

**W222AF Comprehensive Engineering Exhibit
Amendment to Pending BPFT-20110621AAZ
August 2011**

W222AF is seeking to amend the pending application to increase power to 99 watts ERP, upon an existing tower identified by ASR No. 1016652, utilizing a directional antenna with an amended pattern, at an amended location on that tower 262 meters above ground level. The only changes to be made via this amendment are a 21 meter decrease in height, and modification of the antenna pattern.

The facility will continue to be utilized as a “fill-in” translator for primary station WGST (AM). The 60 dBu service contour of the proposed facility is within both the 2 mV/M day time contour of the primary station and inside a 25 mile radius of WGST day facilities, as demonstrated in Figure 1, where it can also be seen that the 60 dBu contour of the facility as proposed, overlaps the existing authorized facility, making this application compliant for filing as a minor modification application.

Attached as Figure 2 is an allocation spacing report wherein it can be determined that the proposed location is within the protected contour of 2nd adjacent facilities of WCLK(FM) licensed and is located 140 meters from 3rd adjacent facility WZGC.

Figure 3 is a calculation of contour value of 79.7 dBu at the translator of WCLK (FM) licensed facilities. Figure 4 is a graph comparing the signal value of this proposal to that of WCLK (FM) from which it can be determined that this proposal will not reach or exceed the +40 dB interference level at the surface. Because WZGC is in close location with this proposal, 140 meters, and operates with a power of 64 kW at a greater height using a non-directional antenna, the WZGC signal will at all times and locations exceed this proposal. As this proposal meets the requirements according to “Living Way”, a waiver is requested as necessary.

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.

