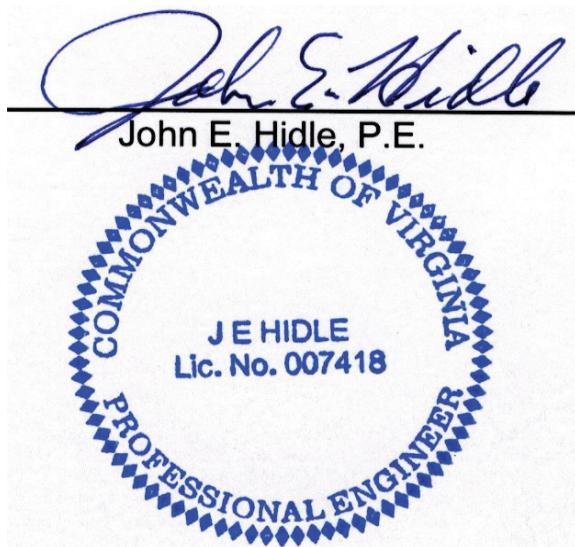
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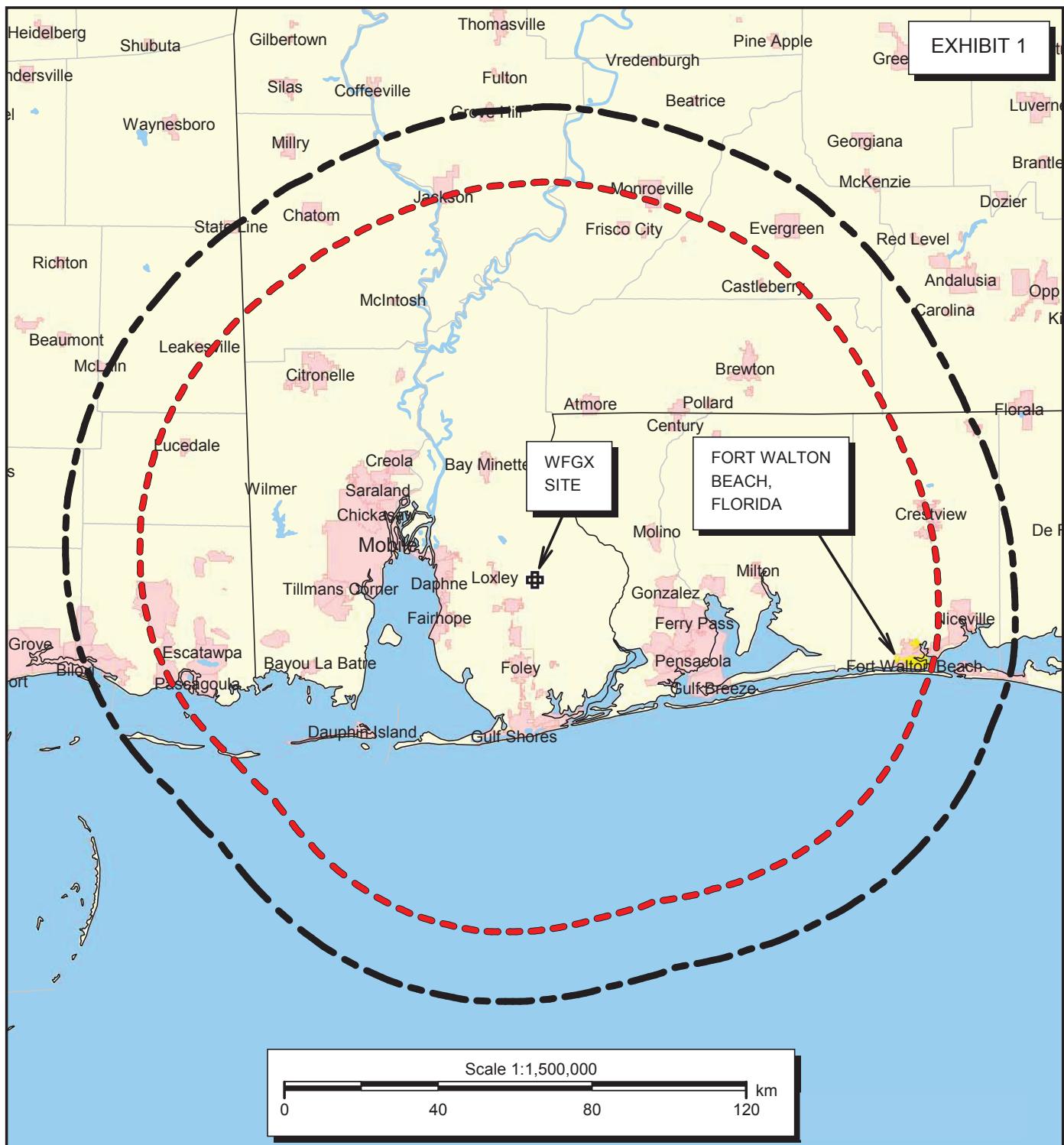
reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

