

Doug Vernier Telecommunications Consultants

W220CH - Move up the tower - Increase to 10 watts  
Town Of Monroe, Connecticut

REFERENCE	CH#	220D - 91.9 MHZ, Pwr= 0.01 kw, HAAT= 167.3 M, COR= 257.3 M Average Protected F(50-50)= 7.67 km Omni-directional	DISPLAY
41 47 48.0 N.			DATA 12-22-15
72 47 52.0 W.			SEARCH 12-22-15

CH CITY	CALL	TYPE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km)	LICENSEE	*OUT* (Overlap in km)
223B Waterbury	WWYZ	LIC	_CN CT	188.6 8.6	26.26 BLH19940916KD	41 33 47.0 72 50 42.0	17.000 268	5.5 368	64.1	Capstar Tx, Llc	-38.3*
220D West Hartford	W220CH	LIC	_C_ CT	0.0 0.0	0.00 BLFT20011002ACH	41 47 48.0 72 47 52.0	0.008 170	24.8 253	7.3	Town Of Monroe, Connecticu	-33.8*
217A West Hartford	WWUH	LIC	_CN CT	194.5 14.5	2.58 BLED19970107KB	41 46 27.0 72 48 20.0	0.440 239	1.5 325	20.4	University of Hartford	-18.0*
220D Middlefield	W220CE	LIC	_C_ CT	172.3 352.3	31.74 BLFT20150706ACV	41 30 49.3 72 44 48.3	0.006 247	23.6 247	6.9	Town Of Monroe, Connecticu	-0.5 **
220D Middlefield	W220CE	CP	DC_ CT	172.3 352.3	31.74 BPFT20151112XRR	41 30 49.3 72 44 48.3	0.010 247	19.5 247	5.6	Town Of Monroe, Connecticu	0.9
220A Springfield	WAIC	LIC	_HX MA	29.5 209.7	40.37 BLED20141016ABC	42 06 45.0 72 33 24.0	0.230 20	33.8 91	10.0	American International Col	2.8
219B1 Storrs	WHUS	LIC	DEN CT	87.4 267.7	44.60 BLED19990413KA	41 48 50.0 72 15 36.0	4.400 150	36.1 313	23.8	The Board of Trustees, The	7.6
221D Naugatuck, Etc.	W221CQ	LIC	_C_ CT	216.0 35.8	40.04 BLFT20130123ABR	41 30 18.0 73 04 50.0	0.055 24	6.9 181	4.8	Danbury Community Radio, I	24.1
220A Sharon	WHDD-FM	LIC	ZCX CT	281.3 100.8	55.41 BLED20110114ABG	41 53 32.0 73 27 16.0	0.650 -19	30.8 279	9.1	Tri-state Public Communica	24.9
06-T Hartford	DWHCT-LP	AP	D_N CT	88.6 268.8	29.52 BDISTVL20110818ACN	41 48 09.7 72 26 29.7	0.010 225	0.7 270	0.8	1.5R	28.0M
220A Northampton	WOZQ	LIC	DEN MA	12.8 192.9	59.70 BLED19820924AH	42 19 13.0 72 38 14.0	0.200 -35	13.3 76	4.1	Trustees of The Smith Coll	29.4
220D Huntington	W220CF	LIC	DVN CT	205.6 25.4	64.14 BLFT19990225TD	41 16 33.0 73 07 46.0	0.007 73	13.4 144	4.3	Town of Monroe, Connecticu	32.3
218D Warren	W218AV	LIC	DCN CT	261.9 81.6	46.64 BLFT19981203TE	41 44 11.0 73 21 16.0	0.250 163	1.0 452	13.7	Town of Monroe, Connecticu	32.7
219A Danbury	WXCI	LIC	DCN CT	232.3 51.9	72.66 BLED19970702KB	41 23 42.0 73 29 14.0	3.000 67	35.6 241	23.5	Western Connecticut State	38.0
219A Dalton	WJNF	LIC	DCX MA	343.5 163.4	74.19 BLED20120514AAQ	42 26 11.0 73 03 14.0	0.160 298	27.5 776	18.6	Horizon Christian Fellowsh	43.4
219A Sheffield	WBSL-FM	LIC	_HN MA	304.9 124.5	62.26 BLED19820819AF	42 06 57.0 73 25 00.0	0.230 -23	13.7 276	9.7	The Berkshire School, Inc.	44.0
218A Guilford	WGRS	LIC	_CX CT	168.4 348.5	57.66 BLED20130516ACT	41 17 18.6 72 39 31.5	2.800 30	1.6 65	13.0	Town of Monroe, Connecticu	44.4
218A South Hadley	WMHC	LIC	_CN MA	19.6 199.8	53.92 BMLED19880804LI	42 15 12.0 72 34 40.0	0.100 -5	0.7 90	7.8	Trustees of Mount Holyoke	45.5
220A Worcester	WBPR	LIC	ZCX MA	52.5 233.1	93.22 BLED20130827ABF	42 18 11.0 71 53 52.0	0.270 213	53.9 449	16.8	University of Massachusett	47.5
220D Fairfield	W220AC	LIC	_CN CT	207.8 27.5	81.41 BLFT19950814TB	41 08 53.0 73 15 05.0	0.019 1	11.9 30	3.7	Town of Monroe, Connecticu	50.4
222B Providence	WPRO-FM	LIC	_CN RI	89.1 270.0	109.77 BMLH19920605KA	41 48 18.0 71 28 24.0	39.000 168	4.5 230	53.9	Radio License Holding Cbc,	52.9
220D New Canaan	WSLX	LIC	_HN CT	221.1 40.6	88.87 BLED1366	41 11 32.0 73 29 46.0	0.019 53	11.9 165	3.7	St. Luke's Foundation, Inc	58.5
221A Sag Harbor	WLNG	LIC	_CX NY	157.6 337.9	99.06 BMLH20100917ABZ	40 58 19.0 72 20 54.0	5.300 106	44.7 114	29.1	Gary Sapiane, Rebecca John	58.5

