

Application for Modification
Post – Repack Construction Permit
Engineering Exhibit

WXPX-TV – Bradenton, Florida

Facility ID: 6601

Licensee "ION MEDIA LICENSE COMPANY, LLC" is currently authorized to operate on Post-Repack DTV channel 29 with an effective radiated power (ERP) of 198 kW at an HAAT of 475 m. The Antenna Structure Registration Number is 1057473 with a Latitude of 27° 49' 10.80" N+ and a Longitude of 082° 15' 38.0" W-.

The purpose of this application is to request authority to modify the pending construction permit application (0000034359) to operate from the same Antenna Structure Registration Number 1057473 with a Latitude of 27° 49' 10.80" N+ and a Longitude of 082° 15' 38.0" W-. A HAAT of 475 m (AGL 472.1 m) and an AMSL of 495 m with an ERP of 218 kW will be utilized.

Antenna System

An Omni-directional top mounted antenna will be utilized. It will be attached to an existing guyed tower structure and will not increase the overall height of the structure. Any vertical component will not exceed the horizontal pattern in any direction. Elevation and Azimuth patterns are attached.

RF Hazard (Environmental)

Human Exposure measurements were calculated using the OET- 65 equation and the outcome is compliant with FCC 1.1310. Furthermore, the calculation is under 5% of the limit categorically excluding the application from further environmental evaluations.

Calculated Maximum	Calculated Exposure	Percent of Limit
mW/cm ²	mW/cm ²	
0.375	0.000409	0.11%

The station will coordinate with other(s) to comply with access, antenna and/or tower issues related to RF Exposure

Broadcast Facility

§73.616 Interference Caused

A calculation using *TVStudy* version 2.2.5 using an LMS database dated 2018-03-20 indicates that there is no excessive new interference created. This study used cell spacing of 2 km and a profile spacing of 1 km and baseline records were excluded if the station(s) has a CP.

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§73.622 Maximum ERP and Antenna Height

The application does not exceed the maximum ERP for the specified HAAT.

§73.623 DTV Allotments

The application does not change the DTV Table of Allotments.

§73.625 Coverage of Principal Community

The application's ERP will sufficiently cover Bradenton, Florida. RF coverage analysis attached.

§73.1030 Radio, Research and Receiving Locations

A calculation using *TVStudy* version 2.2.5 using an LMS database dated 2018-03-20 indicates that no excessive interference to any "protected" locations. As such, no coordination or notification is required.

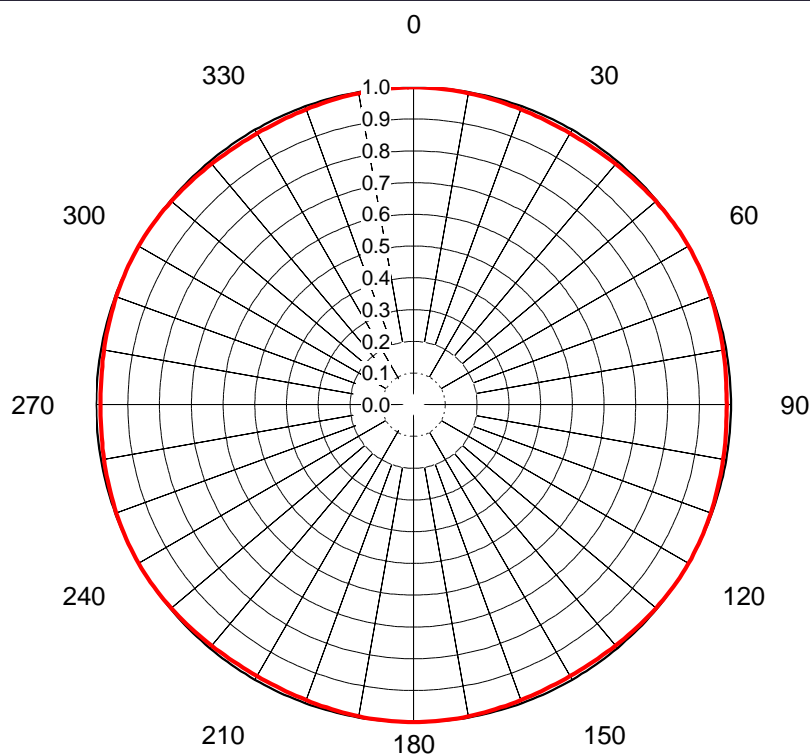
§73.1650 International Agreements

The application's transmit location is 1540.2 km from Canada and 1467.0 km from Mexico. As such, no coordination or notification is required.

