

Channel Study

REFERENCE		CH# 276D - 103.1 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 659 M								DISPLAY DATES	
41 12 44.9 N.		Average Protected F(50-50)= 7.1 km								DATA 04-20-15	
76 57 08.9 W.		Standard Directional								SEARCH 04-21-15	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
276D Garden View	W276CU	LIC	DC PA	0.0 0.0	0.00 BLFT20150403ABK	41 12 44.9 76 57 08.9	0.250 659	78.0 659	26.0 Family Life Ministries, In	-103.8*<	-103.5*<
274B Williamsport	WKSJ	LIC	CN PA	223.0 43.0	3.54 BMLH20030625ACG	41 11 21.0 76 58 53.0	53.000 387	9.2 633	83.9 Clear Channel Broadcasting	-24.2*<	-81.5*<
276A Avoca	AL0580	RSV-A	PA	83.7 264.5	100.42 RM10697	41 18 20.0 75 45 38.0	6.000 100	105.6 479	41.9	-8.4*<	44.1
276A State College	WRSC-FM	LIC	CN PA	233.0 52.5	84.62 BLH19980911KD	40 45 09.0 77 45 15.0	0.370 398	82.7 819	28.5 Fm Radio Licenses, Llc	-7.7<	24.1
276A Avoca	WILK-FM	LIC	CX PA	83.7 264.5	100.42 BLH20040413AAT	41 18 20.0 75 45 38.0	6.000 22	95.8 397	35.3 Entercom Wilkes-barre Scra	1.4<	50.7
279A Lewisburg	WCXR	LIC	NCN PA	207.8 27.7	29.54 BLH19971203KC	40 58 38.0 77 07 00.0	0.950 244	1.8 600	24.0 Backyard Broadcasting Pa,	5.4	4.7
277B York	WARM-FM	LIC	CN PA	167.2 347.4	134.95 BLH19860519KG	40 01 38.0 76 35 60.0	6.400 398	78.2 533	65.8 Radio License Holding Src	29.1	10.3
222A Riverside	WVSL-FM	LIC	CX PA	144.7 324.9	34.57 BLH20011024AAD	40 57 30.0 76 42 53.0	0.930 254	0.0 450	0.0 Mmp License Llc	9.5R	25.1M
278A Berwick	WHLM-FM	LIC	CN PA	103.7 284.2	58.32 BLH19970801KG	41 05 11.0 76 16 41.0	4.100 118	2.5 379	26.1 Columbia Fm, Inc.	42.0	31.9
276A Bath	WCIK	LIC	CN NY	341.6 161.3	131.58 BMLED19980918KA	42 20 07.0 77 27 27.0	0.790 162	65.5 648	21.4 Family Life Ministries, In	40.3	32.7
278D Wellsboro	W278AO	LIC	C PA	334.5 154.3	65.60 BLFT20070306AAU	41 44 41.0 77 17 35.0	0.055 -24	0.5 484	4.8 Northeastern Pennsylvania	39.5	59.7
276A Avoca	WCIK	CP	CX NY	341.2 160.8	147.91 BPED20130924AJT	42 28 15.3 77 32 06.7	1.400 210	80.0 708	27.7 Family Life Ministries, In	42.2	42.7
275D Elmira	W275AB	LIC	CN NY	7.2 187.3	98.07 BLFT19950424TP	42 05 18.0 76 48 09.0	0.050 -71	6.7 307	4.7 Cantroair Communications,	65.9	54.0
277A Vestal	WMXW	LIC	CX NY	41.2 221.9	126.17 BLH20070503ABF	42 03 40.0 75 56 45.0	0.520 335	39.0 733	25.9 Cc Licenses, Llc	67.0	69.9
222A Mansfield	WNBQ	LIC	NC PA	351.3 171.2	77.05 BLH20010821AAN	41 53 53.0 77 05 38.0	1.600 196	0.0 668	0.0 Farm & Home Broadcasting C	9.5R	67.6M

