

Comprehensive Engineering Exhibit

Minor Change of W262CC

Facility ID 148289

This application requests for W262CC a change in location, elevation, and antenna only. No change in channel is requested. The transmitter site is moving approximately 1 km northwest of the current licensed site.

Antenna Location

The proposed operation is to be in “triplex” with stations W243EG and W287CO into the existing Nicom BKG77 antenna which is supported on a tower identified by registration number 1030925 at 144 meters above ground with a directional pattern as depicted in **Figure 0**. Below as **Figure 1** is an overlap and spacing study, that considers the directional antenna pattern, from which it can be determined that this proposal is within the licensed and proposed contour of **second** adjacent channel station WXTY as well as co-located **second** adjacent station WFLA-FM.

73.1204 Compliance

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called “Living Way”, allows for the use of D/U Analysis, also known as “signal strength ratio methodology” to be utilized to demonstrate compliance. In this instant case the facility to be protected is on a second or third adjacent channel and is to be afforded protection from signals 40 dB stronger than the protected facility presents near the proposed translator antenna location.

Concerning WXTY Licensed Facility; In **Figure 2** a map showing the predicted 85.0 dBu signal contour of the protected WXTY facility at the proposed translator antenna location is given. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 125.0 dBu (85. + 40) in a habitable/populated area. Utilizing the line of sight equation shown in **Figure 3** it has been determined that a 125.0 dBu signal developed by 99 watts, as proposed, emitted by the proposed antenna will not reach a habitable area. With examination of the image in **Figure 4** it can be determined that no habitable space extends into the confines of this contour.

Concerning WXTY Application; While only authorized facilities require protection, out of an abundance of caution, we have provided in the map of **Figure 2** the predicted 101.5 dBu signal contour of the applied for WXTY facility at the proposed translator antenna location is given. As this signal is due the same 40 dB protection, and is of higher value than that of WXTY licensed facility, the demonstrated protection of the weaker WXTY licensed facility provides for the protection of the applied for facility.

Concerning WFLA-FM; In **Figure 1** it can be seen that this proposal is co-located with full power station WFLA-FM. The proposed signal is several orders of magnitude lower than that of WFLA-FM and cannot exceed a value of 40 dB greater than the protected signal in habitable space.

Fill-In and Minor Change Status This proposal is to serve as a fill-in translator for station WGMY, Facility ID 61250 Thomasville, GA. The map of **Figure 5** demonstrates that the proposed 60 dBu contour is contained within that of the 5 mV/m of that facility. Also demonstrated in **Figure 2** is the required proposed service contour overlap.

Primary Station The proposed primary station signal to be rebroadcast by W262CC as requested to modified in this application is an HD channel stream of WGMY(FM), Thomasville, Georgia, FCC Facility ID No. 61250. The translator licensee has the written consent of the licensee of WGMY for this HD channel rebroadcast. Note that this HD channel stream will be a distinct HD channel -- with distinct programming -- from the WGMY HD channel rebroadcast on FM Translator W287CO, Tallahassee, Florida, FCC Facility ID No. 144674.

RF Fields Statement

The proposed facilities were evaluated in terms of potential radio frequency field exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

For this analysis the combined power of 418 watts of the 3 translators has been considered. This proposal and W243EG operate with 99 watts each and W287CO with 220 watts ERP. The antenna system is a Nicom BKG77, a one (1) element antenna, mounted 144 meters above ground. FM Model RF Fields program has been set to calculate values for an "Opposed V Dipole" elements operated with an effective radiated power of 0.418 Kilowatts in the Horizontal and Vertical plane. At 2 meters above the surface, at 38 meters from the base of the tower, this proposal will contribute worst case, 0.83 microwatts per square centimeter, or 0.1 percent of the allowable ANSI limit for controlled exposure, and 0.5 percent of the allowable limit for uncontrolled exposure. This figure is less than 5.0% of the applicable FCC exposure limit at all locations extending out from the base of the tower. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 0. Antenna Pattern