AZIMUTH PATTERN Horizontal Polarization

Proposal No. **C-70376-6**
Date **20-Mar-18**
Call Letters **WXPX 29**
Frequency **563 MHz**
Antenna Type **TFU-20GTH/VP-R-O6**

Gain **1.01 (0.06dB)**
Calculated
Circularity **+/- 1.0 dB**
Drawing # **H14-O6-CH29**



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.988	72	0.995	108	0.995	144	0.988	180	1.000	216	0.988	252	0.995	288	0.995	324	0.988
1	1.000	37	0.988	73	0.995	109	0.996	145	0.988	181	1.000	217	0.988	253	0.995	289	0.996	325	0.988
2	1.000	38	0.989	74	0.994	110	0.997	146	0.987	182	1.000	218	0.989	254	0.994	290	0.997	326	0.987
3	1.000	39	0.990	75	0.993	111	0.997	147	0.987	183	1.000	219	0.990	255	0.993	291	0.997	327	0.987
4	0.999	40	0.990	76	0.993	112	0.998	148	0.987	184	0.999	220	0.990	256	0.993	292	0.998	328	0.987
5	0.999	41	0.991	77	0.992	113	0.998	149	0.987	185	0.999	221	0.991	257	0.992	293	0.998	329	0.987
6	0.999	42	0.991	78	0.991	114	0.999	150	0.987	186	0.999	222	0.991	258	0.991	294	0.999	330	0.987
7	0.998	43	0.992	79	0.991	115	0.999	151	0.987	187	0.998	223	0.992	259	0.991	295	0.999	331	0.987
8	0.998	44	0.993	80	0.990	116	0.999	152	0.987	188	0.998	224	0.993	260	0.990	296	0.999	332	0.987
9	0.997	45	0.993	81	0.990	117	1.000	153	0.987	189	0.997	225	0.993	261	0.990	297	1.000	333	0.987
10	0.997	46	0.994	82	0.989	118	1.000	154	0.987	190	0.997	226	0.994	262	0.989	298	1.000	334	0.987
11	0.996	47	0.995	83	0.988	119	1.000	155	0.988	191	0.996	227	0.995	263	0.988	299	1.000	335	0.988
12	0.995	48	0.995	84	0.988	120	1.000	156	0.988	192	0.995	228	0.995	264	0.988	300	1.000	336	0.988
13	0.995	49	0.996	85	0.988	121	1.000	157	0.988	193	0.995	229	0.996	265	0.988	301	1.000	337	0.988
14	0.994	50	0.997	86	0.987	122	1.000	158	0.989	194	0.994	230	0.997	266	0.987	302	1.000	338	0.989
15	0.993	51	0.997	87	0.987	123	1.000	159	0.990	195	0.993	231	0.997	267	0.987	303	1.000	339	0.990
16	0.993	52	0.998	88	0.987	124	0.999	160	0.990	196	0.993	232	0.998	268	0.987	304	0.999	340	0.990
17	0.992	53	0.998	89	0.987	125	0.999	161	0.991	197	0.992	233	0.998	269	0.987	305	0.999	341	0.991
18	0.991	54	0.999	90	0.987	126	0.999	162	0.991	198	0.991	234	0.999	270	0.987	306	0.999	342	0.991
19	0.991	55	0.999	91	0.987	127	0.998	163	0.992	199	0.991	235	0.999	271	0.987	307	0.998	343	0.992
20	0.990	56	0.999	92	0.987	128	0.998	164	0.993	200	0.990	236	0.999	272	0.987	308	0.998	344	0.993
21	0.990	57	1.000	93	0.987	129	0.997	165	0.993	201	0.990	237	1.000	273	0.987	309	0.997	345	0.993
22	0.989	58	1.000	94	0.987	130	0.997	166	0.994	202	0.989	238	1.000	274	0.987	310	0.997	346	0.994
23	0.988	59	1.000	95	0.988	131	0.996	167	0.995	203	0.988	239	1.000	275	0.988	311	0.996	347	0.995
24	0.988	60	1.000	96	0.988	132	0.995	168	0.995	204	0.988	240	1.000	276	0.988	312	0.995	348	0.995
25	0.988	61	1.000	97	0.988	133	0.995	169	0.996	205	0.988	241	1.000	277	0.988	313	0.995	349	0.996
26	0.987	62	1.000	98	0.989	134	0.994	170	0.997	206	0.987	242	1.000	278	0.989	314	0.994	350	0.997
27	0.987	63	1.000	99	0.990	135	0.993	171	0.997	207	0.987	243	1.000	279	0.990	315	0.993	351	0.997
28	0.987	64	0.999	100	0.990	136	0.993	172	0.998	208	0.987	244	0.999	280	0.990	316	0.993	352	0.998
29	0.987	65	0.999	101	0.991	137	0.992	173	0.998	209	0.987	245	0.999	281	0.991	317	0.992	353	0.998
30	0.987	66	0.999	102	0.991	138	0.991	174	0.999	210	0.987	246	0.999	282	0.991	318	0.991	354	0.999
31	0.987	67	0.998	103	0.992	139	0.991	175	0.999	211	0.987	247	0.998	283	0.992	319	0.991	355	0.999
32	0.987	68	0.998	104	0.993	140	0.990	176	0.999	212	0.987	248	0.998	284	0.993	320	0.990	356	0.999
33	0.987	69	0.997	105	0.993	141	0.990	177	1.000	213	0.987	249	0.997	285	0.993	321	0.990	357	1.000
34	0.987	70	0.997	106	0.994	142	0.989	178	1.000	214	0.987	250	0.997	286	0.994	322	0.989	358	1.000
35	0.988	71	0.996	107	0.995	143	0.988	179	1.000	215	0.988	251	0.996	287	0.995	323	0.988	359	1.000