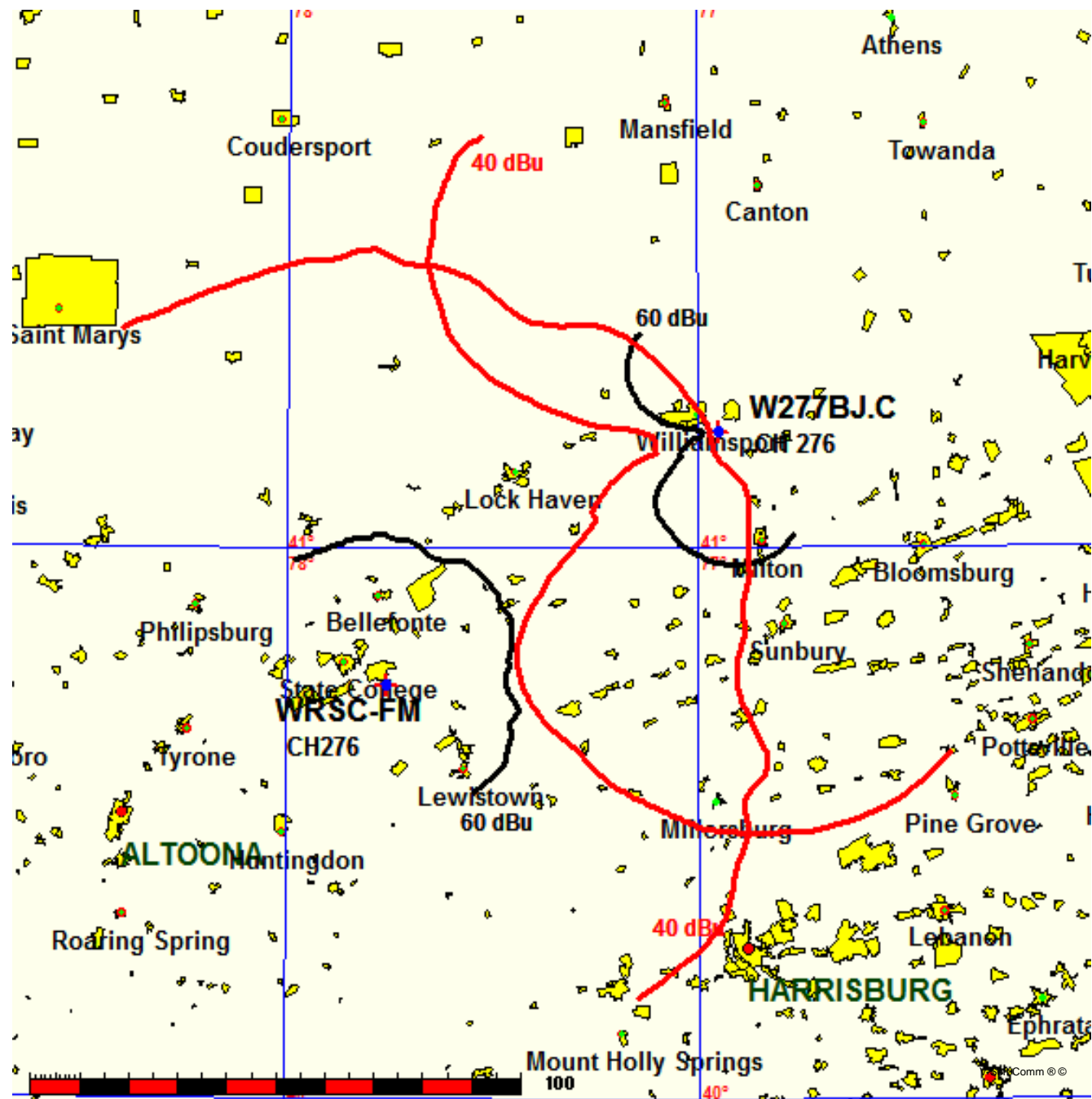
Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
 Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd adjacent.
 All separation margins (if shown) include rounding. Call signs with exclamation 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.
 < = Station meets FCC minimum distance spacing for its class.
 < = Contour Overlap

Family Life Ministries, Inc.

