

**Channel Study**

REFERENCE CH# 275D - 102.9 MHz, Pwr= 0.01 kW DA, HAAT= 165.5 M, COR= 548.5 M DISPLAY DATES  
 42 07 36.0 N. Average Protected F(50-50)= 7.5 km DATA 08-17-19  
 76 47 36.0 W. Standard Directional SEARCH 08-22-19

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
275B Syracuse	WMHR	LIC	CN NY	27.3 207.7	105.29 BLED19990419KG	42 58 01.0 76 12 00.0	20.000 239	120.0 497	58.8 Mars Hill Broadcasting Co.	-21.3*<	15.4
277D Elmira	W277DW	LIC	DC NY	26.3 206.3	0.51 BLFT20181106AAN	42 07 51.0 76 47 26.0	0.250	1.0 607	20.5 Europa Communications, Inc	-7.2*<	-20.2*<
274B Williamsport	WKSJ	LIC	CN PA	188.6 8.5	105.29 BMLH20030625ACG	41 11 21.0 76 58 53.0	53.000 387	107.0 633	86.7 Clear Channel Broadcasting	-9.3*<	3.0
273D Elmira	W273BZ!	LIC	DV NY	207.6 27.6	6.58 BLFT20131206AYB	42 04 27.0 76 49 49.0	0.095 -32	358	---Reference---		
277D Corning	W294AV	CP	DV NY	274.2 94.0	23.57 BPFT20161031ACH	42 08 31.0 77 04 40.0	0.025	0.1 547	7.0 Sound Communications, Llc	15.2	16.4
273D Corning	W273AC	LIC	DH NY	274.2 94.0	23.58 BLFT20170411AAD	42 08 30.7 77 04 40.1	0.014	0.0 532	3.4 Tower Broadcasting Llc	15.3	20.0
276A Avoca	WCIK	LIC	CX NY	302.3 121.8	72.19 BLED20170403ACP	42 28 13.7 77 32 10.7	1.400 210	47.8 708	31.7 Family Life Ministries, In	16.5	29.3
273D Watkins Glen	W273BI	LIC	DV NY	344.7 164.7	30.33 BLFT20061006ACY	42 23 24.0 76 53 26.0	0.050 -125	0.5 253	4.7 Family Life Ministries, In	20.4	25.4
277D Ithaca	W277BS	LIC	DC NY	41.6 221.8	39.46 BLFT20150310AJH	42 23 30.0 76 28 29.0	0.250	0.0 529	2.2 Saga Communications Of New	33.1	37.1
272D East Ithaca	W272DY	LIC	C NY	39.8 220.0	43.88 BLFT20170830ABM	42 25 45.0 76 27 04.2	0.010	0.2 422	4.5 Calvary Chapel Of The Fing	37.3	39.1
277A Vestal	WMXW	LIC	CX NY	95.7 276.2	70.49 BLH20070503ABF	42 03 40.0 75 56 45.0	0.520 335	1.6 733	30.4 Cc Licenses, Llc	62.2	39.9
275D Chenango Bridge	W275BC	LIC	DC NY	88.9 269.5	75.82 BMLFT20070403AAA	42 08 09.0 75 52 35.0	0.057 129	15.7 503	4.8 Family Life Ministries, In	53.7	49.8
273D Vestal	W273AB	LIC	C NY	93.8 274.3	63.43 BMLFT20171031ABJ	42 05 12.0 76 01 42.0	0.100	0.7 446	12.4 Gm Broadcasting, Inc.	56.2	50.8
278D Wellsboro	W278AO	LIC	C PA	224.4 44.1	59.30 BLFT20070306AAU	41 44 41.0 77 17 35.0	0.055 -24	0.5 484	4.8 Northeastern Pennsylvania	51.4	54.3
275A Narrowsburg	AU6230010	VAC	N NY	109.6 290.8	158.92 RM9468	41 38 00.0 74 59 46.0	6.000 100	90.1 451	30.9 Karen J. Johnson	61.8	104.2
272A Canandaigua	WVOR	LIC	CN NY	332.2 151.9	92.65 BLH19910726KC	42 51 47.0 77 19 22.0	3.400 86	2.2 358	22.9 Citicasters Licenses, Inc.	82.4	69.5
273B Buffalo	WTSS	LIC	CX NY	292.1 110.9	162.06 BLH20020111AAW	42 39 33.0 78 37 33.0	110.000 355	10.8 752	89.4 Entercom License, Llc	143.4	72.3
278A Wellsville	WJQZ	LIC	CX NY	266.0 85.2	100.91 BMLH20060425AAA	42 03 24.0 78 00 34.0	1.750 189	2.3 780	27.7 Dbm Communications, Inc.	90.7	73.0
276A Avoca	WILK-FM	LIC	CX PA	136.5 317.1	125.31 BLH20040413AAT	41 18 20.0 75 45 38.0	6.000 22	43.6 397	28.2 Entercom License, Llc	73.4	85.4

