

# 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 AP275, WEDG and WTSS have outgoing contour overlaps from the proposed translator, so no interference to other stations is anticipated. Incoming overlap is not prohibited.

AP275 is the current application, and need not be protected.

WEDG and WTSS are second 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 WEDG at the proposed site is 80.0 dBu. A 40 dB ratio of undesired to desired signal strength gives an allowable interfering F(50,10) field strength of 120.0 dBu. Utilizing the specified 2 bay half wave spaced antenna at 60 meters from the ground, the maximum signal strength on the ground is 104.55 dBu (see attached spreadsheet), less than the above mentioned 120.0 dBu. It only reaches down to 49.87 m above the ground. There are no habitable buildings in the area which reach up to intersect the contour. Hence §74.1204(d) applies, and the predicted area of interference is acceptable to the Commission.

The F(50,50) signal from WTSS at the proposed site is 85.8 dBu. A 40 dB ratio of undesired to desired signal strength gives an allowable interfering F(50,10) field strength of 125.8 dBu. Utilizing the specified 2 bay half wave spaced antenna at 60 meters from the ground, the maximum signal strength on the ground is 104.55 dBu (see attached spreadsheet), less than the above mentioned 125.8 dBu. It only reaches down to 54.80 m above the ground. There are no habitable buildings in the area which reach up to intersect the contour. Hence §74.1204(d) applies, and the predicted area of interference is acceptable to the Commission.

No other entries are sufficiently close to the proposed translator to require analysis.

### Canadian Consideration

The proposed translator is 20 km from the nearest point in Canada, within the 320 km limit established by treaty. The 0.038 kW ERP does not exceed the maximum 250 Watts, and the maximum 13.7 km F(50,10) 34 dBu contour (see data printout) does not exceed the statutory 60 km. Both CKLHFM and CFMXFM were found in the search to be well clear of experiencing outgoing interference from the proposed translator. Because the 34 dBu F(50,10) contour does cross the common border (13.7 km maximum contour distance is greater than the 20 km minimum distance to Canada), Canadian concurrence is required. The relevant document for this analysis is the July 9, 1997 modification to the February 25, 1991 agreement.

## Exhibit 12

## Calvary Chapel of the Finger Lakes

REFERENCE	CH# 275D - 102.9 MHz, Pwr= 0.038 kW, HAAT=74.8 M, COR= 264 M	DISPLAY DATES
42 54 16 N	Average Protected F(50-50)= 6.95 km	DATA 08-21-03
78 40 13 W	Ave. F(50-10) 40 dBu= 23.2 54 dBu= 9.9 80 dBu= 2.2 100 dBu= .4	SEARCH 08-27-03

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	COR (M) INT (km)	PRO (km) LICENSEE	*IN* (Overlap	*OUT* in km)
275D Lancaster	AP275	APP C NY	0.0 180.0	0.00 BNPFT20030317KRZ	42 54 16 78 40 13	0.038 26	264 21.8	4.4 Calvary Chapel Of The Fing	-20.50*	-26.14*
277B Buffalo	WEDG	LIC CN NY	279.9 99.9	14.16 BLH19970523KB	42 55 34 78 50 28	49.000 87	293 0.9	54.2 Citadel Broadcasting Compa	3.07	-40.88*
273B Buffalo	WTSS	LIC CX NY	172.4 352.4	27.49 BLH20020111AAW	42 39 33 78 37 33	110.000 426	752 0.9	96.2 Entercom Buffalo License,	10.93	-69.53*
275B Hamilton	CKLHFM	OPE CN ON	296.7 116.7	108.68	43 20 12 79 52 07	40.000 -75	0 29.5	34.4	-39.09	44.77
SPECIALLY NEGOTIATED SHORT-SPACED CHANNEL										
276C1 Cobourg	CFMXFM	OPE CN ON	18.0 198.0	136.36	44 04 14 78 08 36	86.700 -120	0 12.4	40.4	43.08	83.56
SPEC. NEGTED SHORT-SPACED ALLOC. LTD. TO 86.7KW/252M HAAT										
274A Webster	WDCZFM	LIC ZCN NY	69.6 249.6	86.48 BLH19960708KA	43 10 14 77 40 23	0.738 61	241 6.3	13.3 Kimtron, Inc.	62.34	66.94

