

## 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 W252BT, WCLZ, and WJBQ have outgoing contour overlaps from the proposed translator, so no interference to other stations is anticipated. Incoming overlap is not prohibited.

W252BT is the application being modified, and need not be protected.

WCLZ is third adjacent to the proposed translator, and, according to §74.1204(d),

**"The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to ... lack of population ... ."**

The F(50,50) signal from WCLZ at the proposed site is 103.7 dBu, computed from the 48 kW ERP and 121.9 meter HAAT in the direction toward the reference 4.217 km away at 51 degrees. A 40 dB ratio of undesired to desired signal strength gives an allowable interfering F(50,10) field strength of 143.7 dBu. With 80 Watts maximum ERP, the free-space equations give the distance to this contour of 4.1 meters from the antenna. It will be subsequently be shown that this area is unpopulated.

The F(50,50) signal from WJBQ at the proposed site is 77.1 dBu, computed from the 16 kW ERP and 309.8 meter HAAT in the direction toward the reference 24.13 km away. A 40 dB ratio of undesired to desired signal strength gives an allowable interfering F(50,10) field strength of 117.1 dBu. With 80 Watts maximum ERP, the free-space equations give the distance to this contour of 87.6 meters from the antenna.

The attached topographic map shows that there are no buildings in the area within these interfering contours. Hence §74.1204(d) applies, and the predicted area of interference is acceptable to the Commission.

The outgoing interference from the other entries are not 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 162.679 km from the nearest point in Canada, within the 320 km limit established by treaty. The 0.080 kW ERP does not exceed the maximum 250 Watts, and the maximum 35.1 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. Because the 34 dBu F(50,10) contour does not cross the common border (35.1 km maximum contour distance is less than the 162.7 km minimum distance to Canada), no Canadian concurrence is required. The

relevant document for this analysis is the July 9, 1997 modification to the February 25, 1991 agreement.

## 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.

Light Of Life Ministries, Inc  
Freeport, ME (Oak Hill)

REFERENCE  
43 54 15 N.  
70 02 11 W.

CH# 252D - 98.3 MHz, Pwr= 0.08 kw, HAAT=81.0 M, COR= 115 M  
Average Protected F(50-50)= 8.78 km  
Ave. F(50-10) 40 dBu= 29.1 54 dBu= 12.3 80 dBu= 2.7 100 dBu= .6