**SUMMARY**

It is submitted that the instant application to modify WFGX's post-reassignment channel 14 construction permit by increasing WFGX's ERP to 1000 kW, as described herein, complies with the Rules, Regulations and relevant Policies of the Federal Communications Commission. This statement, FCC Form 2100, its technical sections, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct to the best of my knowledge and belief.

DATED: August 10, 2017





## PREDICTED COVERAGE CONTOURS

WFGX - FORT WALTON BEACH, FLORIDA

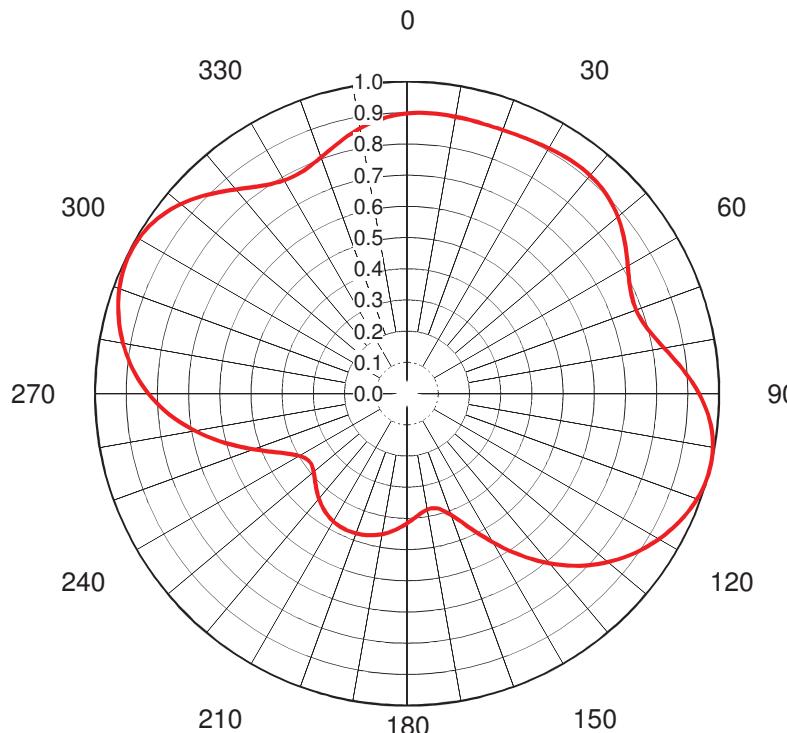
DTV Channel 14 - 1000 kW ERP - 582.8 M HAAT

AUGUST, 2017

Predicted Noise Limited 38.72 dBu  
F(50,90) Coverage Contour



Predicted Principal Community 48 dBu  
F(50,90) Coverage Contour



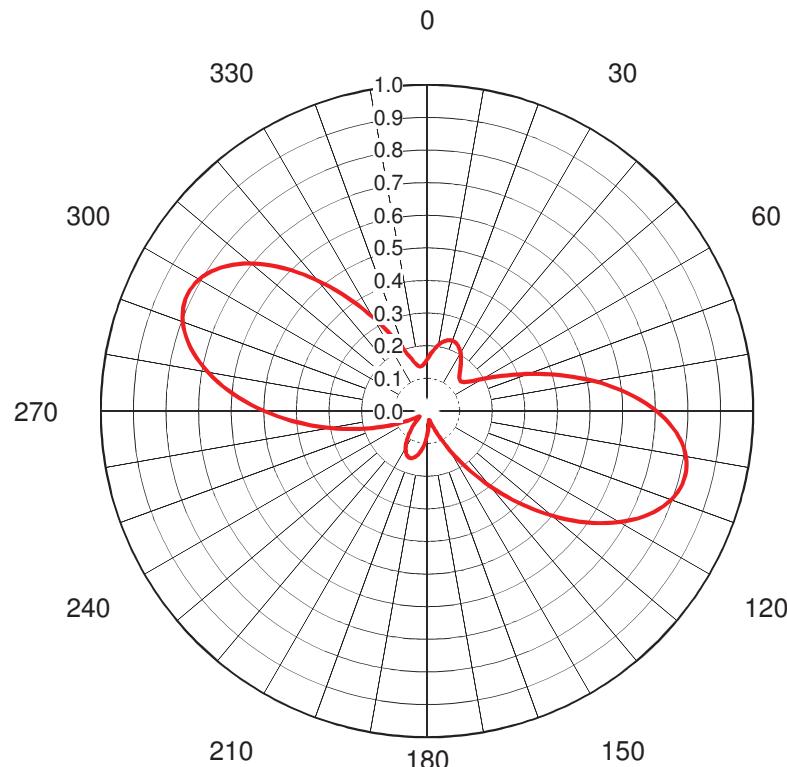
## AZIMUTH PATTERN Horizontal Polarization