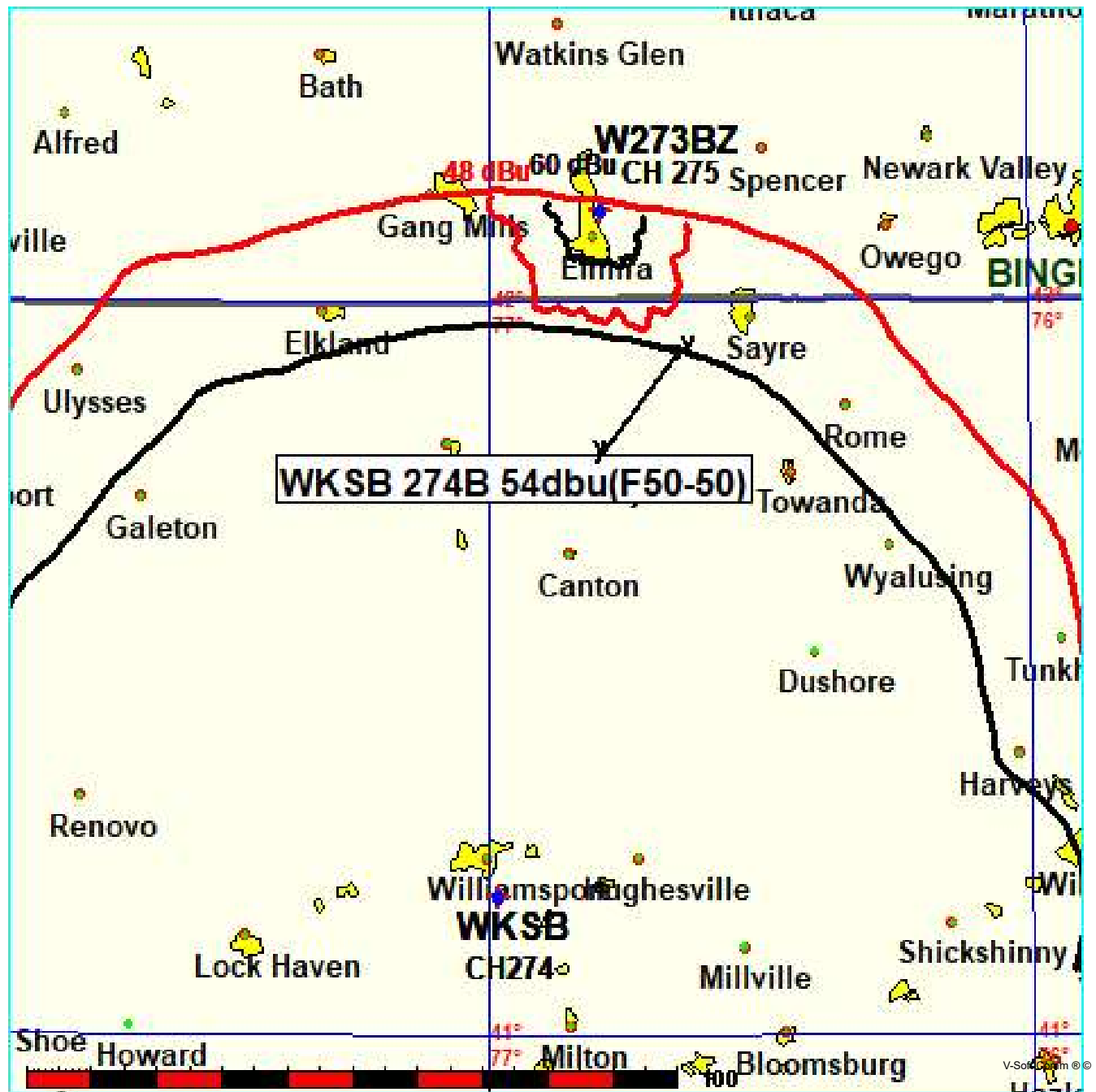
KM Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in  
 Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd  
 adjacent.  
 All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.  
 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 restricted contour.  
 < = Contour Overlap  
 Reference station has protected zone issue: AM tower