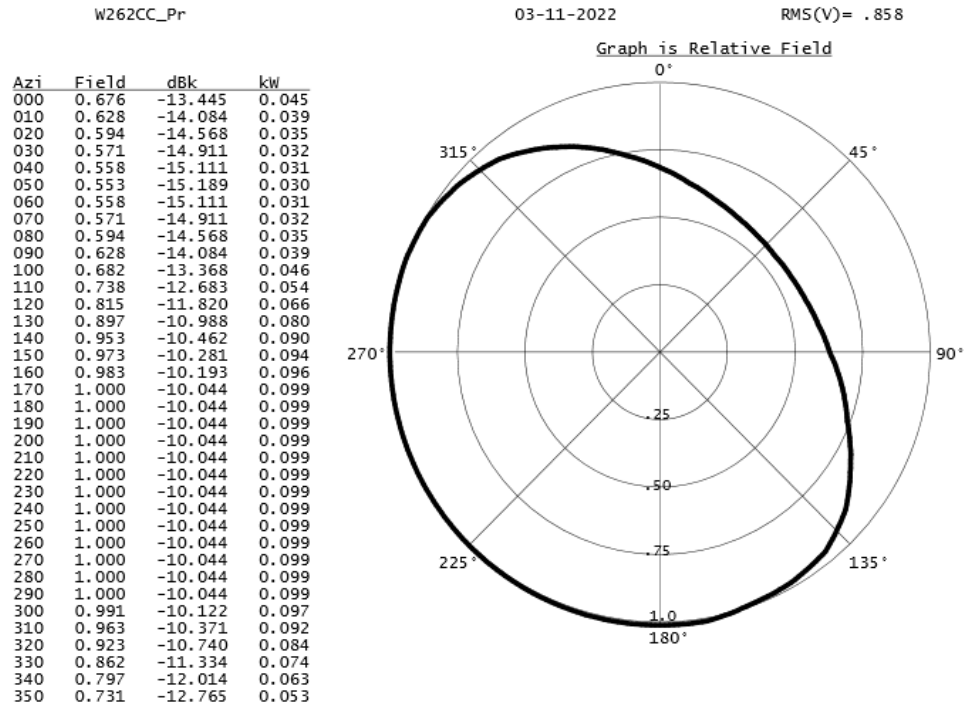


Figure 1. Overlap and Spacing Study

W262CC triplex with W243EG and W287CO Ihm Licenses, LLC											
REFERENCE 30 29 33.10 N. 84 17 12.70 W.			CH# 262D - 100.3 MHz, Pwr= 0.099 kw DA, HAAT= 173.6 M, COR= 210 M Average Protected F(50-50)= 13.56 km Standard Directional						DISPLAY DATES DATA 03-02-22 SEARCH 03-02-22		
CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PMR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)	
262CO	W0BB	LIC _CN	25.9	116.10	31 25 51.70	100.000	173.1	73.2	-57.1*	9.5	Ihm Licenses, LLC
	Tifton	GA	206.2	BMLH20060308ACZ	83 45 09.60	304	412				
262D	W262CC	LIC _CN	126.1	0.86	30 29 16.70	0.027	21.9	6.6	-33.9*	-48.3*	Piedmont Communications, I
	Tallahassee	FL	306.1	BLFT20160815AAA	84 16 46.60		112				
264C3	WFLA-FM	LIC _CN	0.0	0.00	30 29 32.70	11.500	3.8	38.5	-14.9*	-39.0*	Ihm Licenses, LLC
	Midway	FL	347.8	BMLH20020222AAQ	84 17 12.60	149	184				
260A	WXTY	CP ZCN	126.0	0.84	30 29 17.10	1.900	1.6	22.8	-13.7*	-22.6*	Adams Radio Of Tallahassee
	Lafayette	FL	306.0	0000153427	84 16 47.10	180	218				
260A	WXTY	LIC NCN	87.8	5.14	30 29 39.40	3.570	2.3	24.6	-7.7*	-19.8*	Adams Radio Of Tallahassee
	Lafayette	FL	267.8	BLH20180202AAM	84 13 59.60	106	141				
261D	W261DU	APP _CN	290.8	56.12	30 40 14.60	0.250	10.1	7.1	32.5	28.8	Mount Vernon Broadcasting
	Chattahoochee	FL	110.5	0000166400	84 50 07.70		103				
261D	W261DU	CP _CN	290.8	56.12	30 40 14.60	0.250	10.1	7.1	32.5	28.8	Mount Vernon Broadcasting
	Chattahoochee	FL	110.5	BNPFT20171208ACB	84 50 07.70		103				
263C3	WOYS	LIC _CN	214.6	102.46	29 43 57.80	11.500	57.7	38.5	30.9	43.0	East Bay Broadcasting, Inc
	Apalachicola	FL	34.3	BLH20030218AAG	84 53 23.70	145	146				
