

## **Minor Change Application**

**W286BK Facility ID No. 150239**

**August 2011**

This application seeks via minor modification to relocate W286BK to the location and height currently utilized by W281AB which is itself moving to a different location and height. Specifically this application is for 99 watts, non-directional, 190 meters above ground level on the tower identified by ASR 1226663.

Below as Figure 1 is a spacing study from which it can be determined that this proposal is within the protected contour of co-located stations WZZK-FM and WERC-FM, Figure 2 and Figure 3 demonstrate that by use of the "Living Way" method no actual interference will occur. Please note that both stations are located on this same tower proposed in this application.

Also from Figure 1 it can be determined that this proposal is within 10 km of an intermediate frequency related facility of greater than 99 watts. To comply with 73.1204(g), this proposal is for 99 watts ERP, and thus is treated as a "Class D" station not subject to intermediate frequency separation requirements.

An application for license to cover permit BPFT-20110817ADC has been filed for W286AQ, thus the facility licensed by BLFT-20110602ADD has not been protected. It is also noted that W286AQ has filed an additional permit to an even more distant allocation.

Figure 4 demonstrates the proposed 60 dBu contour will continue to be contained within 60 dBu contour of primary station WERC-FM, and that the existing and proposed contours of this facility overlap.

In accordance with 47 C.F.R. 1.1307(b)(1) Table 1, only "Part 74 – Subpart L" facility with an ERP greater than 100 watts, is subject to routine environmental evaluation. Since the facility proposed in this application will operate with an ERP of less than 100 watts, it is "categorically excluded from making such studies or preparing an EA" [1.1307(b)(1)] The licensee will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

**Figure 1. Spacing Study**

ComStudy 2.2 search of channel 286 (105.1 MHz Class D) at 33-29-04.0 N, 86-48-25.0 W.									
Callsign	ChanI	ERP_w	ARN	Cls	Stat	Dist_km	Sep	Clr	Clearance Notes
WZZK-FM	284	97800	BLH20030130AHE	C0	LIC	0	0	-86.82 dB	Living Way
WERC-FM	288	29500	BLH20050829ACX	C2	LIC	0	0	-81.62 dB	Living Way
W286BK	286	99	BLFT20110617ACO	D	LIC	8.12	0	-34.35 dB	This Fac
W286AQ	286	250	BLFT20110602ADD	D	LIC	58.66	0	-22.33 dB	Moved
WJOX-FM	233	100000	BLH20000929AEE	C0	LIC	4.66	25	-20.3	I.F. 99w limit
WJOX-FM	233	50000	BXLH20070411ACW	C0	LIC	4.66	25	-20.3	Aux Fac
WALJ	286	2600	BNPH20110617ACL	A	CP	90.31	0	0.81 dB	Clear
W286BV	286	250	BLFT20110505AAT	D	LIC	75.11	0	0.28 dB	Clear
W286AQ	286	250	BPFT20110607ABE	D	CP	67.6	0	0.19 dB	Clear
WQSB	286	2700	BLH20010116ADJ	C3	LIC	102.67	0	3.14 dB	Clear
W286AQ	286	240	BPFT20110817ADC	D	APP	75.1	0	4.09 dB	Lic Filed

**Figure 2. WZZK-FM Living Way**

XField Calculator V:1.0.5 (C) V-Soft Communications (R) 2011

File Defaults Setup Help About

**Test Reference Station Antenna - dLFX1E**

Call Sign: W286BK-PiP  
Channel: 286  
ERP kW: .099kW  
COR AG (m): 190  
N. Lat: 33 29 04.0  
W. Lng: 86 48 25.0  
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: WZZK-F  
Protected Channel: 284  
Station ERP (kW): 100 kW  
Ant COR AMSL (m): 597 M  
N. Lat: 33 28 04.0  
W. Lng: 86 48 25.0  
Antenna #2 Browse

