

Comprehensive Engineering Exhibit

Minor Modification of BPFT-20130328ARQ

Facility ID No. 140562

This engineering exhibit is part of an application seeking to operate W245AZ from the shared-time auxiliary antenna licensed for use by several stations including primary station WHQC in BXLH-20030421ACR. The antenna will continue to serve in this shared time backup role while simultaneously transmitting this instant proposal.

The antenna is mounted on ASR 1033382 at 134 meters above ground, emitting a non-directional effective radiated power of 180 watts, serving as fill-in translator for standard band station WHQC as shown in **Figure 1**. The overlapping 60 dBu contours of the licensed W254AZ is also shown.

Below as **Figure 2** is a spacing study from which it can be determined that this proposal is not within the protected contour of any other facilities, and no interfering contour of this proposal will overlap the protected contour of any other facility.

RF Radiation Statement

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

The antenna system is a Jampro JBCP-4HR-RFR, 4-element half-wave spaced antenna mounted 134 meters above ground. As this element type is not modeled in any current computer program, for purposes of this analysis the FM Model program has been set to calculate values for a "worst case" type of antenna element array, "Ring Stub", operated with an effective radiated power of 0.180 Kilowatts in both the horizontal and vertical planes. At 2 meters above the surface, at 110 meters from the base of the tower, this proposal will contribute worst case, 0.02 microwatts per square centimeter, or 0.002 percent of the allowable ANSI limit for controlled exposure, and 0.01 percent of the allowable limit for uncontrolled exposure. This figure is less than 5% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. 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 1. Contour, and Distance Map