W273BZ vs WKSB  
Family Life Ministries, Inc.

FMCommander Single Allocation Study - 08-22-2019 - NGDC 30 SEC  
W273BZ's Overlaps (In= -9.33 km, Out= 2.99 km)

W273BZ CH 275 D DA  
Lat= 42 07 36.0, Lng= 76 47 36.0  
0.01 kW 165.5 m HAAT, 548.5 m COR  
Prot.= 60 dBu, Intef.= 48 dBu

WKSB CH 274 B BMLH20030625ACG  
Lat= 41 11 21.0, Lng= 76 58 53.0  
53.0 kW 387 m HAAT, 633 m COR  
Prot.= 54 dBu, Intef.= 54 dBu



**Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60dBu contour of second adjacent translator W277DW, Elmira, NY. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for W273BZ.P:	10 watts
The proposed COR for W273BZ.P:	50 meters
W277DW F(50/50) contour at proposed site:	106.1dBu
The F(50/10) contour of proposed W273BZ.P:	146.1dBu

The predicted distance to the 146.1dbu interfering contour is 1.1 meters. Taking into account the vertical elevation pattern of the Nicom BKG77 single bay antenna and the height above ground of 50M, it has been determined that the interfering contour of 106.1dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 49.512M above ground at a distance of 0.76m from the antenna.

There are no surrounding structures which are tall enough to enter the 146.1dbu contour within the 0.76 meter radius from the base of the tower.

Therefore, FLM respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1  
74.1204(d) Showing  
W273BZ  
Elmira, NY

ERP (kw): 0.01  
Height of Antenna Above Ground (m): 50  
Translator's IX Contour: 146.1  
Antenna Type: Nic BKG77-1

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0100	1.0990	50.000
5	0.999	0.0100	1.0979	49.904
10	0.982	0.0096	1.0792	49.813
15	0.954	0.0091	1.0485	49.729
20	0.918	0.0084	1.0089	49.655
25	0.872	0.0076	0.9583	49.595
30	0.818	0.0067	0.8984	49.551
35	0.758	0.0057	0.8330	49.522
40	0.691	0.0048	0.7594	49.512
45	0.616	0.0038	0.6770	49.521
50	0.538	0.0029	0.5913	49.547
55	0.465	0.0022	0.5110	49.581
60	0.391	0.0015	0.4297	49.628
65	0.313	0.0010	0.3440	49.688
70	0.239	0.0006	0.2627	49.753
75	0.176	0.0003	0.1934	49.813
80	0.129	0.0002	0.1418	49.860
85	0.103	0.0001	0.1132	49.887
90	0.104	0.0001	0.1143	49.886