

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

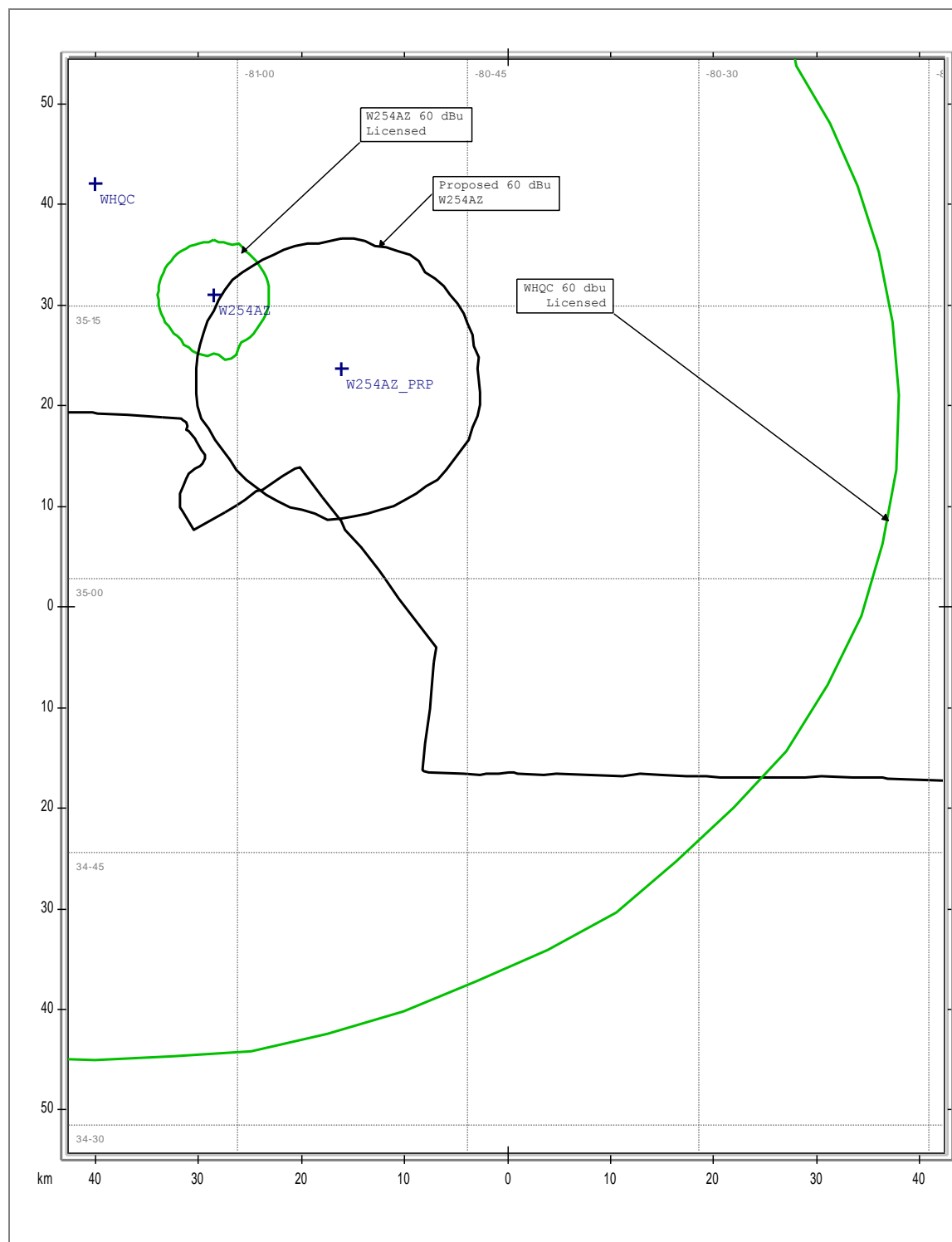


Figure 2. Spacing Study

W254AT at N+1 Aux Ant Capstar TX Llc											
REFERENCE	CH#	254D	-	98.7 MHz, Pwr= 0.18 kw, HAAT= 140.0 M, COR= 341 M	DISPLAY DATES						
35 11 33.0 N. 80 53 14.0 W.				Average Protected F(50-50)= 14.0 km Omni-directional	DATA 11-19-13 SEARCH 11-19-13						
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kw)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
254C0	WSMW	LIC	NCX	47.6	124.89	35 56 42.0	100.000	181.7	78.7	-69.8*<	1.9
Greensboro		NC		228.2	BLH20031229AAZ	79 51 45.0	375	613	Entercom	Kansas City Licens	
254D	W254AZ	CP	DC_	38.8	8.48	35 15 07.0	0.130	43.6	13.0	-48.1*<	-48.7*<
Belmont		NC		218.9	BPFT20130328ARQ	80 49 43.0	135	345	Capstar Tx Llc		
254D	W254AZ	LIC	_C_	300.6	14.66	35 15 34.0	0.088	17.9	5.5	-17.3*<	-37.6*<
Belmont		NC		120.5	BLFT20070503AAN	81 01 34.0	21	228	Capstar Tx Llc		
255C	WSPA-FM	CP	_CX	269.3	127.90	35 10 11.0	100.000	141.7	95.8	-28.1*<	10.4
Spartanburg		SC		88.5	BPH20130415ABG	82 17 28.0	581	1016	Entercom	Kansas City Licens	
One Step Application											
255C	WSPA-FM	LIC	_C_	269.3	127.90	35 10 11.0	100.000	141.7	95.8	-28.1*<	10.4
Spartanburg		SC		88.5	BLH19991026ACQ	82 17 28.0	580	1016	Entercom	Kansas City Licens	
252D	W252BU	LIC	_C_	299.4	23.80	35 17 50.0	0.250	1.1	19.1	8.7	0.4
Dallas		NC		119.3	BLFT20100125AAE	81 06 56.0	194	413	Radio Training Network, In		
253D	W253BA	LIC	_C_	109.1	26.48	35 06 52.0	0.019	6.3	4.5	5.9	0.5
Indian Trail		NC		289.2	BLFT20071002ACI	80 36 45.0	60	246	Positive Alternative Radio		
253D	W253BA	CP	DC_	109.1	26.48	35 06 52.0	0.250	5.0	3.5	7.2	1.5