Proposal No. C-70054  
 Date 8-Mar-17  
 Call Letters WFGX  
 Channel 14  
 Frequency 473 MHz  
 Antenna Type TFU-19ETT/VP-R 4C170  
 Gain 1.67 (2.22dB)  
 Calculated

Drawing # TFU-4C170HP-6890

Deg	Value																		
0	0.898	36	0.914	72	0.786	108	0.995	144	0.648	180	0.416	216	0.457	252	0.555	288	0.973	324	0.820
1	0.899	37	0.914	73	0.789	109	0.992	145	0.632	181	0.421	217	0.453	253	0.572	289	0.977	325	0.813
2	0.900	38	0.914	74	0.793	110	0.989	146	0.616	182	0.426	218	0.449	254	0.589	290	0.981	326	0.807
3	0.901	39	0.914	75	0.799	111	0.985	147	0.599	183	0.430	219	0.444	255	0.606	291	0.985	327	0.801
4	0.902	40	0.913	76	0.805	112	0.981	148	0.583	184	0.435	220	0.440	256	0.623	292	0.988	328	0.796
5	0.902	41	0.912	77	0.812	113	0.976	149	0.567	185	0.439	221	0.435	257	0.640	293	0.990	329	0.792
6	0.902	42	0.910	78	0.820	114	0.971	150	0.550	186	0.443	222	0.430	258	0.657	294	0.992	330	0.789
7	0.902	43	0.908	79	0.828	115	0.966	151	0.534	187	0.447	223	0.425	259	0.673	295	0.994	331	0.787
8	0.902	44	0.906	80	0.837	116	0.960	152	0.519	188	0.451	224	0.420	260	0.689	296	0.995	332	0.786
9	0.901	45	0.903	81	0.847	117	0.954	153	0.503	189	0.454	225	0.414	261	0.705	297	0.995	333	0.785
10	0.901	46	0.900	82	0.857	118	0.947	154	0.488	190	0.457	226	0.409	262	0.721	298	0.995	334	0.786
11	0.900	47	0.896	83	0.867	119	0.940	155	0.474	191	0.460	227	0.404	263	0.736	299	0.994	335	0.788
12	0.900	48	0.892	84	0.877	120	0.933	156	0.460	192	0.463	228	0.399	264	0.751	300	0.993	336	0.790
13	0.899	49	0.887	85	0.887	121	0.925	157	0.448	193	0.466	229	0.395	265	0.765	301	0.991	337	0.793
14	0.899	50	0.882	86	0.898	122	0.917	158	0.436	194	0.468	230	0.391	266	0.778	302	0.989	338	0.797
15	0.899	51	0.877	87	0.908	123	0.909	159	0.425	195	0.470	231	0.387	267	0.792	303	0.985	339	0.801
16	0.899	52	0.871	88	0.917	124	0.900	160	0.415	196	0.472	232	0.384	268	0.805	304	0.982	340	0.806
17	0.898	53	0.865	89	0.927	125	0.891	161	0.406	197	0.473	233	0.382	269	0.817	305	0.977	341	0.811
18	0.898	54	0.858	90	0.936	126	0.882	162	0.398	198	0.475	234	0.381	270	0.829	306	0.972	342	0.817
19	0.899	55	0.851	91	0.945	127	0.872	163	0.391	199	0.476	235	0.381	271	0.840	307	0.966	343	0.823
20	0.899	56	0.844	92	0.953	128	0.862	164	0.386	200	0.477	236	0.382	272	0.851	308	0.960	344	0.829
21	0.899	57	0.838	93	0.960	129	0.851	165	0.382	201	0.478	237	0.384	273	0.862	309	0.953	345	0.835
22	0.900	58	0.831	94	0.967	130	0.840	166	0.379	202	0.478	238	0.388	274	0.872	310	0.946	346	0.841
23	0.901	59	0.824	95	0.974	131	0.829	167	0.377	203	0.478	239	0.393	275	0.882	311	0.938	347	0.847
24	0.901	60	0.817	96	0.979	132	0.818	168	0.376	204	0.478	240	0.399	276	0.891	312	0.929	348	0.853
25	0.902	61	0.811	97	0.984	133	0.806	169	0.376	205	0.478	241	0.406	277	0.900	313	0.921	349	0.858
26	0.903	62	0.805	98	0.989	134	0.793	170	0.377	206	0.478	242	0.415	278	0.908	314	0.912	350	0.864
27	0.905	63	0.799	99	0.992	135	0.780	171	0.379	207	0.477	243	0.425	279	0.916	315	0.902	351	0.869
28	0.906	64	0.794	100	0.995	136	0.767	172	0.382	208	0.476	244	0.436	280	0.924	316	0.893	352	0.873
29	0.907	65	0.790	101	0.997	137	0.754	173	0.385	209	0.474	245	0.449	281	0.931	317	0.883	353	0.878
30	0.908	66	0.787	102	0.999	138	0.740	174	0.389	210	0.473	246	0.462	282	0.938	318	0.873	354	0.882
31	0.909	67	0.784	103	1.000	139	0.725	175	0.393	211	0.471	247	0.476	283	0.945	319	0.864	355	0.886
32	0.911	68	0.782	104	1.000	140	0.710	176	0.397	212	0.469	248	0.491	284	0.951	320	0.854	356	0.889
33	0.912	69	0.782	105	1.000	141	0.695	177	0.402	213	0.466	249	0.506	285	0.957	321	0.845	357	0.892
34	0.913	70	0.782	106	0.999	142	0.680	178	0.406	214	0.463	250	0.522	286	0.963	322	0.836	358	0.894
35	0.913	71	0.783	107	0.997	143	0.664	179	0.411	215	0.460	251	0.538	287	0.968	323	0.828	359	0.896