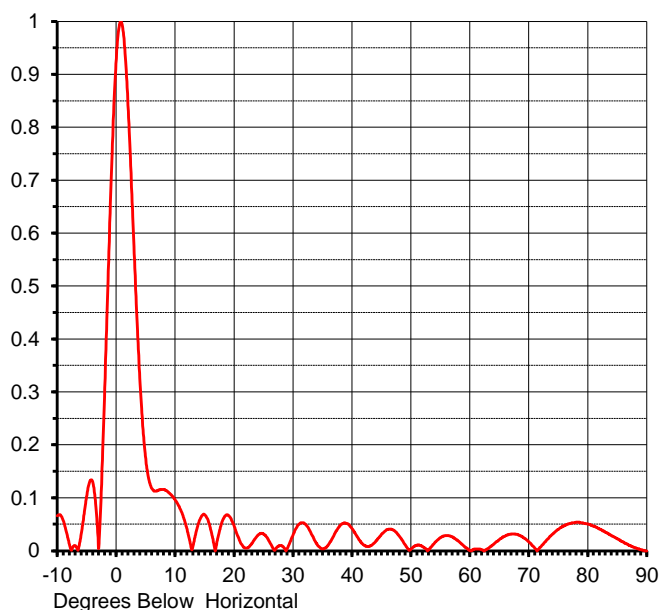
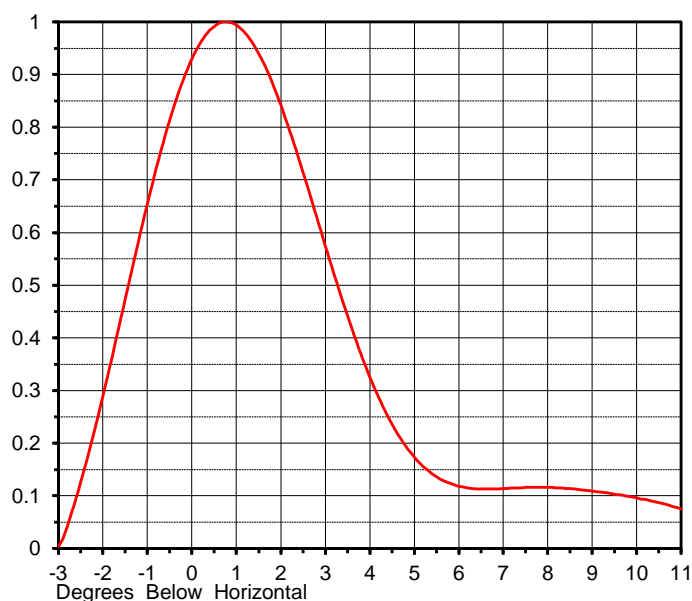
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ELEVATION PATTERN