259C1	WOOF-FM	LIC _CN	311.8	127.40	31 15 07.60	100.000	10.2	72.9	103.9	53.9	Woof, Inc.
	Dothan	AL	131.3	BLH19850506KKS	85 17 11.70	299	380				
261C3	WWLY	APP _CN	256.2	131.50	30 12 13.15	18.000	57.9	37.9	60.0	73.1	Magic Broadcasting II, LLC
	Panama City Beach	FL	75.5	0000094105	85 36 57.54	120	124				
263C3	WJRL-FM	LIC NCN	306.2	132.63	31 11 33.60	10.000	55.1	36.6	64.1	75.9	Alabama Media, LLC
	Stocom	AL	125.6	BLH20161114AAG	85 24 42.80	132	212				
263C3	AL8977	USE _	299.1	142.50	31 06 36.64	25.000	60.6	39.5	68.3	82.7	From CDBS
	Stocom	AL	118.5	RM10871	85 35 39.76	100	174				
265A	WJAQ	CP NCN	288.6	97.13	30 46 04.60	6.000	2.7	27.7	81.0	68.7	Mfr, Inc.
	Marianna	FL	108.1	BPH20190415AAL	85 15 01.70	96	131				
265A	WJAQ	LIC _HN	289.5	98.10	30 47 01.60	5.900	2.7	28.0	81.9	69.4	Mfr, Inc.
	Marianna	FL	109.0	BMLH19941123KG	85 15 17.70	101	134				
261A	AL3358	USE _	104.3	125.26	30 12 26.81	6.000	44.3	28.7	69.5	80.0	From CDBS
	Live Oak	FL	285.0	RM11377	83 01 25.47	100	132				
261A	WILA	LIC ZCN	98.3	130.31	30 18 55.80	6.000	40.9	26.7	78.2	87.5	Learning Avenue, Inc.
	Live Oak	FL	279.0	BLED20150710ADA	82 56 36.50	100	133				
261C3	WWLY	LIC ZCN	256.7	147.62	30 10 44.70	12.000	54.9	36.1	79.1	91.0	Magic Broadcasting II, LLC
	Panama City Beach	FL	76.0	BLH20031030ABY	85 46 54.80	123	124				
263C2	WHHZ	LIC NCN	125.0	169.66	29 36 32.00	44.000	75.9	50.7	80.9	99.8	Marc Radio Gainesville, LL
	Newberry	FL	305.7	BMLH20180306AAH	82 50 58.10	143	155				
261D	W261AT	LIC _CN	311.8	127.38	31 15 06.60	0.250	31.3	21.1	82.8	86.4	Woof, Inc.
	Dothan	AL	131.2	BLFT20100127AAT	85 17 11.80	256	335				
265D	W265CC	LIC _CN	12.8	120.52	31 32 57.60	0.010	0.2	9.1	110.0	111.0	Cathy Gilmore
	Altbury	GA	192.9	BLFT20100604AFV	84 00 18.70	240	313				

