

**Channel Study**

REFERENCE		CH# 235D - 94.9 MHz, Pwr= 0.013 kW DA, HAAT= 110.1 M, COR= 132 M										DISPLAY DATES	
40 48 25.6 N.		Average Protected F(50-50)= 6.5 km										DATA	03-26-18
73 10 47.6 W.		Standard Directional										SEARCH	04-06-18
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*		
235D Hauppauge	W235BB!	LIC	DC NY	5.3 185.3	0.91 BLFT20051031AAK	40 48 55.0 73 10 44.0	0.010 121	21.5 144	6.4 Holding Out Hope Church	-25.5	-21.1		
232A Smithtown	WWSK	LIC	CX NY	266.6 86.5	9.02 BLH20011127AAK	40 48 08.0 73 17 12.0	2.600 96	2.1 125	22.8 Connoisseur Media Licenses	1.5	-14.0*<		
236B Brookfield	WRKI	LIC	DCX CT	344.8 164.6	79.02 BMLH20120221ADH	41 29 36.0 73 25 45.0	29.500 194	81.4 367	68.3 Townsquare Media Danbury L	-7.4*<	0.7		
236D Patchogue	W236DH	CP	DC NY	110.0 290.1	17.30 BNPFT20171205ABR	40 45 14.0 72 59 14.0	0.250	10.3 45	7.2 Connoisseur Media Licenses	0.8	1.3		
238B New York	WPLJ	LIC	CX NY	264.8 84.2	68.37 BMLH20050216ACG	40 44 54.0 73 59 10.0	6.700 408	4.7 422	66.7 Radio License Holdings Llc	58.1	1.2		
234B Newark	WNSH	LIC	CX NJ	269.0 88.3	90.78 BLH20120404ABJ	40 47 17.0 74 15 19.0	23.500 207	79.9 274	67.4 Radio License Holdings Llc	5.6	13.0		
234L1 Ridge	WLIX-LP	LIC		65.7 245.8	24.43 BLL20050816ABT	40 53 50.0 72 54 56.0	0.021 64			12.9	13.0		
235A Montauk	WJJF	LIC	CX NY	75.7 256.5	104.48 BLH20120302AAX	41 01 56.0 71 58 32.0	5.600 104	85.8 105	28.1 Red Wolf Broadcasting Corp	13.8	61.2		
232A New Haven	WYBC-FM	LIC	DE CT	16.0 196.1	62.71 BLH20010918AAT	41 20 59.0 72 58 23.0	3.000 144	1.8 215	23.7 Yale Broadcasting Company,	56.4	38.9		
237A Southampton	WHFM	LIC	ZCN NY	77.7 258.2	68.28 BLH19911211KA	40 56 05.0 72 23 15.0	5.000 108	2.6 114	27.8 Cox Radio, Inc.	60.7	40.3		
233A Sagaponack	R16637	ADD		78.8 259.3	74.22	40 56 01.0 72 18 55.0	6.000 100	2.7 107	27.8 Red Wolf Broadcasting Corp	66.5	46.3		
233A Sagaponack	1661852	RSV-A		78.8 259.3	74.22	40 56 01.0 72 18 55.0	6.000 100	2.7 107	27.8 Red Wolf Broadcasting Corp	66.5	46.3		
236D Fort Greene	W236CH	LIC	DC NY	265.0 84.5	66.83 BLFT20161012AAH	40 45 08.8 73 58 06.0	0.027	13.1 284	9.3 Bridgelight, Llc	48.2	49.8		
233A Sagaponack	1657969	APP	ZCX NY	75.0 255.6	72.43 BNPH20141124AIU	40 58 19.0 72 20 54.0	5.600 103	2.0 109	22.5 Red Wolf Broadcasting Corp	65.7	49.8		
232D Pomona	W232AL	LIC	DC NY	294.3 113.8	59.70 BLFT20140829AAT	41 01 32.0 73 49 39.0	0.250	0.2 257	8.2 Bridgelight, Llc	54.4	51.4		
232D Pomona	W232AL	CP	DC NY	285.5 105.1	64.90 BPFT20170623ABN	40 57 38.6 73 55 22.5	0.055	0.4 246	11.2 Bridgelight, Llc	59.5	53.5		
233D Danbury	W233CF	LIC	DC CT	340.6 160.4	66.83 BLFT20160701ABY	41 22 27.0 73 26 47.0	0.099	0.7 302	12.7 The Berkshire Broadcasting	61.1	54.0		
233D Sag Harbor	W233AI	LIC	CN NY	75.0 255.6	72.43 BLFT20000202ABN	40 58 19.0 72 20 54.0	0.027 48	0.4 96	7.2 Town Of Monroe, Connecticu	67.3	65.0		