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

# Exhibit 12

vs WEDG

## Freespace Interference Study based on Vertical Radiation Pattern ERI Series 100 2-bay 1/2-wave spaced antenna

Depression Angle from Antenna	Antenna Relative Field	ERP Watts	ERP dBk	Distance to Ground from Antenna (m)	Free Space Signal (dBu)	2.5 dB Loss for Reflection	Signal Strength at Ground (dBu)	Circular Distance From Tower (m)	Distance to Contour using Free Space (m)	Height of Contour above Ground (m)
90	0.001	0.000	-74.20	60.00	57.15	2.5	54.65	0.00	0.03	59.97
85	0.002	0.000	-68.18	60.23	63.14	2.5	60.64	5.25	0.06	59.94
80	0.009	0.003	-55.12	60.93	76.11	2.5	73.61	10.58	0.29	59.71
75	0.023	0.020	-46.97	62.12	84.09	2.5	81.59	16.08	0.75	59.28
70	0.049	0.091	-40.40	63.85	90.42	2.5	87.92	21.84	1.59	58.51
65	0.076	0.219	-36.59	66.20	93.92	2.5	91.42	27.98	2.46	57.77
60	0.120	0.547	-32.62	69.28	97.49	2.5	94.99	34.64	3.89	56.63
55	0.180	1.231	-29.10	73.25	100.53	2.5	98.03	42.01	5.84	55.22
50	0.250	2.375	-26.24	78.32	102.80	2.5	100.30	50.35	8.11	53.79
45	0.333	4.214	-23.75	84.85	104.59	2.5	102.09	60.00	10.80	52.36
40	0.425	6.864	-21.63	93.34	105.88	2.5	103.38	71.51	13.78	51.14
35	0.524	10.434	-19.82	104.61	106.71	2.5	104.21	85.69	16.99	50.25
30	0.625	14.844	-18.28	120.00	107.05	2.5	104.55	103.92	20.27	49.87
25	0.723	19.864	-17.02	141.97	106.86	2.5	104.36	128.67	23.44	50.09
20	0.815	25.241	-15.98	175.43	106.06	2.5	103.56	164.85	26.43	50.96
15	0.890	30.100	-15.21	231.82	104.40	2.5	101.90	223.92	28.86	52.53
10	0.950	34.295	-14.65	345.53	101.50	2.5	99.00	340.28	30.80	54.65
5	0.989	37.169	-14.30	688.42	95.86	2.5	93.36	685.80	32.07	57.20

Distance to Ground Level assumes flat ground or a site where the site level is above average terrain in all azimuths.

Maximum ERP	38	watts	Max dBu at Ground Level	104.55	Lowest Height of Contour	49.87
Radiation Center AG	60	m				
Radiation Center AG	197	ft.				
Maximum ERP	-14.20	dBk				
Protected dBu	80	dBu				
Interfering dBu	120.0	dBu				
Free Space Distance	43.24	m				

# Exhibit 12

vs WTSS

## Freespace Interference Study based on Vertical Radiation Pattern ERI Series 100 2-bay 1/2-wave spaced antenna

Depression Angle from Antenna	Antenna Relative Field	ERP Watts	ERP dBk	Distance to Ground from Antenna (m)	Free Space Signal (dBu)	2.5 dB Loss for Reflection	Signal Strength at Ground (dBu)	Circular Distance From Tower (m)	Distance to Contour using Free Space (m)	Height of Contour above Ground (m)
90	0.001	0.000	-74.20	60.00	57.15	2.5	54.65	0.00	0.02	59.98
85	0.002	0.000	-68.18	60.23	63.14	2.5	60.64	5.25	0.03	59.97
80	0.009	0.003	-55.12	60.93	76.11	2.5	73.61	10.58	0.15	59.85
75	0.023	0.020	-46.97	62.12	84.09	2.5	81.59	16.08	0.38	59.63
70	0.049	0.091	-40.40	63.85	90.42	2.5	87.92	21.84	0.81	59.23
65	0.076	0.219	-36.59	66.20	93.92	2.5	91.42	27.98	1.26	58.85
60	0.120	0.547	-32.62	69.28	97.49	2.5	94.99	34.64	2.00	58.27
55	0.180	1.231	-29.10	73.25	100.53	2.5	98.03	42.01	2.99	57.55
50	0.250	2.375	-26.24	78.32	102.80	2.5	100.30	50.35	4.16	56.82
45	0.333	4.214	-23.75	84.85	104.59	2.5	102.09	60.00	5.54	56.08
40	0.425	6.864	-21.63	93.34	105.88	2.5	103.38	71.51	7.07	55.46
35	0.524	10.434	-19.82	104.61	106.71	2.5	104.21	85.69	8.71	55.00
30	0.625	14.844	-18.28	120.00	107.05	2.5	104.55	103.92	10.39	54.80
25	0.723	19.864	-17.02	141.97	106.86	2.5	104.36	128.67	12.02	54.92
20	0.815	25.241	-15.98	175.43	106.06	2.5	103.56	164.85	13.55	55.36
15	0.890	30.100	-15.21	231.82	104.40	2.5	101.90	223.92	14.80	56.17
10	0.950	34.295	-14.65	345.53	101.50	2.5	99.00	340.28	15.80	57.26
5	0.989	37.169	-14.30	688.42	95.86	2.5	93.36	685.80	16.45	58.57

Distance to Ground Level assumes flat ground or a site where the site level is above average terrain in all azimuths.

Maximum ERP	38	watts	Max dBu at Ground Level	104.55	Lowest Height of Contour	54.80
Radiation Center AG	60	m				
Radiation Center AG	197	ft.				
Maximum ERP	-14.20	dBk				
Protected dBu	85.8	dBu				
Interfering dBu	125.8	dBu				
Free Space Distance	22.18	m				

Exhibit 12  
Canadian Terrain and Contour Data  
AP275 Lancaster, NY

ERP 0.038 kW  
N. Lat. 42 54 16  
W. Lon. 78 40 13  
Center of Radiation 264.00 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	198.7	65.3	0.0380	30.8
30	207.6	56.4	0.0380	28.6
60	234.9	29.1	0.0380	20.8
90	242.6	21.4	0.0380	20.8
120	255.0	9.0	0.0380	20.8
150	250.2	13.8	0.0380	20.8
180	238.0	26.0	0.0380	20.8
210	215.0	49.0	0.0380	26.6
240	189.2	74.8	0.0380	33.2
270	193.7	70.3	0.0380	32.1
300	203.5	60.5	0.0380	29.6
-->330	194.3	69.7	0.0380	31.9<--
Average	218.558	45.442	<--HAAT m	