

## **Exhibit 12**

### **Interference Analysis Overlap Requirements**

According to CFR 47 §74.1204(a), translators are required to protect all existing FM stations from interference due to overlap of the protected contours of the existing stations with the interfering contours of the new translators.

#### **US Stations**

In the attached tabular printout, only AP291(Plymouth) has an outgoing contour overlap from the proposed translator, so no interference to other stations is anticipated.

AP291(Plymouth) is the current application, and need not be protected.

Again, no other entries are sufficiently close to the proposed translator to require analysis.

#### **IF Separation**

No stations separated by 53 or 54 channels were found by the search.

#### **Canadian Consideration**

The proposed translator is 265 km from the nearest point in Canada, within the 320 km limit established by treaty. The 0.027 kW ERP does not exceed the maximum 250 Watts, and the maximum 32.2 km F(50,10) 34 dBu contour (see data printout) does not exceed the statutory 60 km. No Canadian stations were found in the above search. Hence there is no outgoing interference with any Canadian stations. Because the 34 dBu F(50,10) contour does not cross the common border (32.2 km maximum contour distance is not greater than the 265 km minimum distance to Canada), Canadian concurrence is not required. The relevant document for this analysis is the July 9, 1997 modification to the February 25, 1991 agreement.

## Exhibit 12

## Friends of Christian Radio

REFERENCE	CH#	291D	-	106.1 MHz,	Pwr= 0.027 kW,	HAAT=82.9 M,	COR= 323 M	DISPLAY DATES
41 19 09 N				Average Protected F(50-50)= 6.74 km				DATA 08-21-03
86 12 32 W	Ave. F(50-10)	40 dBu= 22.5	54 dBu= 9.6	80 dBu= 2.1	100 dBu= .4			SEARCH 08-22-03

CH	CALL	TYPE	AZI.	DIST	LAT.	Pwr (kW)	COR (M)	PRO (km)	*IN*	*OUT*
CITY	STATE		<--	FILE #	LNG.	HAAT (M)	INT (km)	LICENSEE	(Overlap	in km)
291D	AP291	APP C	0.0	0.71	41 19 32	0.027	323	6.4	-27.38*	-27.79*
Plymouth		IN	180.0	BNPFT20030314BLK	86 12 32	76	22.1	Friends Of Christian Radio		
291D	AP291	APP C	195.0	63.92	40 45 48	0.250	249	7.1	33.98	36.29
Logansport		IN	15.0	BNPFT20030317GRS	86 24 22	15	20.5	Kaspar Broadcasting Co, In		
292A	WUBU	LIC ZCN	354.8	39.87	41 40 36	0.805	320	14.3	11.89	16.16
South Bend		IN	174.8	BLH19921016KA	86 15 08	69	9.4	Partnership Radio, Llc		
294D	AP294	APP C	96.7	15.57	41 18 10	0.019	343	6.5	8.92	8.66
Bourbon		IN	276.7	BNPFT20030312AJH	86 01 27	92	0.4	Csn International		

\*\*\*Affixed to 'IN' or 'Out' values = site inside protected contour.  
ERP and HAAT are on direct line to and from reference station.

Exhibit 12  
Canadian Terrain and Contour Data  
AP291 Plymouth, IN

ERP 0.027 kW  
N. Lat. 41 19 9  
W. Lon. 86 12 32  
Center of Radiation 323.00 m AMSL

Azimuth Deg T.	Avg Elev 3-16 km Meters AMSL	Effective Antenna Ht Meters AAT	ERP Kilowatts	Distance to Contour (km) 34.0 dBu F(50,10)
0	243.0	80.0	0.0270	31.3
30	246.2	76.8	0.0270	30.6
60	246.7	76.3	0.0270	30.5
90	250.2	72.8	0.0270	29.7
120	247.4	75.6	0.0270	30.3
150	239.1	83.9	0.0270	32.2
180	247.3	75.7	0.0270	30.4
210	247.2	75.8	0.0270	30.4
240	244.0	79.0	0.0270	31.1
270	245.6	77.4	0.0270	30.7
300	243.7	79.3	0.0270	31.2
330	245.8	77.2	0.0270	30.7
Average	245.517	77.483	<--HAAT m	