Proposal No. **C-70376-6**
 Date **20-Mar-18**
 Call Letters **WXPX 29**
 Frequency **563 MHz**
 Antenna Type **TFU-20GTH/VP-R-O6**

RMS Directivity at Main Lobe **17.50 (12.43 dB)**
 RMS Directivity at Horizontal **15.10 (11.79 dB)**
 Calculated

Beam Tilt **0.75 deg**
 Drawing Number **20G175075**



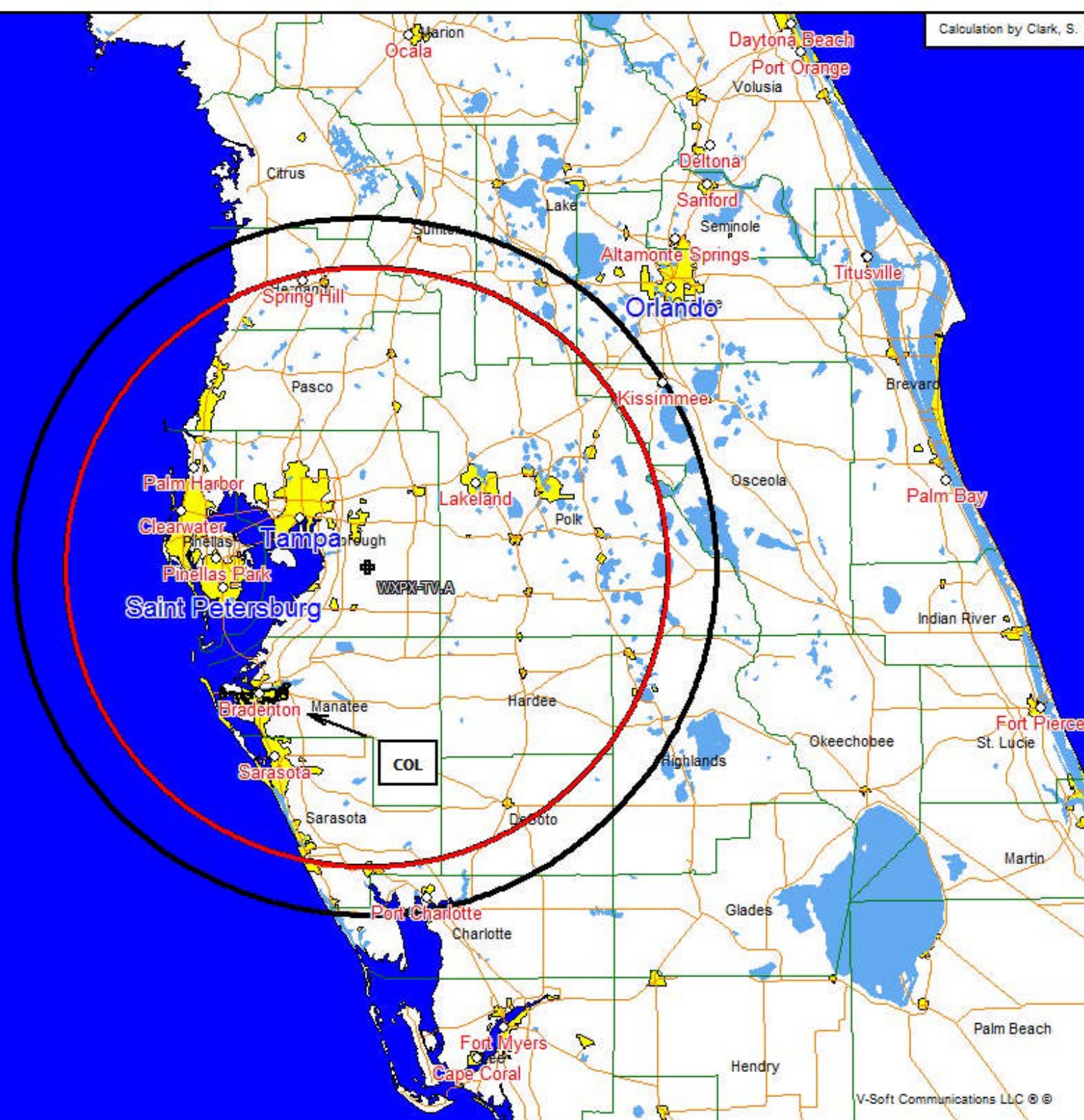
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.066	10.0	0.096	30.0	0.030	50.0	0.003	70.0	0.017
-9.0	0.057	11.0	0.075	31.0	0.050	51.0	0.010	71.0	0.005
-8.0	0.014	12.0	0.041	32.0	0.051	52.0	0.008	72.0	0.007
-7.0	0.010	13.0	0.008	33.0	0.035	53.0	0.002	73.0	0.020
-6.0	0.028	14.0	0.053	34.0	0.014	54.0	0.015	74.0	0.031
-5.0	0.105	15.0	0.068	35.0	0.004	55.0	0.025	75.0	0.040
-4.0	0.130	16.0	0.041	36.0	0.011	56.0	0.029	76.0	0.047
-3.0	0.004	17.0	0.011	37.0	0.031	57.0	0.026	77.0	0.052
-2.0	0.290	18.0	0.056	38.0	0.048	58.0	0.019	78.0	0.054
-1.0	0.655	19.0	0.067	39.0	0.052	59.0	0.009	79.0	0.053