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
 Contour distances are on direct line to and from reference station. Reference zone= East Zone, Co to 3rd adjacer
 All separation margins (if shown) include rounding.
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 ""affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 2. Contour Map

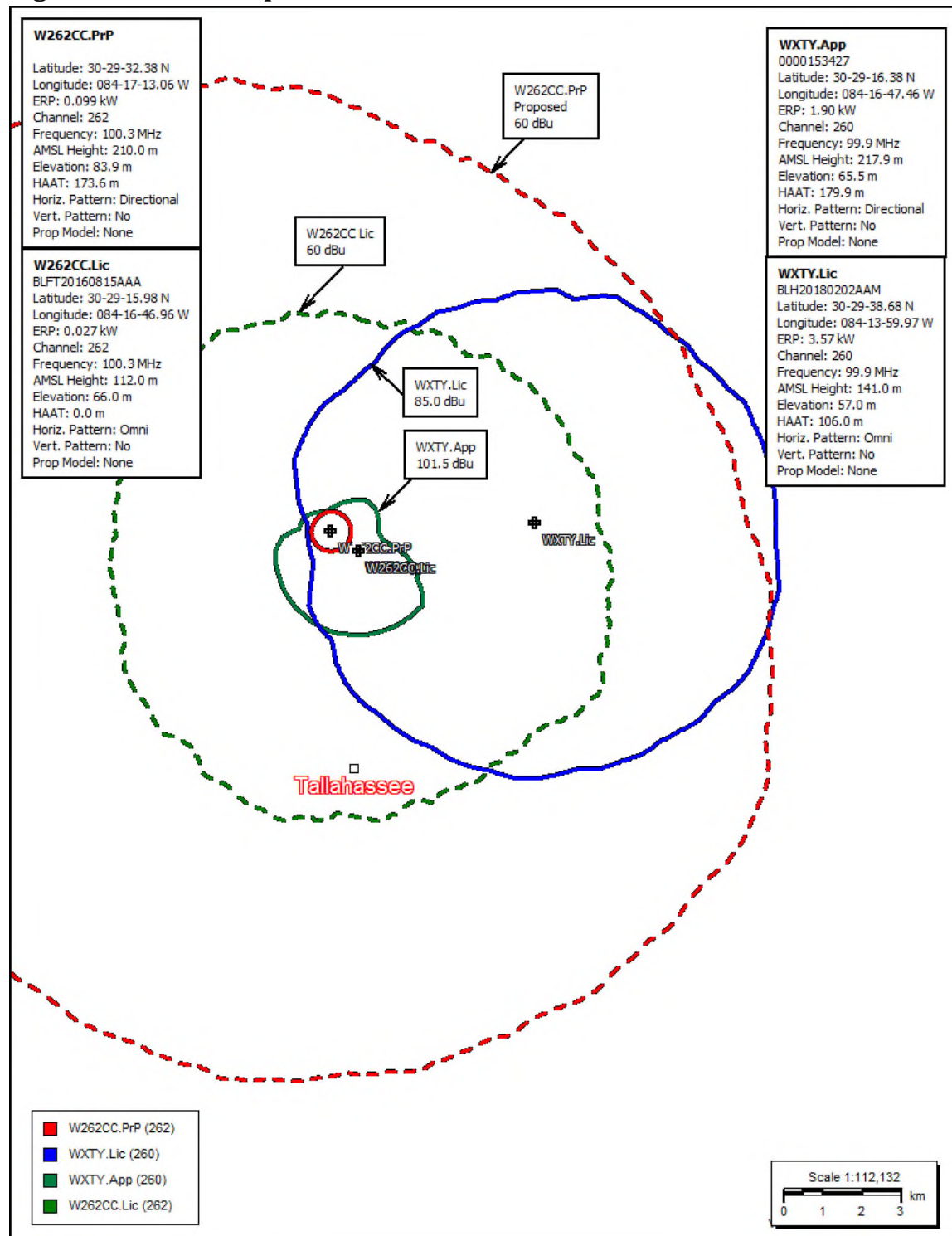


Figure 3. Distance to Interference Signal Level

Proposed Antenna: Isotropic Proposed Power: 0.099 kW Antenna Height AGL: 144 meters Interference Contour: 125 dBu Artificial Rcv Antenna Height: 2 meters Distance (Free Space) Equation: $= (10^{((106.92 - [\text{desired dBu}] + [\text{ERP in dBk}]) / 20)) * 1000}$ Field Strength (dBu) Equation $= 106.92 - (20 * (\text{LOG10}[\text{DistMeters}]/1000)) + [\text{ERP in dBk}]$								
<div>Fill in "yellow" cells</div>								
Depression				Distance				
Angle	Antenna			from Ant.	Distance	Field Strength	Distance	Field Strength
Below	Relative	ERP	ERP	to Interf	from Ant. to	in dBu @	from Ant.	in dBu @
Horizon	Field	in kW	in dBk	Contour	Artificial Plane	Artificial Plane	to Ground Level	Ground Level
0°	1.000	0.099	-10.04	39.25 m	infinite	---	infinite	---
-5°	1.000	0.099	-10.04	39.25 m	1629.27 m	92.64 dBu	1652.21 m	92.52 dBu
-10°	1.000	0.099	-10.04	39.25 m	817.75 m	98.62 dBu	829.26 m	98.50 dBu
-15°	1.000	0.099	-10.04	39.25 m	548.65 m	102.09 dBu	556.37 m	101.97 dBu
-20°	1.000	0.099	-10.04	39.25 m	415.18 m	104.51 dBu	421.03 m	104.39 dBu
-25°	1.000	0.099	-10.04	39.25 m	336.00 m	106.35 dBu	340.73 m	106.23 dBu
-30°	1.000	0.099	-10.04	39.25 m	284.00 m	107.81 dBu	288.00 m	107.69 dBu
-35°	1.000	0.099	-10.04	39.25 m	247.57 m	109.00 dBu	251.06 m	108.88 dBu
-40°	1.000	0.099	-10.04	39.25 m	220.91 m	109.99 dBu	224.02 m	109.87 dBu
-45°	1.000	0.099	-10.04	39.25 m	200.82 m	110.82 dBu	203.65 m	110.70 dBu
-50°	1.000	0.099	-10.04	39.25 m	185.37 m	111.52 dBu	187.98 m	111.39 dBu
-55°	1.000	0.099	-10.04	39.25 m	173.35 m	112.10 dBu	175.79 m	111.98 dBu
-60°	1.000	0.099	-10.04	39.25 m	163.97 m	112.58 dBu	166.28 m	112.46 dBu
-65°	1.000	0.099	-10.04	39.25 m	156.68 m	112.98 dBu	158.89 m	112.85 dBu
-70°	1.000	0.099	-10.04	39.25 m	151.11 m	113.29 dBu	153.24 m	113.17 dBu
-75°	1.000	0.099	-10.04	39.25 m	147.01 m	113.53 dBu	149.08 m	113.41 dBu
-80°	1.000	0.099	-10.04	39.25 m	144.19 m	113.70 dBu	146.22 m	113.58 dBu
-85°	1.000	0.099	-10.04	39.25 m	142.54 m	113.80 dBu	144.55 m	113.68 dBu
-90°	1.000	0.099	-10.04	39.25 m	142.00 m	113.83 dBu	144.00 m	113.71 dBu

Figure 4. Image of Support Structure



Figure 5. Fill-in Contour Map