FMCommander Single Allocation Study - 04-22-2015 - NGDC 30 SEC
W277BJ.C's Overlaps (In= -7.67 km, Out= 24.07 km)

W277BJ.C CH 276 D DA
Lat= 41 12 44.9, Lng= 76 57 08.9
0.25 kW 0 M HAAT, 659 M COR
Prot.= 60 dBu, Intef.= 40 dBu

WRSC-FM CH 276 A BLH19980911KD
Lat= 40 45 09.0, Lng= 77 45 15.0
0.37 kW 398 M HAAT, 819 M COR
Prot.= 60 dBu, Intef.= 40 dBu

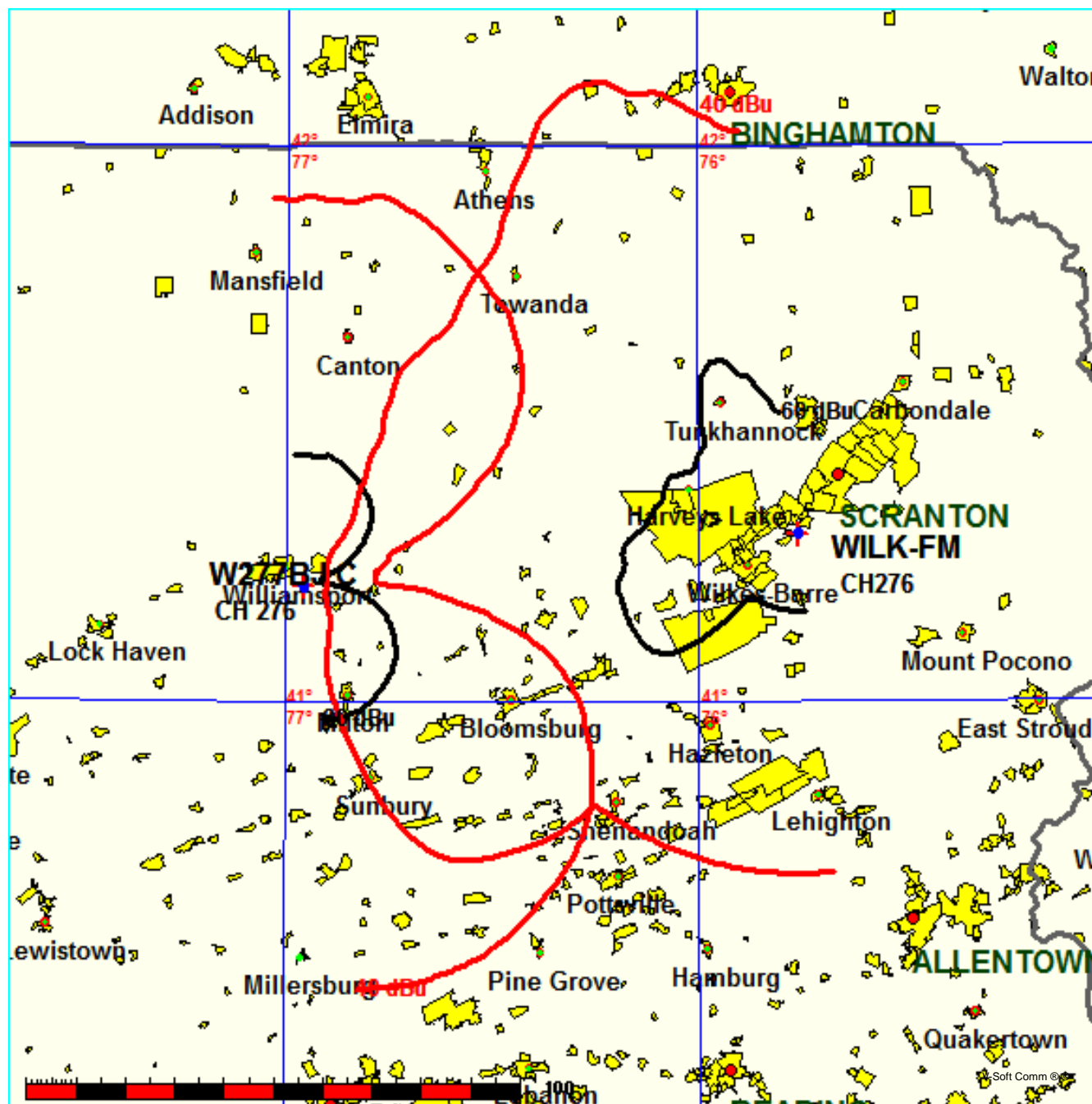


Family Life Ministries, Inc.