DISPLAY DATES  
DATA 11-08-05  
SEARCH 12-17-05

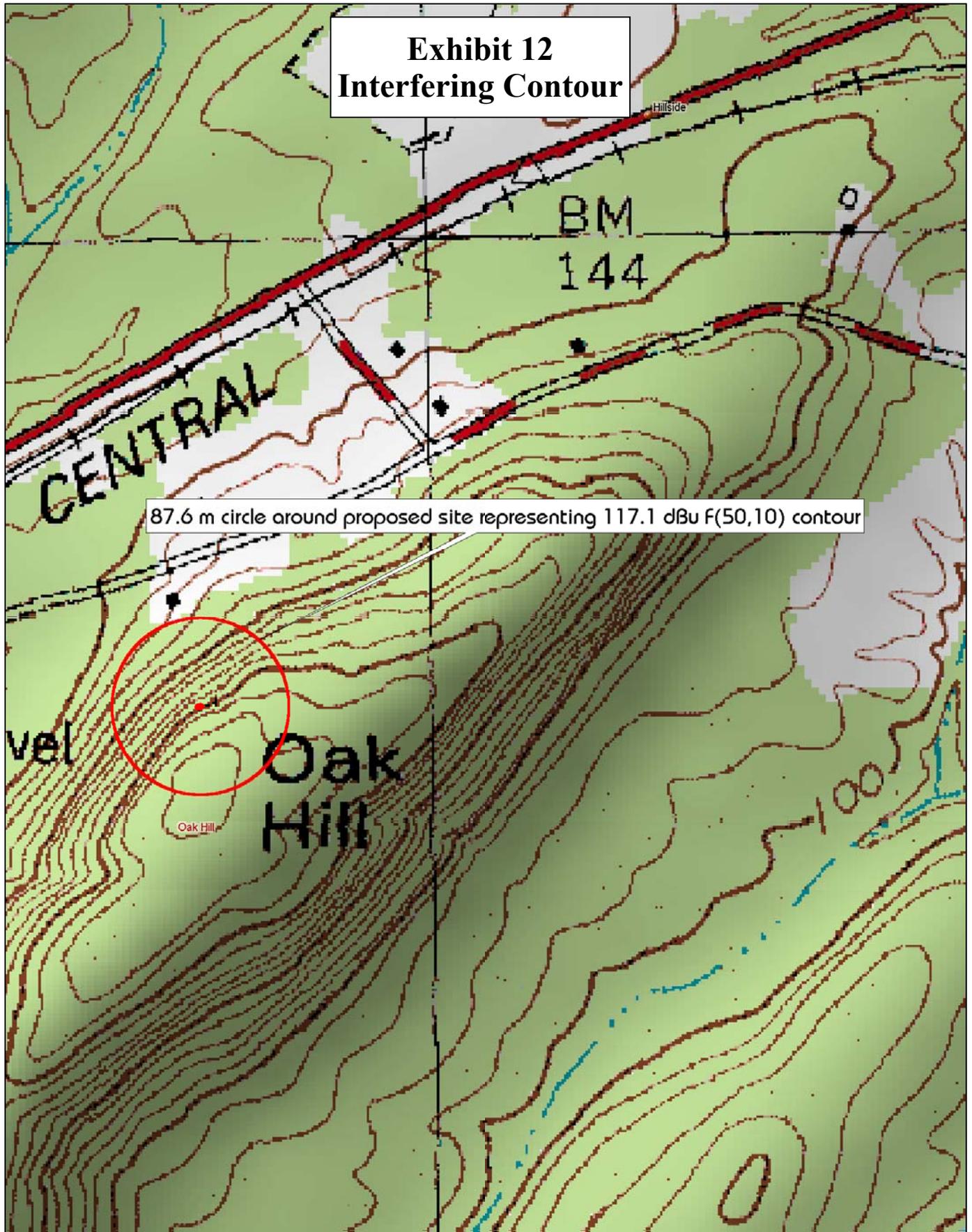
CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*OUT* (Overlap in km)
252D Freeport	W252BT	LIC C ME	132.0 312.1	2.40 BLFT20050719AHP	43 53 23 70 00 51	0.120 -24	38 19.6	5.9 Light of Life Ministries,	-27.17*<
255B Brunswick	WCLZ	LIC CN ME	51.4 231.5	4.22 BLH19890906KB	43 55 40 69 59 43	48.000 122	160 5.3	60.5 Citadel Broadcasting Compa	-57.06*<
250B Portland	WJBQ	LIC CN ME	256.1 75.9	24.13 BLH19861020KA	43 51 06 70 19 40	16.000 310	351 5.9	68.6 Citadel Broadcasting Compa	-45.57*<
253C1 Waterville	WEBB	LIC NCN ME	24.6 204.9	80.86 BLH19950421KA	44 33 52 69 36 39	61.000 108	161 74.3	47.9 Citadel Broadcasting Compa	23.38
252C3 Laconia	WLNHFM	LIC ZC NH	254.2 73.2	122.65 BLH20010309AAS	43 35 46 71 29 55	15.500 180	334 115.7	45.2 Nassau Broadcasting Iii, L	51.87
254A Somersworth	WBYY	LIC ZCN NH	223.2 42.6	101.49 BLH19941219KA	43 14 11 70 53 37	2.999 86	148 2.2	22.5 Garrison City Broadcasting	78.60
252D Holden	AP252	APP C ME	53.1 234.1	141.74 BNPFT20030317ANL	44 39 31 68 36 17	0.230 338	393 70.7	23.4 Clear Channel Broadcasting	94.64

ERP and HAAT are on direct line to and from reference station.

Incoming contour overlap is ignored.

"\*"affixed to 'IN' or 'Out' values = site inside protected contour. "<" = contour overlap

# Exhibit 12 Interfering Contour



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Zoom Level: 15-0 Datum: NAD27

Scale 1 : 5 200

1" = 132.08 m

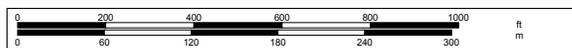


Exhibit 12  
Terrain and Contour Data  
W252BT Freeport, ME  
Canadian Showing

ERP 0.080 kW  
N. Lat. 43 54 15  
W. Lon. 70 2 11  
Center of Radiation 115.00 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	51.0	64.0	0.0550	34.0
30	40.2	74.8	0.0380	33.2
60	21.3	93.7	0.0270	34.3
90	20.1	94.9	0.0270	34.6
120	13.6	101.4	0.0190	32.6
150	9.1	105.9	0.0190	33.4
180	6.6	108.4	0.0190	33.9
210	11.7	103.3	0.0190	33.0
--240	47.0	68.0	0.0550	35.1--
270	62.6	52.4	0.0800	34.1
300	64.0	51.0	0.0800	33.5
330	61.1	53.9	0.0800	34.6
Average	34.025	80.975	<--HAAT m	