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## AZIMUTH PATTERN Vertical Polarization

Proposal No. C-70054  
 Date 8-Mar-17  
 Call Letters WFGX  
 Channel 14  
 Frequency 473 MHz  
 Antenna Type TFU-19ETT/VP-R 4C170  
 Gain 3.78 (5.77dB)  
 Calculated

Drawing # TFU-4C170V D14

Deg	Value																
0	0.157	36	0.177	72	0.367	108	0.808	144	0.229	180	0.078	216	0.100	252	0.166	288	0.781
1	0.162	37	0.172	73	0.386	109	0.803	145	0.212	181	0.083	217	0.095	253	0.180	289	0.789
2	0.167	38	0.167	74	0.405	110	0.797	146	0.196	182	0.089	218	0.089	254	0.196	290	0.797
3	0.172	39	0.162	75	0.424	111	0.789	147	0.180	183	0.095	219	0.083	255	0.212	291	0.803
4	0.177	40	0.157	76	0.444	112	0.781	148	0.166	184	0.100	220	0.078	256	0.229	292	0.808
5	0.182	41	0.153	77	0.463	113	0.772	149	0.151	185	0.106	221	0.072	257	0.246	293	0.812
6	0.187	42	0.149	78	0.483	114	0.762	150	0.138	186	0.111	222	0.067	258	0.264	294	0.814
7	0.192	43	0.146	79	0.503	115	0.750	151	0.125	187	0.116	223	0.061	259	0.282	295	0.816
8	0.197	44	0.143	80	0.523	116	0.738	152	0.113	188	0.121	224	0.056	260	0.301	296	0.816
9	0.201	45	0.141	81	0.543	117	0.725	153	0.101	189	0.126	225	0.052	261	0.320	297	0.816
10	0.206	46	0.139	82	0.562	118	0.711	154	0.091	190	0.130	226	0.047	262	0.339	298	0.814
11	0.210	47	0.138	83	0.581	119	0.697	155	0.081	191	0.135	227	0.043	263	0.359	299	0.811
12	0.214	48	0.138	84	0.600	120	0.681	156	0.072	192	0.138	228	0.039	264	0.379	300	0.806
13	0.217	49	0.138	85	0.619	121	0.665	157	0.064	193	0.142	229	0.036	265	0.399	301	0.801
14	0.220	50	0.139	86	0.637	122	0.649	158	0.057	194	0.145	230	0.033	266	0.419	302	0.794
15	0.223	51	0.141	87	0.655	123	0.632	159	0.050	195	0.147	231	0.031	267	0.439	303	0.787
16	0.225	52	0.144	88	0.672	124	0.614	160	0.044	196	0.149	232	0.029	268	0.459	304	0.778
17	0.227	53	0.148	89	0.688	125	0.596	161	0.040	197	0.151	233	0.028	269	0.479	305	0.768
18	0.228	54	0.152	90	0.703	126	0.577	162	0.036	198	0.152	234	0.028	270	0.499	306	0.757
19	0.229	55	0.157	91	0.718	127	0.558	163	0.032	199	0.153	235	0.029	271	0.519	307	0.745
20	0.229	56	0.163	92	0.732	128	0.539	164	0.030	200	0.153	236	0.030	272	0.539	308	0.732
21	0.229	57	0.170	93	0.745	129	0.519	165	0.029	201	0.153	237	0.032	273	0.558	309	0.718
22	0.228	58	0.178	94	0.757	130	0.499	166	0.028	202	0.152	238	0.036	274	0.577	310	0.703
23	0.227	59	0.186	95	0.768	131	0.479	167	0.028	203	0.151	239	0.040	275	0.596	311	0.688
24	0.225	60	0.195	96	0.778	132	0.459	168	0.029	204	0.149	240	0.044	276	0.614	312	0.672
25	0.223	61	0.205	97	0.787	133	0.439	169	0.031	205	0.147	241	0.050	277	0.632	313	0.655
26	0.220	62	0.216	98	0.794	134	0.419	170	0.033	206	0.145	242	0.057	278	0.649	314	0.637
27	0.217	63	0.228	99	0.801	135	0.399	171	0.036	207	0.142	243	0.064	279	0.665	315	0.619
28	0.214	64	0.241	100	0.806	136	0.379	172	0.039	208	0.138	244	0.072	280	0.681	316	0.600
29	0.210	65	0.254	101	0.811	137	0.359	173	0.043	209	0.135	245	0.081	281	0.697	317	0.581
30	0.206	66	0.268	102	0.814	138	0.339	174	0.047	210	0.130	246	0.091	282	0.711	318	0.562
31	0.201	67	0.283	103	0.816	139	0.320	175	0.052	211	0.126	247	0.101	283	0.725	319	0.543
32	0.197	68	0.299	104	0.816	140	0.301	176	0.056	212	0.121	248	0.113	284	0.738	320	0.523
33	0.192	69	0.315	105	0.816	141	0.282	177	0.061	213	0.116	249	0.125	285	0.750	321	0.503
34	0.187	70	0.332	106	0.814	142	0.264	178	0.067	214	0.111	250	0.138	286	0.762	322	0.483
35	0.182	71	0.349	107	0.812	143	0.246	179	0.072	215	0.106	251	0.151	287	0.772	323	0.463

