

Channel Study

REFERENCE		CH# 273D - 102.5 MHz, Pwr= 0.074 kW, HAAT= 279.0 M, COR= 597 M								DISPLAY DATES	
41 03 53.0 N.		Average Protected F(50-50)= 16.0 km								DATA 08-02-11	
81 34 59.0 W.		Omni-directional								SEARCH 08-03-11	
CH CITY	CALL	TYPE STATE	ANT	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
273D Akron	W273BL	LIC OH	C	0.0 0.0	0.0 BLFT20080118ADH	41 03 53.0 81 34 59.0	0.010 279	35.1 597	10.5 Educational Media Foundati	-52.5* -66.4*	
271B Cleveland	WDOK	LIC OH	CX	344.3 164.3	36.7 BMLH20020611AAI	41 22 58.0 81 42 07.0	12.000 306	4.6 570	57.6 Cbs Radio Stations Inc.	16.1 -22.1*	
273B Pittsburgh	WDVE	LIC PA	CN	115.2 296.2	146.4 BMLH19900323KB	40 29 38.0 80 01 09.0	55.000 250	151.3 553	74.9 Capstar Tx Llc	-20.6* 4.2	
273A Edgewood	WZOO-FM	LIC OH	NCN	36.4 216.9	105.9 BLH19911104KD	41 49 44.0 80 49 28.0	5.800 100	81.1 329	24.2 Media One Group Iii, Llc	8.3 28.2	
274B Sandusky	WCPZ	CP OH	DCX	290.5 109.7	107.9 BPH20090513ACA	41 23 48.0 82 47 31.0	28.000 201	76.8 393	64.7 Bas Broadcasting, Inc.	15.4 9.8	
275B Sharon	WYFM	LIC PA	NCX	90.3 270.9	79.3 BLH20030702AAA	41 03 26.0 80 38 22.0	33.000 184	6.0 508	65.6 Cumulus Licensing Llc	57.5 12.5	
274D Jefferson	W274AN	LIC OH	C	223.2 43.0	43.3 BLFT20061011AAQ	40 46 49.0 81 56 06.0	0.013 71	6.9 392	5.0 Mansfield Christian School	20.9 15.0	
274B Sandusky	WCPZ	LIC OH	DCN	294.8 114.0	101.5 BLH19901226KA	41 26 28.0 82 41 14.0	50.000 41	57.3 227	44.9 Bas Broadcasting, Inc.	28.8 23.9	
273B1 Baltimore	WWCD	LIC OH	CX	214.6 33.9	174.0 BLH20091005AAO	39 46 14.8 82 44 25.3	15.000 130	109.4 403	46.6 Southeastern Ohio Broadcas	48.8 68.0	
272A Galion	WFXN-FM	LIC OH	CN	251.8 71.0	107.2 BLH19920511KE	40 45 26.0 82 47 23.0	3.500 131	39.5 482	25.9 Capstar Tx Llc	52.5 58.3	
274A Cambridge	WCMJ	CP OH	CX	182.7 2.7	113.9 BPH20070405ABI	40 02 24.0 81 38 50.0	4.500 116	42.7 395	27.8 Avc Communications, Inc.	55.1 62.0	
275D Mansfield	634381	APP OH	C	245.5 65.0	79.4 BNPFT20030311AME	40 45 59.0 82 26 21.0	0.055 260	0.5 260	4.8 American Family Associatio	63.4 73.9	
270A Hubbard	WRBP	LIC OH	CN	87.8 268.5	90.9 BLH19930726KC	41 05 29.0 80 30 05.0	3.000 100	2.4 418	25.4 Bernard Ohio Llc	72.8 65.0	