FMCommander Single Allocation Study - 04-22-2015 - NGDC 30 SEC
W277BJ.C's Overlaps (In= 1.35 km, Out= 50.73 km)

W277BJ.C CH 276 D DA
Lat= 41 12 44.9, Lng= 76 57 08.9
0.25 kW 0 M HAAT, 659 M COR
Prot.= 60 dBu, Intef.= 40 dBu

WILK-FM CH 276 A BLH20040413AAT
Lat= 41 18 20.0, Lng= 75 45 38.0
6.0 kW 22 M HAAT, 397 M COR
Prot.= 60 dBu, Intef.= 40 dBu

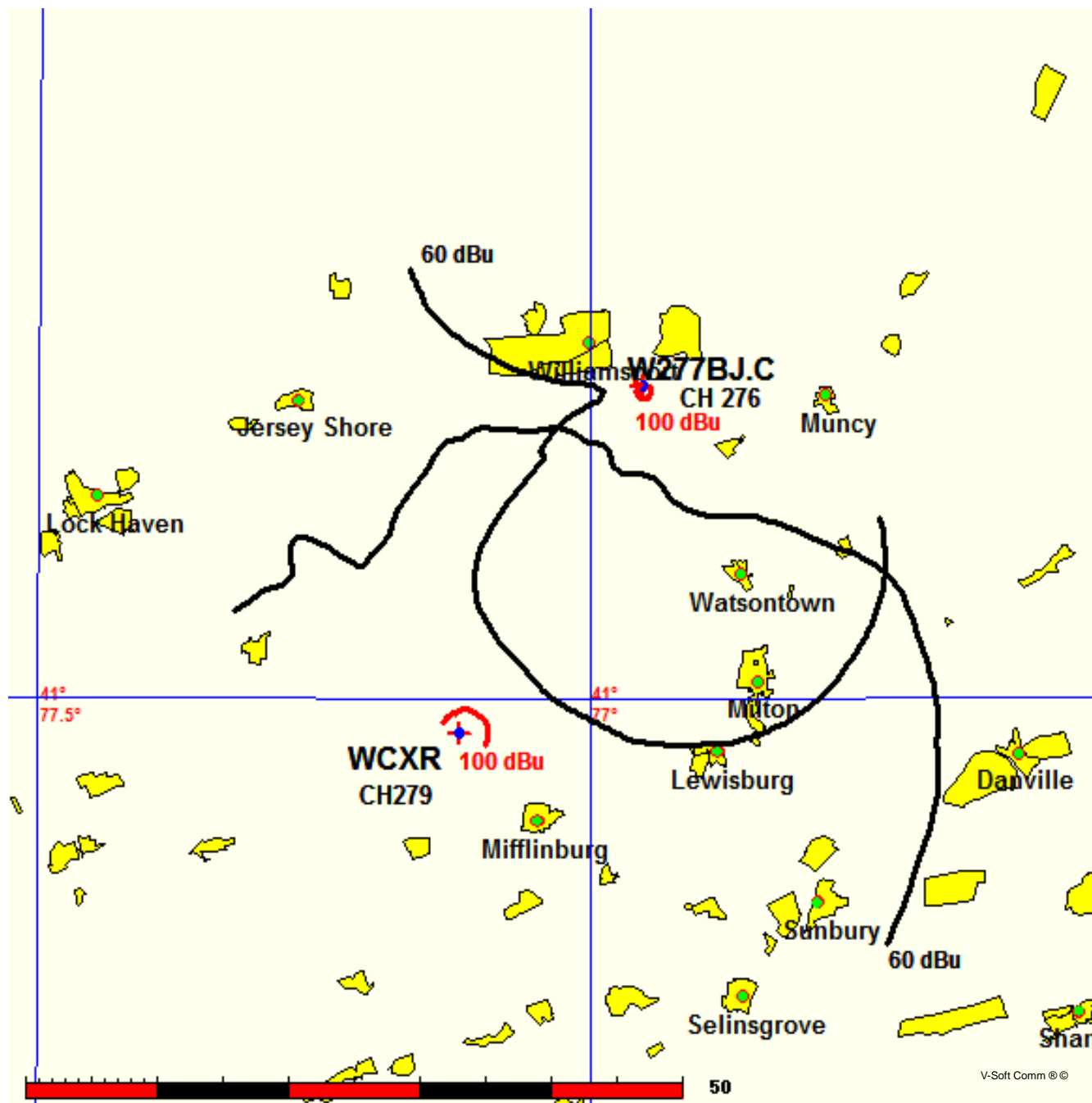


Family Life Ministries, Inc.

FMCommander Single Allocation Study - 04-22-2015 - NGDC 30 SEC
W277BJ.C's Overlaps (In= 5.43 km, Out= 4.71 km)

W277BJ.C CH 276 D DA
Lat= 41 12 44.9, Lng= 76 57 08.9
0.25 kW 0 M HAAT, 659 M COR
Prot.= 60 dBu, Intef.= 100 dBu

WCXR CH 279 A 73.215 N BLH19971203KC
Lat= 40 58 38.0, Lng= 77 07 00.0
0.95 kW 244 M HAAT, 600 M COR
Prot.= 60 dBu, Intef.= 100 dBu