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## ELEVATION PATTERN

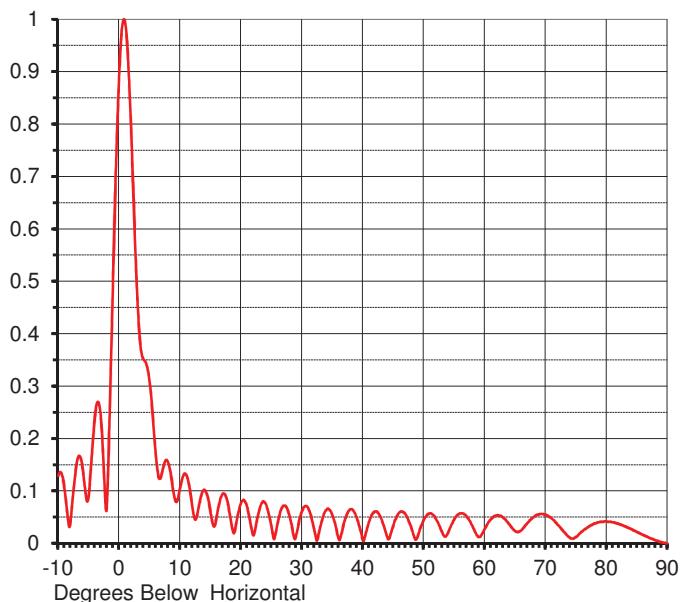
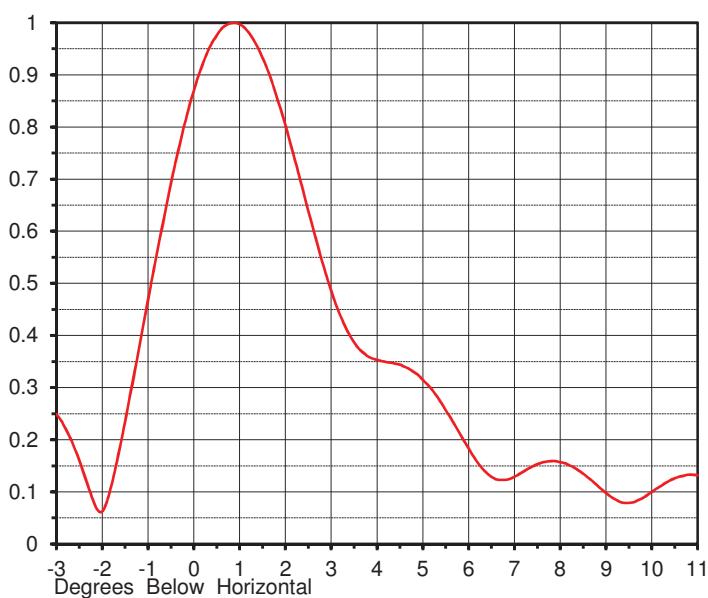
Proposal No. C-70054  
 Date 8-Mar-17  
 Call Letters WFGX  
 Channel 14  
 Frequency 473 MHz  
 Antenna Type TFU-19ETT/VP-R 4C170

RMS Directivity at Main Lobe  
 RMS Directivity at Horizontal

**18.0 ( 12.55 dB )**  
**13.6 ( 11.34 dB )**

Calculated

Beam Tilt 0.75 deg  
 Drawing Number 75



Angle	Field								
-10.0	0.129	10.0	0.106	30.0	0.062	50.0	0.045	70.0	0.054
-9.0	0.106	11.0	0.131	31.0	0.067	51.0	0.057	71.0	0.047
-8.0	0.041	12.0	0.070	32.0	0.026	52.0	0.046	72.0	0.035
-7.0	0.151	13.0	0.066	33.0	0.032	53.0	0.021	73.0	0.022
-6.0	0.142	14.0	0.102	34.0	0.064	54.0	0.021	74.0	0.010
-5.0	0.092	15.0	0.058	35.0	0.053	55.0	0.046	75.0	0.012
-4.0	0.241	16.0	0.051	36.0	0.009	56.0	0.057	76.0	0.023
-3.0	0.237	17.0	0.095	37.0	0.043	57.0	0.051	77.0	0.031
-2.0	0.081	18.0	0.065	38.0	0.065	58.0	0.032	78.0	0.038
-1.0	0.515	19.0	0.025	39.0	0.048	59.0	0.012	79.0	0.041
0.0	0.898	20.0	0.078	40.0	0.005	60.0	0.028	80.0	0.042
1.0	0.991	21.0	0.068	41.0	0.041	61.0	0.046	81.0	0.040
2.0	0.772	22.0	0.015	42.0	0.061	62.0	0.053	82.0	0.037
3.0	0.460	23.0	0.065	43.0	0.047	63.0	0.049	83.0	0.032