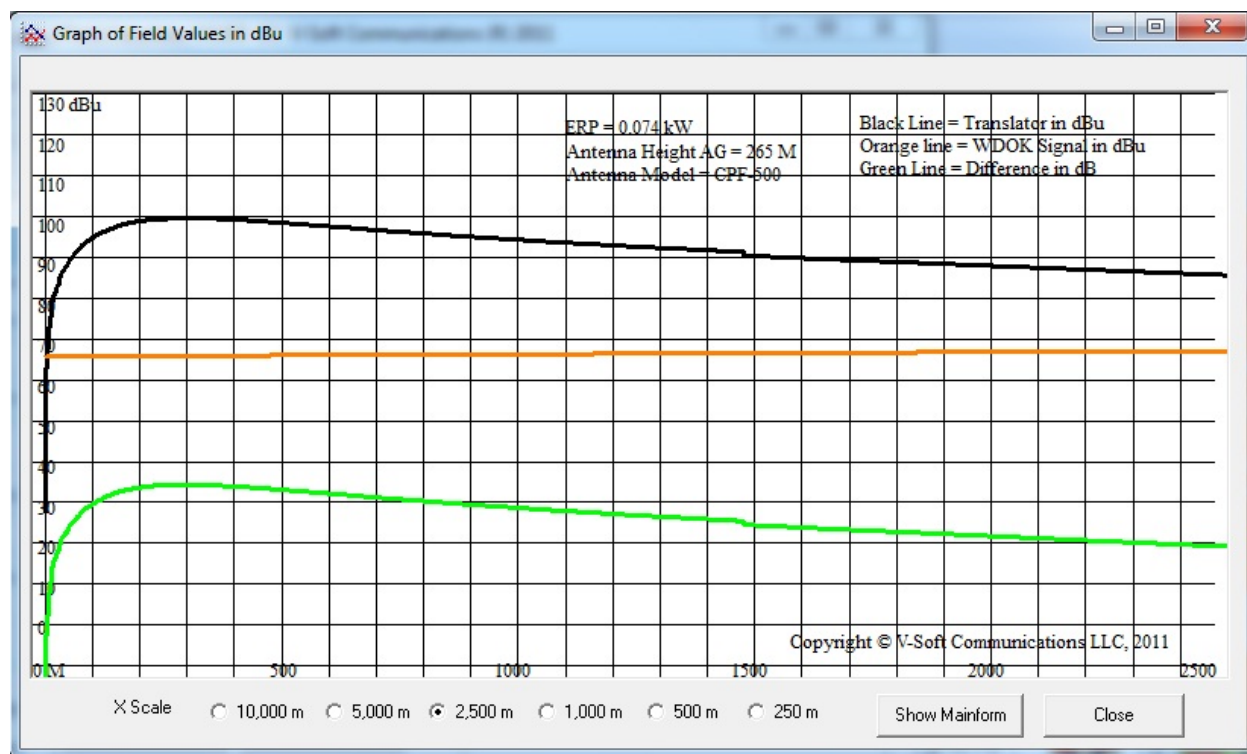
Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM. Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd adjacent. Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
 "*"affixed to 'IN' or 'OUT' values = site inside protected contour.

Compliance with C.F.R. 74.1204

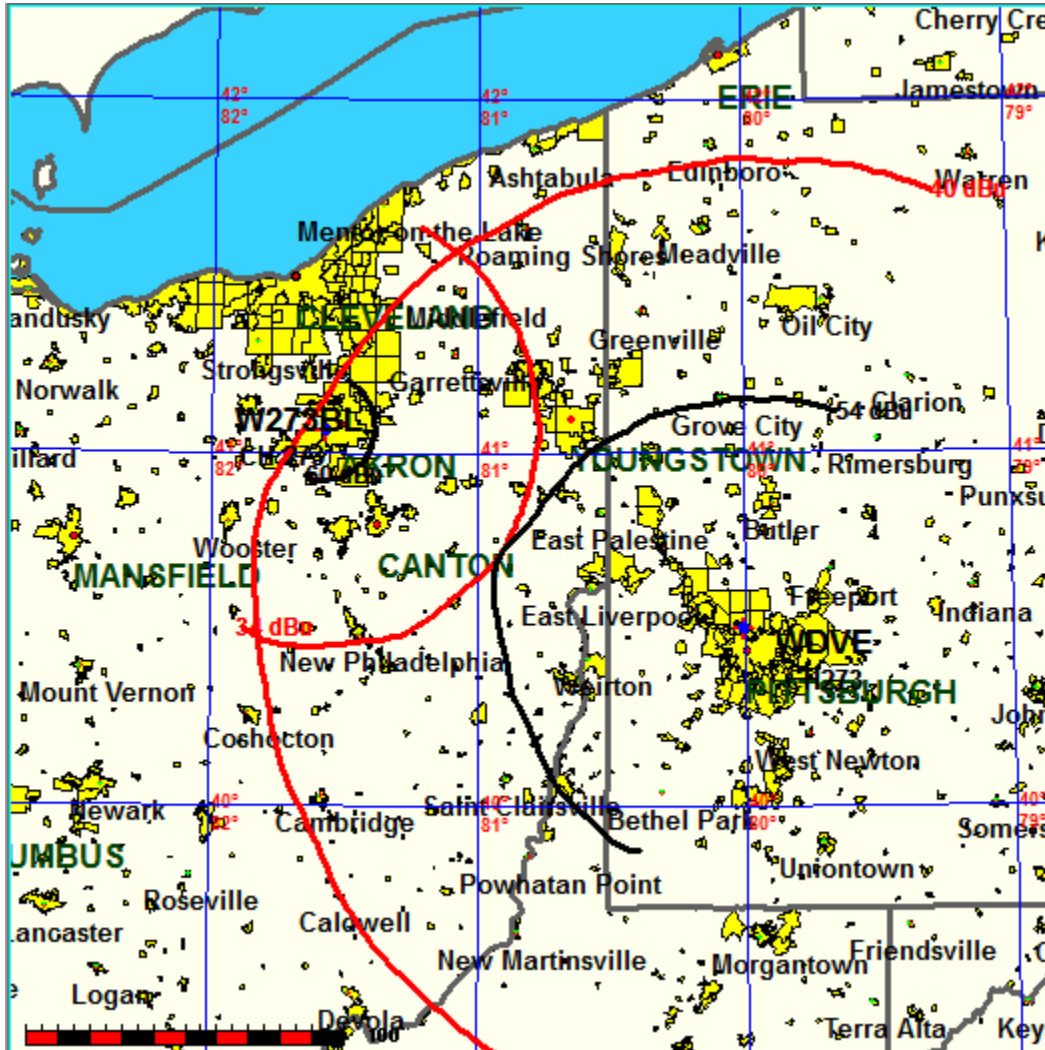
The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WDOK (channel 271B) CLEVELAND, OH. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed W273BL facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case W273BL's proposed facility has an ERP of 74 watts, height AG of 265M, and is using an RFS CPF-500, 1 BAY antenna.