Terrain database is FCC 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 restricted contour.

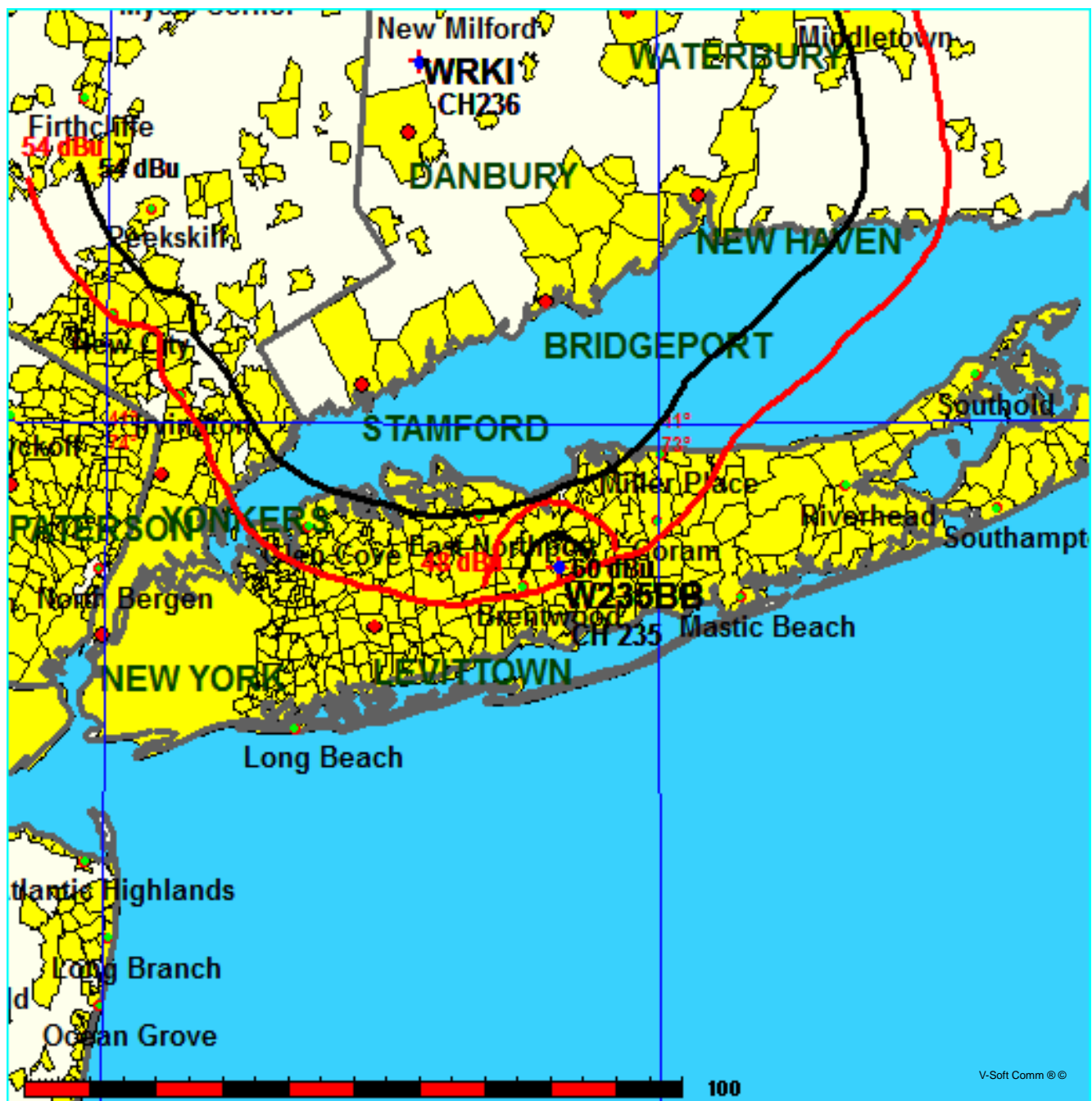
< = Contour Overlap

## Holding Out Hope Church

FMCommander Single Allocation Study - 04-06-2018 - FCC NGDC 30 Sec  
W235BB's Overlaps (In= -7.37 km, Out= 0.75 km)

W235BB CH 235 D DA  
Lat= 40 48 25.6, Lng= 73 10 47.6  
0.013 kW 110.1 m HAAT, 132 m COR  
Prot.= 60 dBu, Intef.= 48 dBu

WRKI CH 236 B DA BMLH20120221ADH  
Lat= 41 29 36.0, Lng= 73 25 45.0  
29.5 kW 194 m HAAT, 367 m COR  
Prot.= 54 dBu, Intef.= 54 dBu