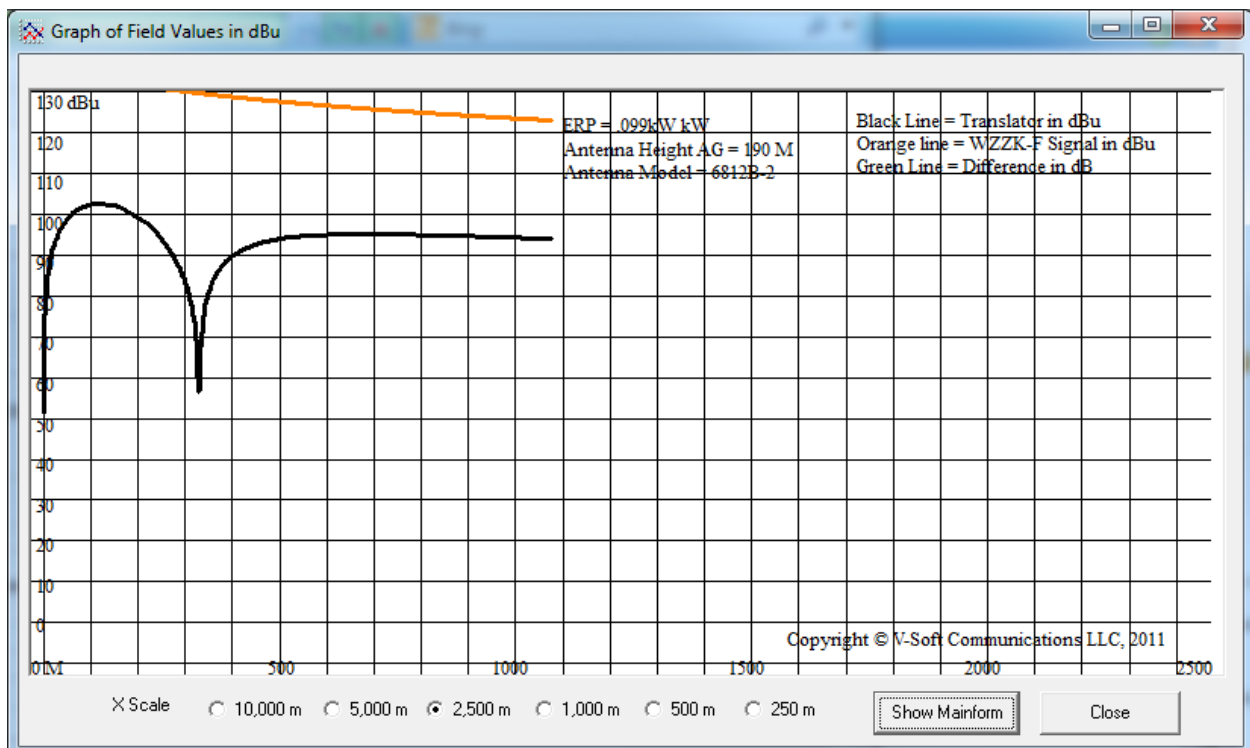
**Translator Protection Parameters**

Table Distance Increment Between Points (m): 2  
Table Distance to Study (m): 2500  
☐ Show Deltas above dB  
Show Graph ShowTable

**Initial Calculations**

Distance to Site (km): 1.9 Calc  
Azimuth to Site: 0.0  
HAAT to translator: 426.4  
Signal at translator in dBu: 121.0481

**XFIELD**



**Figure 3. WERC-FM Living Way**

XField Calculator V:1.0.5 (C) V-Soft Communications (R) 2011

File Defaults Setup Help About

**Test Reference Station Antenna - dLPLX1E**

Call Sign: W286BK-PrP  
Channel: 286  
ERP kW: .099kW  
COR AG (m): 190  
N. Lat.: 33 29 04.0  
W. Lng.: 86 48 25.0  
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: WERC-F  
Protected Channel: 288  
Station ERP (kW): 29.5 kW  
Ant COR AMSL (m): 383 M  
N. Lat.: 33 28 54.0  
W. Lng.: 86 48 25.0  
Antenna #2:   
Browse:

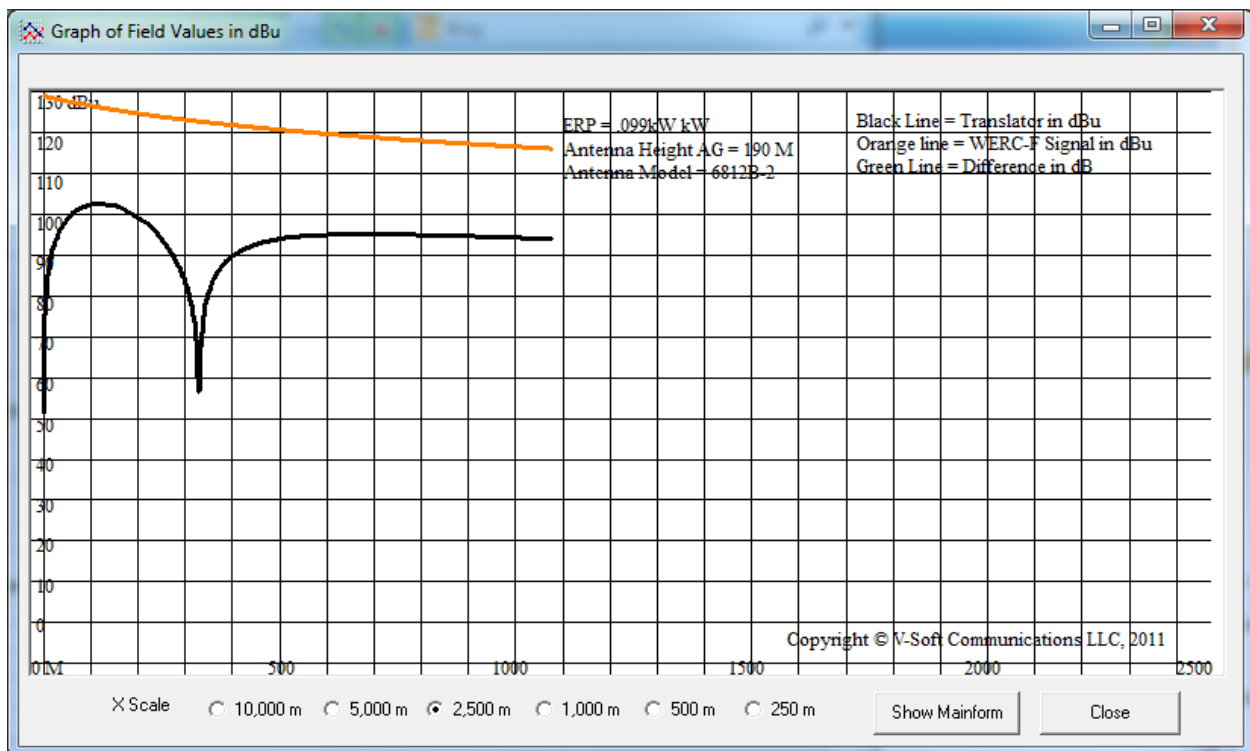
**Translator Protection Parameters**

Table Distance Increment Between Points (m): 2  
Table Distance to Study (m): 2500  
☐ Show Deltas above dB  
Show Graph:   
Show Table:

**Initial Calculations**

Distance to Site (km): 0.3   
Calc:   
Azimuth to Site: 0.0  
HAAT to translator: 215.5  
Signal at translator in dBu: 131.8259

**XFIELD**



**Figure 4 Contour Map**