As can be seen in the graph below, at no point does the interfering contour of the proposed facility exceed the required 40dB difference (green line on graph). Therefore, the proposed facility does not cause interference at any point.



W23BL vs. WDV
Contours



WDVE vs. W273BL

EMF
08-09-2011 Terrain Data: NGDC 30 SEC FM Over Analysis

WDVE BMLH19900323KB

W273BL

Channel = 273B
Max ERP = 55 kW
RCAMSL = 553 M
N. Lat. 40 29 38.0
W. Lng. 80 01 09.0
Protected
54 dBu

Channel = 273D
Max ERP = 0.074 kW
RCAMSL = 597 M
N. Lat. 41 03 53.0
W. Lng. 81 34 59.0
Interfering
34 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	IX (km)
277.0	055.0000	0294.0	079.9	135.4	000.0740	0272.3	075.2	31.33	
278.0	055.0000	0296.0	080.0	134.7	000.0740	0273.4	074.2	31.70	
279.0	055.0000	0298.3	080.2	133.9	000.0740	0274.6	073.2	32.07	
280.0	055.0000	0300.0	080.3	133.0	000.0740	0275.8	072.3	32.42	
281.0	055.0000	0301.7	080.5	132.2	000.0740	0277.0	071.4	32.76	
282.0	055.0000	0303.1	080.6	131.2	000.0740	0278.2	070.6	33.08	
283.0	055.0000	0303.1	080.6	130.2	000.0740	0279.2	070.0	33.35	
284.0	055.0000	0302.8	080.6	129.2	000.0740	0280.1	069.4	33.59	
285.0	055.0000	0301.9	080.5	128.1	000.0740	0280.5	068.8	33.79	
286.0	055.0000	0299.3	080.3	126.9	000.0740	0280.5	068.5	33.91	
287.0	055.0000	0295.3	080.0	125.8	000.0740	0280.2	068.3	33.97	
288.0	055.0000	0288.5	079.4	124.5	000.0740	0279.5	068.4	33.91	
289.0	055.0000	0280.6	078.7	123.2	000.0740	0278.6	068.7	33.77	
290.0	055.0000	0272.8	078.0	122.0	000.0740	0277.4	069.0	33.61	
291.0	055.0000	0265.5	077.4	120.8	000.0740	0275.9	069.4	33.43	
292.0	055.0000	0259.4	076.8	119.6	000.0740	0274.4	069.8	33.26	
293.0	055.0000	0253.9	076.3	118.5	000.0740	0273.2	070.1	33.11	
294.0	055.0000	0248.4	075.8	117.4	000.0740	0272.4	070.4	32.96	
295.0	055.0000	0243.4	075.4	116.3	000.0740	0271.8	070.8	32.81	
296.0	055.0000	0238.9	075.0	115.2	000.0740	0271.3	071.2	32.67	
297.0	055.0000	0234.9	074.7	114.2	000.0740	0271.1	071.6	32.53	
298.0	055.0000	0232.0	074.4	113.1	000.0740	0271.2	071.9	32.42	
299.0	055.0000	0231.0	074.3	112.1	000.0740	0271.1	072.1	32.34	
300.0	055.0000	0231.3	074.3	111.1	000.0740	0270.9	072.2	32.29	
301.0	055.0000	0231.8	074.4	110.1	000.0740	0270.5	072.4	32.22	
302.0	055.0000	0231.4	074.3	109.1	000.0740	0270.0	072.7	32.11	
303.0	055.0000	0230.0	074.2	108.1	000.0740	0269.6	073.1	31.95	
304.0	055.0000	0228.4	074.1	107.2	000.0740	0269.3	073.6	31.78	
305.0	055.0000	0227.3	074.0	106.2	000.0740	0269.1	074.1	31.61	
306.0	055.0000	0226.7	073.9	105.3	000.0740	0269.1	074.5	31.45	