4.0	0.351	24.0	0.076	44.0	0.011	64.0	0.036	84.0	0.027
5.0	0.306	25.0	0.030	45.0	0.035	65.0	0.023	85.0	0.021
6.0	0.169	26.0	0.039	46.0	0.059	66.0	0.025	86.0	0.016
7.0	0.134	27.0	0.072	47.0	0.055	67.0	0.039	87.0	0.010
8.0	0.155	28.0	0.049	48.0	0.027	68.0	0.050	88.0	0.006
9.0	0.091	29.0	0.013	49.0	0.014	69.0	0.056	89.0	0.002
						90.0	0.000		

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## SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WFGX, Fort Walton Beach, FL  
Channel 14, 1000 kW, 582.8 m HAAT  
August, 2017

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY (<math>\mu\text{W}/\text{cm}^2</math>)</u>	<u>FCC UNCONTROLLED LIMIT (<math>\mu\text{W}/\text{cm}^2</math>)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
WFGX	DT	14	473	H & V	574.9	1000.000	0.300	18.323	315.33	5.81%
WEAR	DT	17	491	H	567	1000.000	0.300	9.419	327.33	2.88%
WEDS-LD (CP)	DT	29	563	H	111.3	13.000	0.300	3.272	375.33	0.87%
WHBR	DT	34	593	H	403	1000.000	0.300	18.699	395.33	4.73%
WMOE-LD (CP)	DT	42	641	H	111.3	10.000	0.300	2.517	427.33	0.59%
WWBH-LP	DT	47	671	H	111.3	14.200	0.300	3.574	447.33	0.80%
<b>TOTAL PERCENTAGE OF FCC GUIDELINE VALUE =</b>										<b>15.68%</b>

\* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.