0.0	0.930	20.0	0.047	40.0	0.042	60.0	0.001	80.0	0.051
1.0	0.994	21.0	0.018	41.0	0.025	61.0	0.003	81.0	0.047
2.0	0.842	22.0	0.005	42.0	0.011	62.0	0.002	82.0	0.041
3.0	0.575	23.0	0.014	43.0	0.009	63.0	0.004	83.0	0.035
4.0	0.326	24.0	0.029	44.0	0.017	64.0	0.012	84.0	0.029
5.0	0.174	25.0	0.032	45.0	0.031	65.0	0.021	85.0	0.023
6.0	0.118	26.0	0.017	46.0	0.040	66.0	0.028	86.0	0.017
7.0	0.114	27.0	0.003	47.0	0.039	67.0	0.032	87.0	0.011
8.0	0.116	28.0	0.010	48.0	0.028	68.0	0.031	88.0	0.006
9.0	0.109	29.0	0.004	49.0	0.012	69.0	0.026	89.0	0.002
								90.0	0.000

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WXPX-TV

Latitude: 27-49-10.80 N
Longitude: 082-15-38 W
ERP: 218.00 kW
Channel: 29
Frequency: 563.0 MHz
AMSL Height: 495.0 m
Elevation: 22.9 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.75
Prop Model: None

Calculation by Clark, S.

**Contour Legend**

- Dipole Adjusted Noise Limited
- 48 dBu Noise Limited