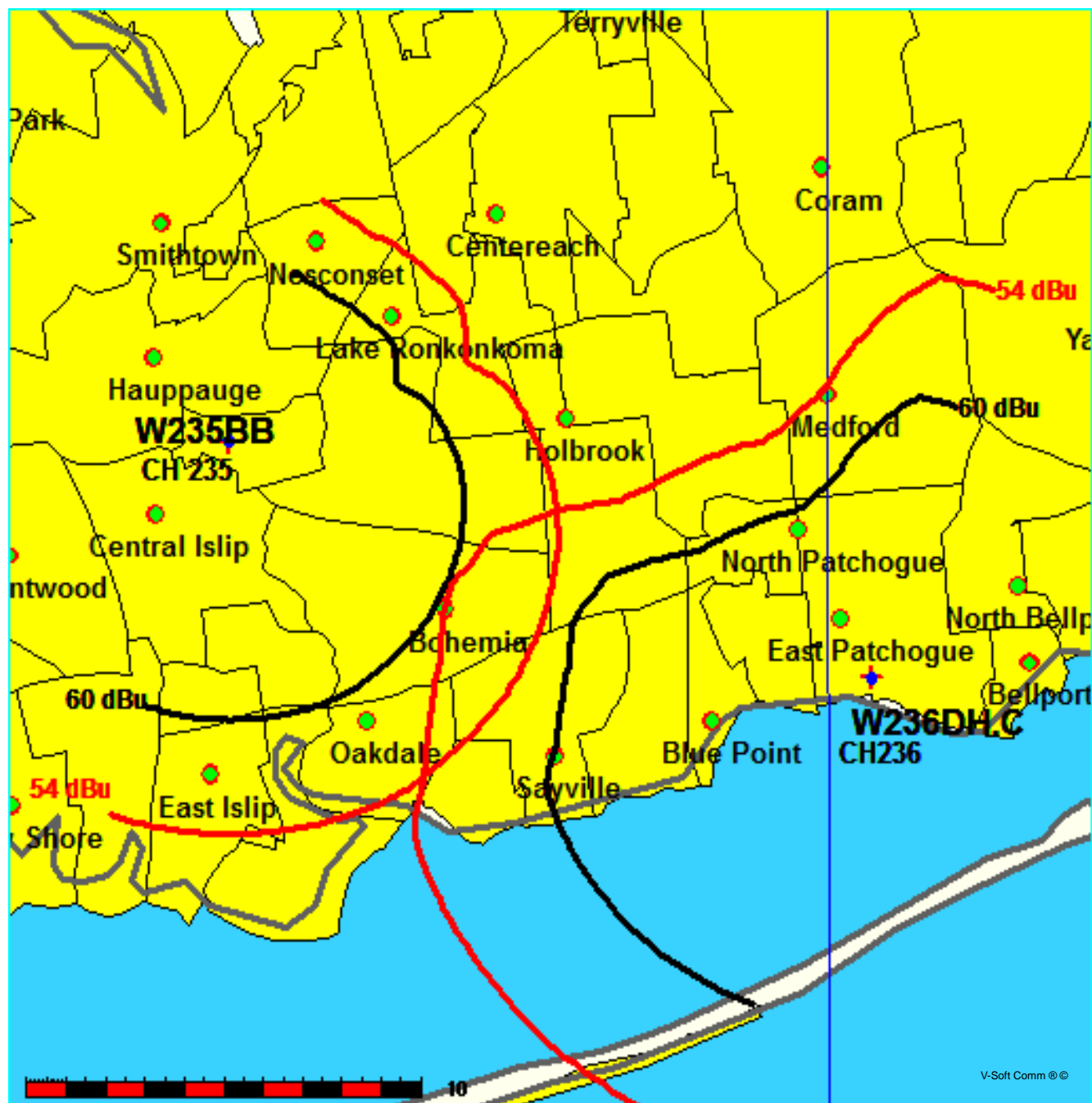


## Holding Out Hope Church

FMCommander Single Allocation Study - 04-06-2018 - FCC NGDC 30 Sec  
W235BB's Overlaps (In= 0.76 km, Out= 1.34 km)

W235BB CH 235 D DA  
Lat= 40 48 25.6, Lng= 73 10 47.6  
0.013 kW 110.1 m HAAT, 132 m COR  
Prot.= 60 dBu, Intef.= 54 dBu

W236DH CH 236 D DA BNPFT20171205ABR  
Lat= 40 45 14.0, Lng= 72 59 14.0  
0.25 kW 0 m HAAT, 45 m COR  
Prot.= 60 dBu, Intef.= 54 dBu



FMCommander Single Allocation Study - 04-06-2018 - FCC NGDC 30 Sec  
W235BB's Overlaps (In= 58.12 km, Out= 1.21 km)

WPLJ CH 238 B BMLH20050216ACG  
Lat= 40 44 54.0, Lng= 73 59 10.0  
6.7 kW 408 m HAAT, 422 m COR  
Prot.= 54 dBu, Intef.= 100 dBu



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

The proposed FM Translator to operate on channel 235 is located within the protected 60dBu contour of second adjacent channel station WWSK, channel 232A, Smithtown, 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 W235BB.P:	13 watts
The proposed COR for W235BB.P:	105 meters
WWSK F(50/50) contour at proposed site:	76.0dBu
The F(50/10) contour of proposed W235BB.P:	116.0dBu

The predicted distance to the 116.0dbu interfering contour is 40 meters. Taking into account the vertical elevation pattern of the Scala FMV vertically polarized antenna and the height above ground of 105m, it has been determined that the interfering contour of 116.0dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 88.28m above ground at a distance of 29m from the antenna.

As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the 40m distance from the antenna.

