

## **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 AP264 has an outgoing contour overlap from the proposed translator, so no interference to other stations is anticipated.

AP264 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 47 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 32.3 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 (32.3 km maximum contour distance is less than the 47 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  
Benedicta, ME 10

REFERENCE CH# 264D - 100.7 MHz, Pwr= 0.027 kW, HAAT=84.4 M, COR= 218 M DISPLAY DATES  
45 48 09 N Average Protected F(50-50)= 6.81 km DATA 05-03-03  
68 24 42 W Ave. F(50-10) 40 dBu= 22.7 54 dBu= 9.7 80 dBu= 2.1 100 dBu= .4 SEARCH 08-02-03

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	COR (M) INT (km)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT* (Overlap in km)
264D Benedicta	AP264	APP C ME	0.0 180.0	0.00 BNPFT20030314CJD	45 48 09 68 24 42	0.027 60	218 19.7	5.8 Light Of Life Ministries,	-24.98*<	-25.47*<
261C3 Houlton	WHOUFM	LIC CN ME	31.2 211.2	44.33 BLH19971208KC	46 08 35 68 06 50	9.600 176	382 0.4	40.7 County Communications, Inc	36.28	3.24
261C3 Houlton	ALLO	USE ME	56.1 236.1	53.67	46 04 10 67 50 06	25.000 -169	0 0.4	22.7	47.37	30.64
Specially negotiated, short-spaced allotment										
264D Bangor	AP264	APP C ME	196.9 16.9	119.63 BNPFT20030314CKE	44 46 19 68 51 07	0.055 48	90 12.9	6.1 Light Of Life Ministries,	95.25	100.64
262B Brewer	ALLO	USE ME	191.0 11.0	119.85	44 44 37 68 42 04	50.000 -32	0 0.7	36.1	111.90	83.01
263C Saint John	ALLO	NB	101.3 281.3	173.56 RM9702	45 28 39 66 14 02	100.000 -148	0 10.9	34.4	78.05	128.24
263C Saint John	263	PRO HN NB	101.3 281.3	173.56	45 28 39 66 14 02	100.000 -148	0 10.9	34.4	78.05	128.24

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

## HOW TO READ THE FM COMPUTER PRINT-OUT

The computer print-out should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "\* IN \*" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights along the azimuths between the reference station and the database station are used and visa versa. The column labeled "\* OUT \*" shows the distance of kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing interference.

For I.F., commercial, international and other spacing based relationships, the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum required distance in kilometers, while the letter "M" in the next column follows the available clear space separation in kilometers or "Margin". Minimum commercial separation distances were taken from Sec 73.207 of the rules as amended. This procedure is also used for all Canadian and Mexican spacing. Canadian separation distances were derived from the "Canadian/American Working Agreement".

Under the "BEARING" column, the first row of numbers indicate the bearings from true north of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

The first three letters of the "TYPE" column identify the current F.C.C. status of the stations. The fourth letter will be a "D" or "Z" (Sec. 73.215) if the facility is directional. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a 'Y' if the antenna uses beam tilt.

Exhibit 12  
Terrain and Contour Data  
AP264 Benedicta, ME

ERP 0.027 kW  
N. Lat. 45 48 9  
W. Lon. 68 24 42  
Center of Radiation 218.00 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	154.4	63.6	0.0270	27.8
30	190.0	28.0	0.0270	19.0
60	190.0	28.0	0.0270	19.0
90	169.8	48.2	0.0270	24.3
120	149.4	68.6	0.0270	28.8
150	147.7	70.3	0.0270	29.2
180	158.7	59.3	0.0270	26.9
210	145.1	72.9	0.0270	29.7
240	133.6	84.4	0.0270	32.3<--
270	136.1	81.9	0.0270	31.7
300	144.7	73.3	0.0270	29.8
330	172.8	45.2	0.0270	23.5
Average	157.692	60.308	<--HAAT m	