

Minor Modification of Permit K253BV; BMPFT-20140117AAC Facility ID No. 140403

This exhibit is for minor modification of translator permit for K253BV Facility ID No. 140403, BMPFT-20140117AAC. It requests only a change in primary station as well as a change of antenna make and model.

Antenna Location

The antenna location does not change. It is to be mounted on an existing tower identified by registration number 1012601 at 180 meters above ground. Below as **Figure 1** is an overlap and spacing study from which it can be determined that this proposal is within the protected contour of **second** adjacent channel station WWLS-FM; and **second** adjacent channel station KYIS, both of which are co-located on a tower only 1.44 km distant from K253BV. Also note that co-channel translator K253AY was filed subsequent to this permit, as such it accepts interference from the permitted facility of K253BV which is making no material technical modifications.

73.1204 Complinance

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 in the location of the proposed translator antenna location.

Concerning WWLS-FM; In **Figure 2** a map showing the predicted 115.5 dBu signal contour of the protected facility at 500 meters beyond the proposed translator antenna location is given. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 155.5 dBu in a habitable/populated area. Utilizing the line of sight equation shown in **Figure 3** it has been determined that a 155.5 dBu signal developed by 130 watts will have a maximum distance of 1.34 meters, effectively not leaving the transmit antenna which has a physical size greater than 1.34 meters. Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Concerning KYIS; As can be seen in Figure 1, KYIS produces an even stronger signal than WWLS-FM in the area of concern, thus by demonstrating protection of the WWLS-FM signal, protection of the KYIS signal is also demonstrated.

Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Fill-in Status

This proposal is to serve as a fill-in translator for station KBRU(FM), Facility ID 11964, Oklahoma City, OK. The map of **Figure 4** demonstrates that the proposed 60 dBu contour is contained within that of the KBRU(FM).

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 proposed antenna system is an **ERI 100A-1M-DA** a single element antenna mounted 180 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 0.13 Kilowatts in the Horizontal and Vertical. At 2 meters above the surface, at 50 meters from the base of the tower, this proposal will contribute worst case, 0.16 microwatts per square centimeter, or 0.02 percent of the allowable ANSI limit for controlled exposure, and 0.1 percent of the allowable limit for uncontrolled exposure. 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. Overlap and Spacing Study

K253BV Overlap and Spacing Study												
Educational Media Foundation												
REFERENCE	CH# 253D - 98.5 MHz, Pwr= 0.13 kW DA, HAAT= 0.0 M, COR= 540 M										DISPLAY DATES	
35 34 24.0 N.	Average Protected F(50-50)= 6.0 km										DATA 01-07-15	
97 29 08.0 W.	Standard Directional										SEARCH 01-07-15	
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)	
253C	KYIS	LIC	CX	179.0	1.44	35 33 37.0	100.000	12.3	84.8	-22.0*	-83.8*	
Oklahoma City			OK	359.0	BLH20070904AAD	97 29 07.0	470	820	Radio License Holding		Cbc,	
251C1	WWLS-FM	LIC	C	179.0	1.44	35 33 37.0	31.000	8.6	72.3	-18.3*	-71.3*	
The Village			OK	359.0	BLH20080721ACN	97 29 07.0	470	820	Radio License Holding		Cbc,	
253D	K253BV!	CP	DC	0.0	0.00	35 34 24.0	0.130	48.8	14.9	-63.7	-63.7	
Oklahoma City			OK	0.0	BMPFT20140117AAC	97 29 08.0		540	Educational Media Foundati			
253C	KVOO-FM	LIC	CY	60.8	142.85	36 11 26.0	100.000	180.6	77.8	-54.1*	12.1	
Tulsa			OK	241.7	BLH19880420KC	96 05 50.0	374	611	Journal Broadcast Corporat			
253C3	KACO	LIC	NCX	229.3	107.12	34 56 30.0	18.500	106.9	36.8	-11.8	30.3	
Apache			OK	48.8	BLH20060130AUS	98 22 33.0	93	506	Perry Broadcasting Of Apac			
253D	K253AY	LIC	DC	170.2	40.03	35 13 04.0	0.250	27.6	8.3	1.2	-5.6	
Norman			OK	350.2	BLFT20140327BGZ	97 24 37.0		419	The Love Station, Inc.			
253D	K253BY	CP	C	264.4	55.54	35 31 22.0	0.027	26.1	7.8	15.5	1.9	
El Reno			OK	84.0	BNPFT20130830AAW	98 05 42.0	96	524	Csn International			
253D	K253BC	LIC	C	341.1	96.88	36 23 54.0	0.250	33.9	10.1	47.5	36.2	
Enid			OK	160.9	BLFT20141024ABQ	97 50 14.4		399	Paul W. & Patsy Regier			