Indian Trail		NC		289.2	BPFT20130328ASI	80 36 45.0	60	246	Positive Alternative Radio		
256D	W256BP	LIC	_C_	70.2	19.39	35 15 05.0	0.010	0.2	7.0	5.9	8.3
Charlotte		NC		250.3	BLFT20110315AAO	80 41 12.0	161	360	Isothermal Community Colle		
257C3	WBT-FM	LIC	_CX	218.0	56.46	34 47 30.0	7.700	3.6	37.6	38.1	18.0
Chester		SC		37.8	BLH20031201APJ	81 16 06.0	182	350	Greater Media Charlotte In		
201D	W201DI	LIC	_C_	126.0	34.51	35 00 35.0	0.170	0.0	0.0	10.0R	24.5M
Monroe		NC		306.2	BLFT20091204ADK	80 34 51.0	23	206	Grace Christian School		
253C	WTFM	APP	ZCY	321.1	177.95	36 25 53.0	74.000	132.8	89.7	31.6	67.8
Kingsport		TN		140.3	BPH20130528AKF	82 08 16.0	683	1305	Holston Valley Broadcastin		
One Step Application											
253C	WTFM	LIC	ZCY	321.1	177.96	36 25 54.0	74.000	132.8	89.7	31.6	67.9
Kingsport		TN		140.3	BLH19950213KA	82 08 15.0	683	1305	Holston Valley Broadcastin		
255L1	WVOY-LP	LIC	_C_	140.8	72.94	34 40 59.0	0.058	39	51.2	45.8	
Jefferson		SC		321.1	BLL20070329AAD	80 22 57.0	174		The Church of God, Inc. Em		
201C2	WPIR	LIC	DEX	338.4	63.75	35 43 34.0	26.500	0.0	0.0	15.0R	48.8M
Hickory		NC		158.2	BLE020011024AAG	81 08 52.0	77	372	Positive Alternative Radio		
253C	WTFM	RSV-A	_C_	327.7	203.32	36 43 59.0	100.000	137.2	92.3	52.7	90.8
Kingsport		TN		147.0		82 06 28.0	600	1222	Holston Valley Broadcastin		
One Step Application											
253A	WBZF	LIC	NCX	138.0	108.41	34 27 54.0	6.000	40.5	26.3	53.1	59.9
Hartsville		SC		318.5	BLH20021101ABO	80 05 45.0	100	187	Cumulus Licensing Llc		

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), Beamttilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside protected contour.
 < = Contour overlap