

**Minor Modification of Construction Permit**  
**BPFT-20110103AAL**  
**Facility ID No. 155742**

This minor modification of permit application seeks to utilize the existing licensed location, and height, for translator Fid 155742, to transmit with 75 watts non-directional, on the channel authorized via BPFT-20110103AAL, channel 289.

Below as Figure 1 is a spacing study from which it can be determined that this proposal is within the protected contour of station KSMG. Figure 2 demonstrates calculations of distance to the interfering contour produced by this proposal with respect to KSMG. Figure 3 is an image of the antenna location, from which it can be determined that no habitable area is near the antenna. Thus by use of the "Living Way" method, it has been demonstrated that no actual interference will occur.

As no change in location is proposed, the 60 dBu contours as existing and proposed do overlap, thus qualifying this application for processing as a "minor change".

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 a Bext Model TFC1K fully spaced 2 bay antenna array mounted 50 meters above ground. As the selected antenna is not modeled in the mini-computer program RF Model, for purposes of this analysis the program has been set to calculate values for a "Ring Stub" type of antenna element array as a worst case study, operated with an effective radiated power of 0.075 Kilowatts in both the horizontal and vertical planes 50 meters above ground. At 2 meters above the surface, at 20 meters from the base of the tower, this proposal will contribute worst case, 0.5 microwatts per square centimeter, or 0.05 percent of the allowable ANSI limit for controlled exposure, and 0.25 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. Spacing Study**

Search of channel 289 (105.7 MHz Class D) at 28-58-15.0 N, 98-28-30.0 W.							
Callsign	Chan	ARN	Class	Status	Dist_km	Clr	Clr Notes
KSMG	287	BLH20060427AFC	C	LIC	39.43	-20.06 dB	Living Way
KSMG	287	BXLH20060616AAM	C	LIC	39.43	0.29 dB	Aux
KTGO	289	BLH19960314KB	C3	LIC	85.31	10.03 dB	Clear
KAHL-FM	290	BLH20090303AAF	A	LIC	85.87	22.35 dB	Clear
KNAF-FM	289	BLH20041217AXT	C3	LIC	160.1	27.25 dB	Clear
K290BO	290	BLFT20100914AAE	D	LIC	64.76	25.15 dB	Clear

**Figure 2. KSMG Living Way**

XField Calculator V:1.0.6 (C) V-Soft Communications (R) 2011

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**-Test Reference Station Antenna - PF500-1**

Cell Sign	K292FK
Channel	289
ERP kW	.075 kW
COR AG (m)	50
N. Lat.	28 58 15.0
W. Lng	98 28 30.0
Review Azimuth	

Antenna #1 V-Field

Browse

**-IBOC Station Antenna -**

ERP kW

COR AG (m)

70%

Antenna #2, V-Field Graph

**-Database in Use**

USGS 03 SEC  
NAD 27

**-Station to be Protected by Translator**

Protected Station's Call	KSMG
Protected Channel	287
Station ERP (kW)	100 kW
Ant COR AMSL (m)	611 M
N. Lat.	29 16 29.0
W. Lng.	98 15 52.0

Antenna #2 Browse

**-Initial Calculations**

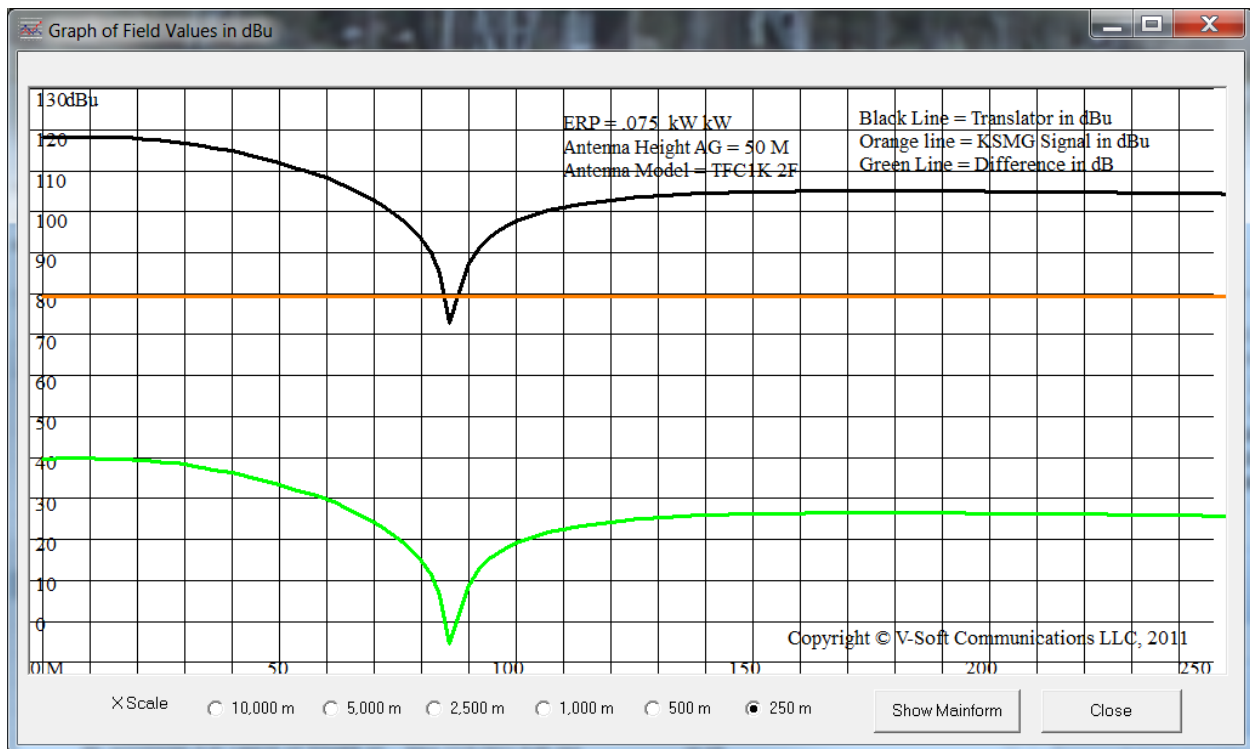
Distance to Site (km)	39.5	Calc
Azimuth to Site	211.2	
HAAT to translator	467.0	
Signal at translator in dBu	79.65382	

**-Translator Protection Parameters**

Table Distance Increment Between Points (m)	2
Table Distance to Study (m)	20000
Show Deltas above dB	<input type="checkbox"/>

Show Graph Show Table

**XFIELD**



**Figure 3. Facility ID No. 155742 Living Way Image of Site**