## WFGX - FORT WALTON BEACH, FLORIDA

### Longley-Rice Interference Analysis

tvstudy v2.2.3 (Dxtpx3)  
Database: localhost, Study: WFGX\_14\_1MW\_DA\_3F, Model: Longley-Rice  
Start: 2017.08.09 16:45:04

Study created: 2017.08.09 16:44:38

Study build station data: LMS TV 2017-08-08 (29)

Proposal: WFGX D14 DT APP FORT WALTON BEACH, FL  
File number: WFGX\_14\_1MW\_DA\_3F  
Facility ID: 6554  
Station data: User record  
Record ID: 1120  
Country: U.S.  
Zone: III

Search options:

Non-U.S. records included

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	319.6 km
WDBD	D14	DT	CP	JACKSON, MS	BLANK0000025182	314.8
WPMI-TV	D15	DT	LIC	MOBILE, AL	BLCDT20090618ABA	3.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14  
Latitude: 30 36 45.40 N (NAD83)  
Longitude: 87 38 41.60 W  
Height AMSL: 615.7 m  
HAAT: 582.8 m  
Peak ERP: 1000 kW  
Antenna: Dielectric-TFU-19ETT/VP-R 4C170 (ID 1001610) 0.0 deg  
Elev Pattrn: Generic  
Elec Tilt: 0.8

38.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	806 kW	577.7 m	122.3 km
45.0	806	577.0	122.3
90.0	876	584.6	123.6
135.0	601	580.5	119.6
180.0	173	581.3	108.4
225.0	173	576.3	108.1
270.0	687	569.7	120.3
315.0	810	573.0	122.1

Database HAAT does not agree with computed HAAT  
Database HAAT: 583 m Computed HAAT: 578 m

ERP exceeds maximum  
ERP: 1000 kW ERP maximum: 354 kW

\*\*Proposal service area extends beyond baseline plus 1.0%  
Proposal service area population is more than 95.0% of baseline

**Appendix B - Interference Analysis**  
**WFGX - Fort Walton Beach, Florida**  
**Channel 14 - 1000 kW - Page 2**

Distance to Canadian border: 1307.4 km

Distance to Mexican border: 1043.7 km

Conditions at FCC monitoring station: Powder Springs GA  
 Bearing: 36.5 degrees Distance: 453.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
 Bearing: 308.4 degrees Distance: 1906.3 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%  
 Maximum new IX to LPTV: 2.00%

**Interference to BLANK0000025692 CP, scenario 1**

Desired:	Call WDBB	Chan D14	Svc DT	Status CP	City, State BESSEMER, AL	File Number BLANK0000025692	Distance			
Undesireds:	WFGX	D14	DT	BL	FORT WALTON BEACH, FL	DTVBL6554	319.6 km			
	WFGX	D14	DT	APP	FORT WALTON BEACH, FL	WFGX_14_1MW_DA_3F	319.6			
	WDBB	D14	DT	CP	JACKSON, MS	BLANK0000025182	312.0			
	WDSI-TV	D14	DT	CP	CHATTANOOGA, TN	BLANK0000027938	273.6			
	WLJT-DT	D14	DT	CP	LEXINGTON, TN	BLANK0000027017	270.4			
	WAFF	D15	DT	CP	HUNTSVILLE, AL	BLANK0000025101	158.2			
Service area	39276.4	1,688,439	38504.0	1,666,606	37429.0	1,633,116	37264.2	1,631,438	Percent New IX 0.44	0.10
Undesired					Total IX	Unique IX, before	Unique IX, after			
WFGX D14 DT BL		188.9			2,816	176.8	2,805			
WFGX D14 DT APP		357.6			4,494		341.6	4,483		
WDBB D14 DT CP		124.4			1,458	72.3	1,134	68.3	1,134	
WDSI-TV D14 DT CP		84.0			2,926	36.1	1,972	36.1	1,972	
WLJT-DT D14 DT CP		562.5			15,004	327.0	7,553	327.0	7,553	
WAFF D15 DT CP		374.8			19,077	207.3	12,428	207.3	12,428	