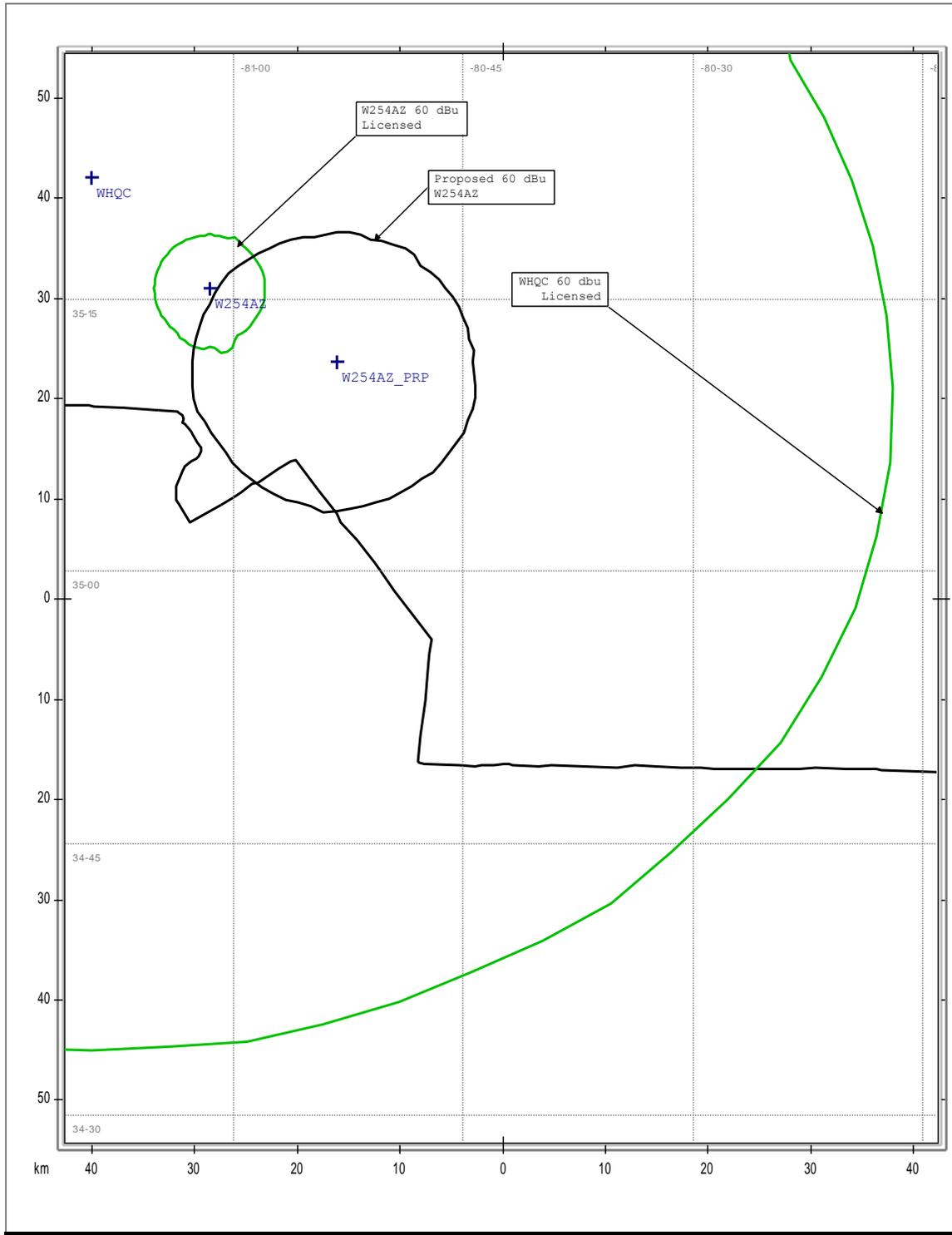


Figure 2. Spacing Study

w254AT at N+1 Aux Ant Capstar Tx Lic											
REFERENCE	CH#	254D	-	98.7 MHz,	Pwr=	0.18 kw,	HAAT=	140.0 M,	COR=	341 M	DISPLAY DATES
35 11 33.0 N.											DATA 11-19-13
80 53 14.0 W.											SEARCH 11-19-13
Average Protected F(50-50)= 14.0 km Omni-directional											
CH	CALL	TYPE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
254C0	WSMW Greensboro	LIC	NCX NC	47.6 228.2	124.89 BLH20031229AAZ	35 56 42.0 79 51 45.0	100.000 375	181.7 613	78.7	-69.8*<	1.9
254D	w254AZ Belmont	CP	DC_ NC	38.8 218.9	8.48 BPFT20130328ARQ	35 15 07.0 80 49 43.0	0.130 135	43.6 345	13.0	-48.1*<	-48.7*<
254D	w254AZ Belmont	LIC	_C_ NC	300.6 120.5	14.66 BLFT20070503AAN	35 15 34.0 81 01 34.0	0.088 21	17.9 228	5.5	-17.3*<	-37.6*<
255C	WSPA-FM Spartanburg One Step Application	CP	_CX SC	269.3 88.5	127.90 BPH20130415ABG	35 10 11.0 82 17 28.0	100.000 581	141.7 1016	95.8	-28.1*<	10.4
255C	WSPA-FM Spartanburg	LIC	_C_ SC	269.3 88.5	127.90 BLH19991026ACQ	35 10 11.0 82 17 28.0	100.000 580	141.7 1016	95.8	-28.1*<	10.4
252D	w252BU Dallas	LIC	_C_ NC	299.4 119.3	23.80 BLFT20100125AAE	35 17 50.0 81 06 56.0	0.250 194	1.1 413	19.1	8.7	0.4
253D	w253BA Indian Trail	LIC	_C_ NC	109.1 289.2	26.48 BLFT20071002ACI	35 06 52.0 80 36 45.0	0.019 60	6.3 246	4.5	5.9	0.5
253D	w253BA Indian Trail	CP	DC_ NC	109.1 289.2	26.48 BPFT20130328ASI	35 06 52.0 80 36 45.0	0.250 60	5.0 246	3.5	7.2	1.5
256D	w256BP Charlotte	LIC	_C_ NC	70.2 250.3	19.39 BLFT20110315AAO	35 15 05.0 80 41 12.0	0.010 161	0.2 360	7.0	5.9	8.3
257C3	WBT-FM Chester	LIC	_CX SC	218.0 37.8	56.46 BLH20031201APJ	34 47 30.0 81 16 06.0	7.700 182	3.6 350	37.6	38.1	18.0
201D	w201DI Monroe	LIC	_C_ NC	126.0 306.2	34.51 BLFT20091204ADK	35 00 35.0 80 34 51.0	0.170 23	0.0 206	0.0	10.0R	24.5M
253C	WTFM Kingsport One Step Application	APP	ZCY TN	321.1 140.3	177.95 BPH20130528AKF	36 25 53.0 82 08 16.0	74.000 683	132.8 1305	89.7	31.6	67.8
253C	WTFM Kingsport	LIC	ZCY TN	321.1 140.3	177.96 BLH19950213KA	36 25 54.0 82 08 15.0	74.000 683	132.8 1305	89.7	31.6	67.9
255L1	wVOY-LP Jefferson	LIC	_SC	140.8 321.1	72.94 BLL20070329AAD	34 40 59.0 80 22 57.0	0.058 39	174		51.2	45.8
201C2	WPIR Hickory	LIC	DEX NC	338.4 158.2	63.75 BLE20011024AAG	35 43 34.0 81 08 52.0	26.500 77	0.0 372	0.0	15.0R	48.8M
253C	WTFM Kingsport One Step Application	RSV-A	_TN	327.7 147.0	203.32	36 43 59.0 82 06 28.0	100.000 600	137.2 1222	92.3	52.7	90.8
253A	WBZF Hartsville	LIC	NCX SC	138.0 318.5	108.41 BLH20021101ABO	34 27 54.0 80 05 45.0	6.000 100	40.5 187	26.3	53.1	59.9

Terrain database is NGDC 30 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= , Co to 3rd adjacent.
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 protected contour.
< = Contour overlap