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

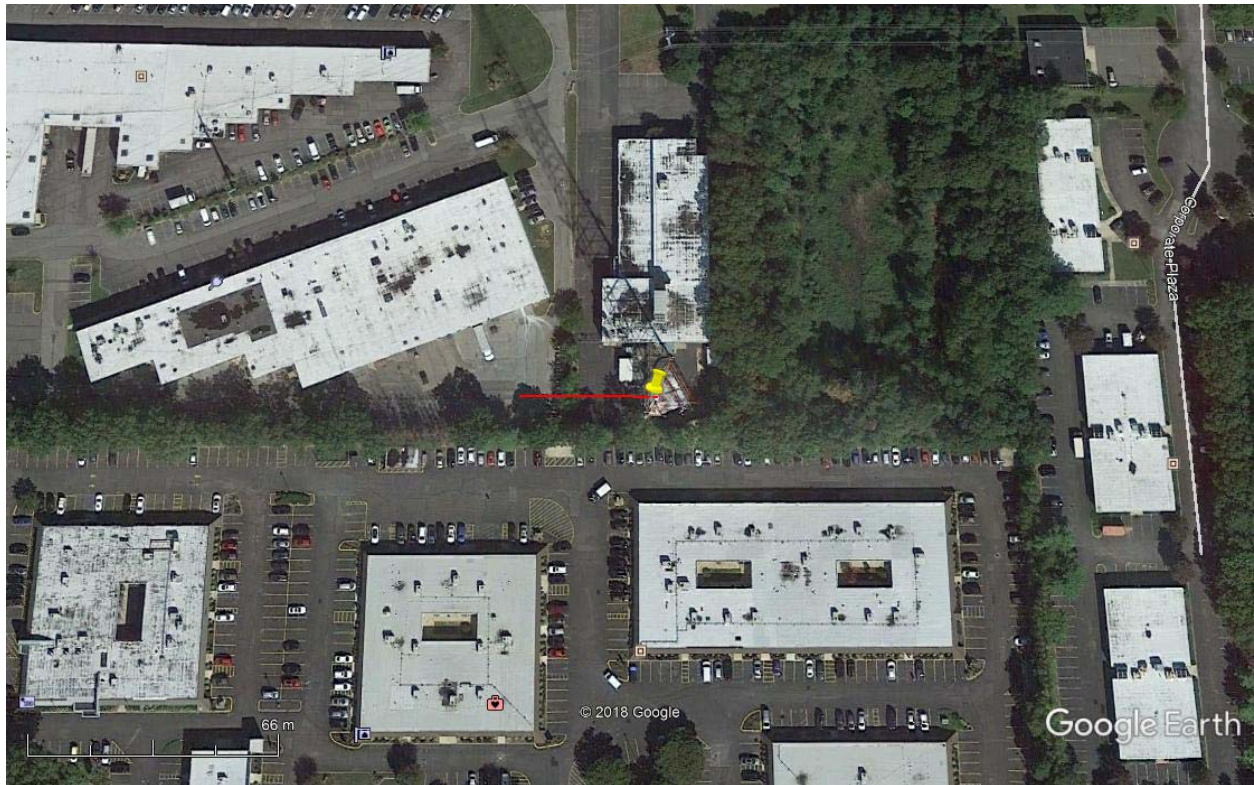
EXHIBIT 13 - A1  
74.1204(d) Showing  
W235BB  
Hauppauge, NY

ERP (kw): 0.013  
Height of Antenna above Ground (m): 105  
Translator's IX Contour: 116  
Antenna Type: Scala FMV-1

<b>Depression Angle from Horizon</b>	<b>Antenna Relative Field</b>	<b>ERP (kw) from the Antenna RF</b>	<b>Dist. To IX Contour (m)</b>	<b>Height IX Contour Above Ground (m)</b>
0	1.000	0.0130	40.0841	105.000
5	0.995	0.0129	39.8756	101.525
10	0.982	0.0125	39.3505	98.167
15	0.956	0.0119	38.3043	95.086
20	0.918	0.0110	36.8092	92.411
25	0.867	0.0098	34.7368	90.320
30	0.803	0.0084	32.1715	88.914
35	0.727	0.0069	29.1451	88.283
40	0.645	0.0054	25.8502	88.384
45	0.558	0.0040	22.3709	89.181
50	0.472	0.0029	18.8996	90.522
55	0.388	0.0020	15.5526	92.260
60	0.315	0.0013	12.6265	94.065
65	0.240	0.0007	9.6202	96.281
70	0.176	0.0004	7.0628	98.363
75	0.119	0.0002	4.7660	100.396
80	0.067	0.0001	2.6816	102.359
85	0.019	0.0000	0.7736	104.229
90	0.025	0.0000	1.0181	103.982



## Exhibit 13-A2



Yellow Pin Marker

NAD 27

40-48-25.6 N 73-10-47.6 W

Red Line Marker: 40m at 270 degrees true north