**Interference to BLANK0000025182 CP, scenario 1**

Desired:	Call WDBB	Chan D14	Svc DT	Status CP	City, State JACKSON, MS	File Number BLANK0000025182	Distance			
Undesireds:	WFGX	D14	DT	BL	FORT WALTON BEACH, FL	DTVBL6554	314.8 km			
	WFGX	D14	DT	APP	FORT WALTON BEACH, FL	WFGX_14_1MW_DA_3F	314.8			
	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	312.0			
	KARZ-TV	D14	DT	CP	LITTLE ROCK, AR	BLANK0000028198	348.0			
	KLWB	D14	DT	CP	NEW IBERIA, LA	BLANK0000025239	256.5			
	WFXW	D15	DT	LIC	GREENVILLE, MS	BLCDT20090612ACI	163.2			
	WNTZ-TV	D15	DT	CP	NATCHEZ, MS	BLANK0000027596	137.6			
Service area	40289.4	918,450	40205.6	917,435	39354.0	909,305	39037.0	904,783	Percent New IX 0.81	0.50
Undesired					Total IX	Unique IX, before	Unique IX, after			
WFGX D14 DT BL		360.0			4,606	300.4	3,639			
WFGX D14 DT APP		688.9			9,256		617.4	8,161		
WDBB D14 DT CP		4.0			94	0.0	0.0	0		

**Appendix B - Interference Analysis**  
**WFGX - Fort Walton Beach, Florida**  
**Channel 14 - 1000 kW - Page 3**

KARZ-TV D14 DT CP	8.0	2	8.0	2	8.0	2
KLWB D14 DT CP	321.2	3,304	234.0	2,080	222.1	1,952
WFXW D15 DT LIC	16.0	18	16.0	18	16.0	18
WNTZ-TV D15 DT CP	233.6	1,424	201.9	1,073	201.9	1,073

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**Interference to BLCDT20090618ABA LIC, scenario 1**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WPMI-TV	D15	DT	LIC	MOBILE, AL	BLCDT20090618ABA	
Undesireds:	WFGX	D14	DT	BL	FORT WALTON BEACH, FL	DTVBL6554	3.6 km
	WFGX	D14	DT	APP	FORT WALTON BEACH, FL	WFGX_14_1MW_DA_3F	3.6
	WRBL	D15	DT	LIC	COLUMBUS, GA	BLCDT20061013ABV	327.7
	WNOL-TV	D15	DT	LIC	NEW ORLEANS, LA	BLCDT20121019AAR	237.3
	WMAH-TV	D16	DT	LIC	BILOXI, MS	BLEDT20110404AGM	128.9
Service area		Terrain-limited			IX-free, before	IX-free, after	Percent New IX
40563.8	1,467,869	40405.1	1,467,462	39305.8	1,456,882	39154.7	1,455,317
Undesired		Total IX			Unique IX, before	Unique IX, after	
WFGX D14 DT BL		79.5	677	79.5	677		
WFGX D14 DT APP		238.6	2,293			230.6	2,242
WRBL D15 DT LIC		270.2	2,209	270.2	2,209	266.2	2,158
WNOL-TV D15 DT LIC		179.2	1,660	35.8	4	35.8	4
WMAH-TV D16 DT LIC		713.8	7,690	570.4	6,034	566.4	6,034

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**Interference to proposal, scenario 1**

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WFGX	D14	DT	APP	FORT WALTON BEACH, FL	WFGX_14_1MW_DA_3F	
Undesireds:	WDBB	D14	DT	CP	BESSEMER, AL	BLANK0000025692	319.6 km
	WDBD	D14	DT	CP	JACKSON, MS	BLANK0000025182	314.8
	WPMI-TV	D15	DT	LIC	MOBILE, AL	BLCDT20090618ABA	3.6
Service area		Terrain-limited			IX-free	Percent IX	
43878.5	1,493,866	43743.7	1,493,319	43191.5	1,487,424	1.26	0.39
Undesired		Total IX			Unique IX	Prcnt Unique IX	
WDBB D14 DT CP		233.7	1,489	186.2	896	0.43	0.06
WDBD D14 DT CP		302.1	2,007	254.6	1,414	0.58	0.09
WPMI-TV D15 DT LIC		63.8	2,992	63.8	2,992	0.15	0.20