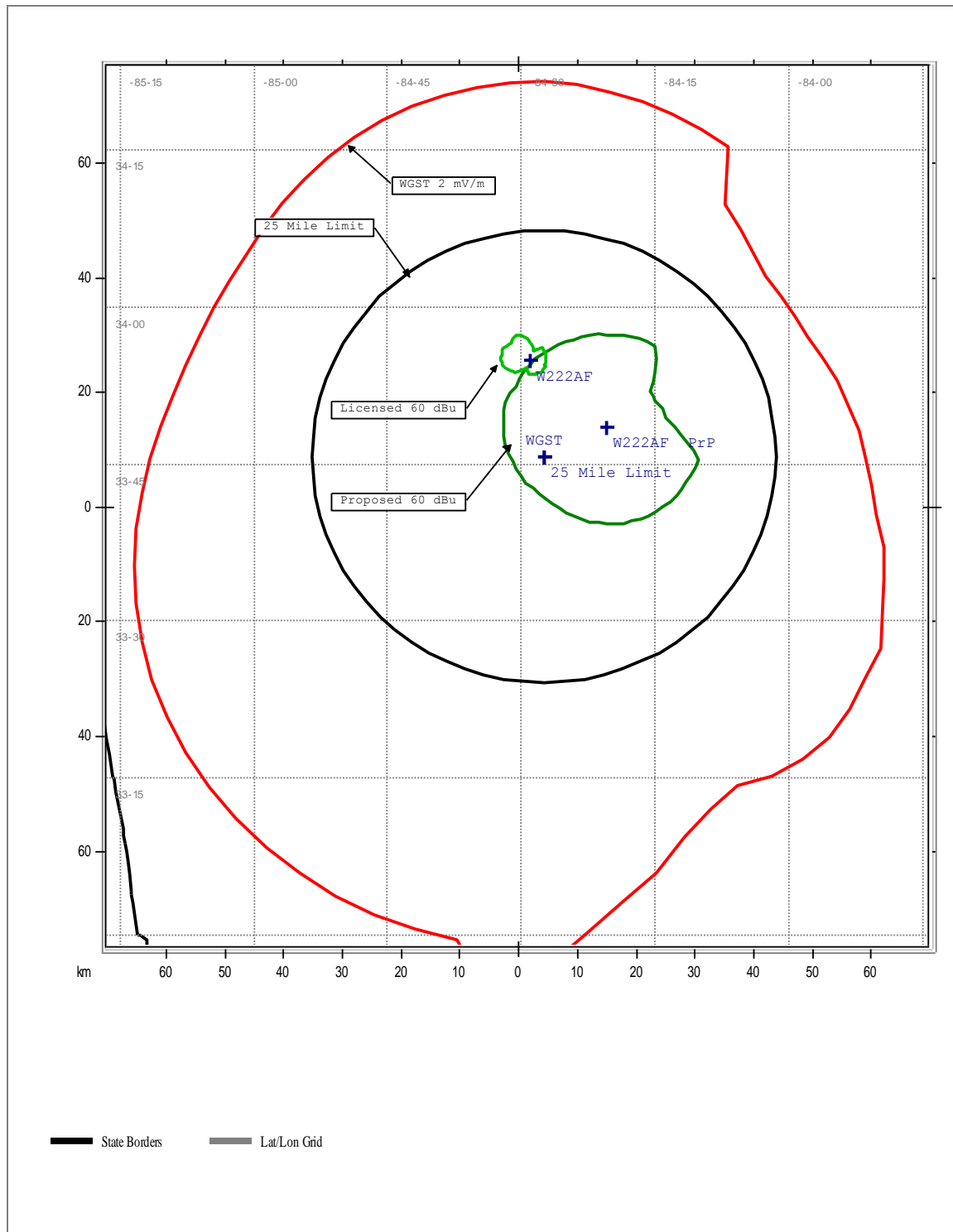


Figure 2. Spacing Study

ComStudy 2.2 search of channel 222 (92.3 MHz Class C1) at 33-48-27.0 N, 84-20-27.0 W.								
Callsign	Chanl	ERP_w	ARN	Cls	Status	Dist_km	Clr	
WZGC	225	64000	BMLH20080226ABQ	C1	LIC	0.14	-79.38 dB	Living Way
WZGC	225	39000	BXLH20060711ABN	C1	LIC	5.38	-46.37 dB	Aux
W222AF	222	15	BLFT20110620AAX	D	LIC	17.8	-30.07 dB	This Fac
W222AF	222	99	BPFT20110621AAZ	D	APP	0	-22.11 dB	This Fac
WCLK	220	6000	BLED20010712ACT	A	LIC	8.93	-21.68 dB	Living Way
W221CG	223	120	BMPFT20110325ACL	D	CP MOD	31.46	-5.96 dB	Surrendered
W221AZ	221	27	BLFT19950802TO	D	LIC	17.16	0.87 dB	Clear
WMOQ	222	3000	BLH20071022BXC	A	LIC	72.98	1.41 dB	Clear
W221CG	221	38	BLFT20100125AIL	D	LIC	43.02	5.89 dB	Clear
WEKS	223	12000	BLH20060714AAC	C3	LIC	76.1	6.19 dB	Clear
W275BK	275	160	BLFT20100401AGD	D	LIC	7.17	7.2	Clear
WDEF-FM	222	97000	BMLH20050831ADG	C0	LIC	172.74	11.42 dB	Clear
WBTR-FM	221	580	BLH19861029KC	A	LIC	68.23	11.31 dB	Clear
W221AW	221	10	BLFT20050420ABJ	D	LIC	54.48	11.07 dB	Clear
WJGA-FM	221	2150	BLH19861029KB	A	LIC	68.35	11.43 dB	Clear
WLZN	222	3000	BLH19920813KB	A	LIC	132.03	18.45 dB	Clear
WMVW	219	13000	BLED20100510AKQ	C3	LIC	63.02	21.39 dB	Clear
WCCV	219	7300	BLED20010327AAC	C2	LIC	75.24	22.23 dB	Clear
WLWI-FM	222	100000	BMLH20070402ADQ	C0	LIC	232.88	28.81 dB	Clear
NEW	222	13	BNPFT20030310ABV	D	APP	172.22	29.91 dB	Clear
W222BC	222	38	BLFT20070418ACX	D	LIC	173.96	30.03 dB	Clear
WESC-FM	223	95000	BLH19800811AB	C	LIC	217.04	31.87 dB	Clear
W276BK	222	8	BPFT20090302AAL	D	CP	179.67	31.03 dB	Clear
WUGA	219	6000	BLED19951207KB	A	LIC	102.08	32.62 dB	Clear

Figure 3

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

File Defaults Setup Help About

Test Reference Station Antenna - d\LPX1E

Call Sign: W222AF PrP
Channel: 222
ERP kW: .099
COR AG (m): 283
N. Lat.: 33-48-27.0 N
W. Lng.: 84-20-27.0 W
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: WCLK
Protected Channel: 220
Station ERP (kW): 6 kW
Ant COR AMSL (m): 372 M
N. Lat.: 33 44 56.0
W. Lng.: 84 24 26.0

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): 8.9 Calc
Azimuth to Site: 43.3
HAAT to translator: 93.4
Signal at translator in dBu: 79.67624

XFIELD

Figure 4