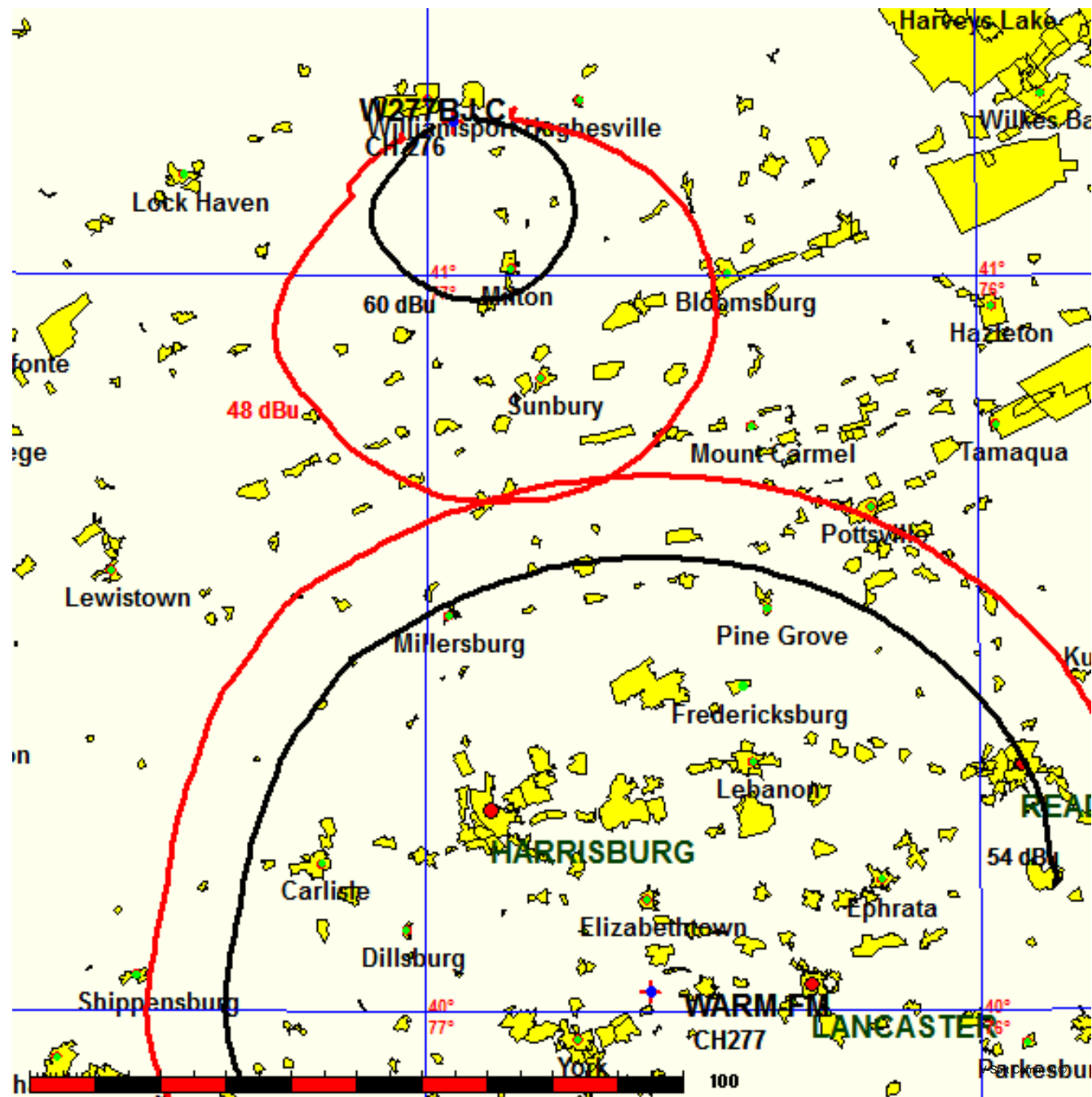


Family Life Ministries, Inc.

FMCommander Single Allocation Study - 04-22-2015 - NGDC 30 SEC
W277BJ.C's Overlaps (In= 29.11 km, Out= 10.31 km)

W277BJ.C CH 276 D DA
Lat= 41 12 44.9, Lng= 76 57 08.9
0.25 kW 0 M HAAT, 659 M COR
Prot.= 60 dBu, Intef.= 48 dBu

WARM-FM CH 277 B BLH19860519KG
Lat= 40 01 38.0, Lng= 76 35 60.0
6.4 kW 398 M HAAT, 533 M COR
Prot.= 54 dBu, Intef.= 54 dBu



Compliance with C.F.R. 74.1204

The proposed FM Translator, to operate on channel 276, is located within the protected 54dBu contour of second adjacent channel station WKSB, channel 274B, Williamsport, PA. 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 W276CU.P:	250 watts
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The proposed COR for W276CU.P:	52 meters
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WKSB F(50/50) contour at proposed site:	111.6dBu
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The F(50/10) contour of proposed W276CU.P:	151.6dBu