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.
All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 2. Contour Map

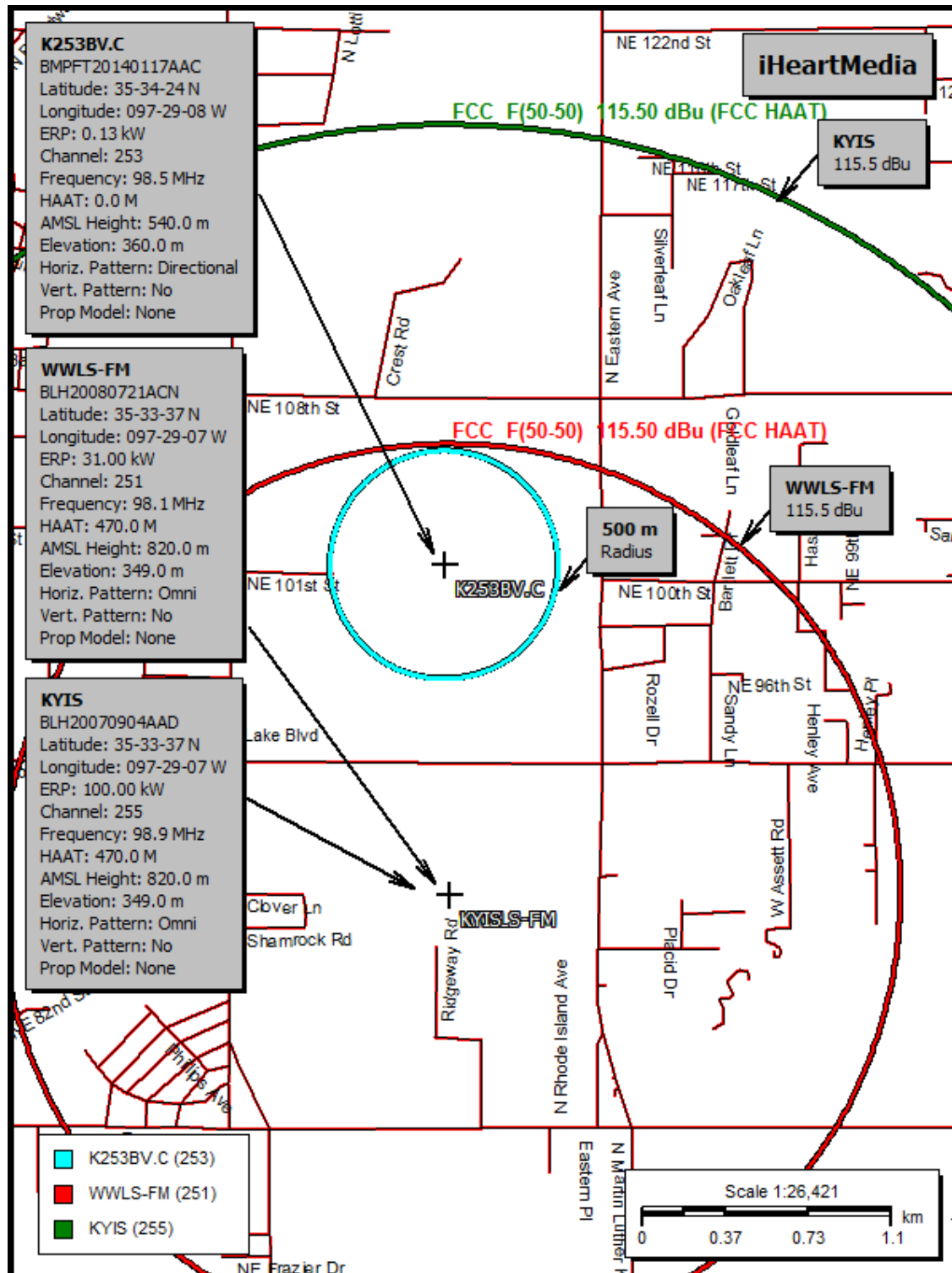


Figure 3. Signal Level at or Near Ground Level

ERP	0.13	kw		
Calculated IX contour	155.5	dbu		
			Distance to interfering contour meters (hypot)	Height of IX meters
Relative Field	Downward ERP			
1	0.1300		1.3427	178.657

Figure 4. 60 dBu Contour Map