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The predicted distance to the 151.6dbu interfering contour is 2.9 meters. Taking into account the vertical elevation pattern of the Scala CA2-CP antenna and the height above ground of 52M, it has been determined that the interfering contour of 151.6dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 50.659M above ground.

There are no surrounding structures which are tall enough or close enough to this tower to enter the interference area.

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
W276CU
Garden View, Pa

ERP (kw): 0.25
Height of Antenna above Ground (m): 52
Translator's IX Contour: 151.6
Antenna Type: Scala CA2-CP

<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	0.2500	2.9172	52.000
5	0.990	0.2450	2.8881	51.748
10	0.979	0.2396	2.8560	51.504
15	0.952	0.2266	2.7772	51.281
20	0.920	0.2116	2.6838	51.082
25	0.877	0.1923	2.5584	50.919
30	0.829	0.1718	2.4184	50.791
35	0.772	0.1490	2.2521	50.708
40	0.715	0.1278	2.0858	50.659
45	0.647	0.1047	1.8874	50.665
50	0.570	0.0812	1.6628	50.726
55	0.487	0.0593	1.4207	50.836
60	0.388	0.0376	1.1319	51.020
65	0.292	0.0213	0.8518	51.228
70	0.187	0.0087	0.5455	51.487
75	0.095	0.0023	0.2771	51.732
80	0.045	0.0005	0.1313	51.871
85	0.032	0.0003	0.0934	51.907
90	0.030	0.0002	0.0875	51.912