Terrain database is GLOBE 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent. All separation margins (if shown) include rounding.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
Incoming contour overlap is ignored.

"\*affixed to 'IN' or 'OUT' values = site inside restricted contour.

Reference station has protected zone issue: AM tower

\* Section 74.1204(d). Please see Pages 3-5.

\*\* Modified by construction permit BPFT-20151112XRR. License to cover application BLFT-20151222AEX on file.

## HOW TO READ THE FM COMPUTER PRINT-OUT

### Translator Reference Station

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90. The column labeled "\* OUT \*" shows the greatest distance in kilometers of overlap (or smallest distance of clearance) between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap. Since translators are able to receive interference there is no "In" or incoming column in this report.

Listed antenna heights and power are the specific antenna heights and power from the FCC database.

Under the "AZI" column, the first row of numbers indicate the True North azimuths from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station. Bearings are calculated using spherical trigonometry.

The columns labeled "INT" and "PRO" contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the minimum spacings the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N" or left blank.

W220CH West Hartford, CT

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.01

Translator or LPFM Antenna Height AG = 50.3 Meters

W220CH Antenna Model = Shively 6812-1

Protected Station's Contour = 73.83968 dBu

Translator's or LPFM's full Interference contour 113.83968

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.01 kw

Distance between stations = 26.3 km

Protected Station= WXYZ, 17 kw, 368 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0100	045.0833	045.0833	050.300
05.00	0.993	1.0	0.0099	044.7677	044.5974	046.398
10.00	0.974	1.0	0.0095	043.9112	043.2441	042.675
15.00	0.941	1.0	0.0089	042.4234	040.9779	039.320
20.00	0.897	1.0	0.0080	040.4397	038.0009	036.469
25.00	0.843	1.0	0.0071	038.0052	034.4445	034.238
30.00	0.78	1.0	0.0061	035.1650	030.4538	032.718
35.00	0.709	1.0	0.0050	031.9641	026.1834	031.966
40.00	0.633	1.0	0.0040	028.5377	021.8612	031.956
45.00	0.554	1.0	0.0031	024.9762	017.6608	032.639
50.00	0.473	1.0	0.0022	021.3244	013.7071	033.965
55.00	0.394	1.0	0.0016	017.7628	010.1883	035.750
60.00	0.317	1.0	0.0010	014.2914	007.1457	037.923
65.00	0.245	1.0	0.0006	011.0454	004.6680	040.289
70.00	0.181	1.0	0.0003	008.1601	002.7909	042.632
75.00	0.124	1.0	0.0002	005.5903	001.4469	044.900
80.00	0.077	1.0	0.0001	003.4714	000.6028	046.881
85.00	0.041	1.0	0.0000	001.8484	000.1611	048.459
90.00	0.016	1.0	0.0000	000.7213	000.0000	049.579

X-Field™ By V-Soft Communications®LLC

W220CH West Hartford, CT

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.01

Translator or LPFM Antenna Height AG = 50.3 Meters

W220CH Antenna Model = Shively 6812-1

Protected Station's Contour = 93.06242 dBu

Translator's or LPFM's full Interference contour 133.06242

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.01 kw

Distance between stations = 2.6 km

Protected Station= WWUH, .44 kw, 325 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0100	004.9304	004.9304	050.300
05.00	0.993	1.0	0.0099	004.8959	004.8772	049.873
10.00	0.974	1.0	0.0095	004.8022	004.7292	049.466
15.00	0.941	1.0	0.0089	004.6395	004.4814	049.099
20.00	0.897	1.0	0.0080	004.4225	004.1558	048.787
25.00	0.843	1.0	0.0071	004.1563	003.7669	048.543
30.00	0.78	1.0	0.0061	003.8457	003.3305	048.377
35.00	0.709	1.0	0.0050	003.4956	002.8635	048.295
40.00	0.633	1.0	0.0040	003.1209	002.3908	048.294
45.00	0.554	1.0	0.0031	002.7314	001.9314	048.369
50.00	0.473	1.0	0.0022	002.3321	001.4990	048.514
55.00	0.394	1.0	0.0016	001.9426	001.1142	048.709
60.00	0.317	1.0	0.0010	001.5629	000.7815	048.946
65.00	0.245	1.0	0.0006	001.2079	000.5105	049.205
70.00	0.181	1.0	0.0003	000.8924	000.3052	049.461
75.00	0.124	1.0	0.0002	000.6114	000.1582	049.709
80.00	0.077	1.0	0.0001	000.3796	000.0659	049.926
85.00	0.041	1.0	0.0000	000.2021	000.0176	050.099
90.00	0.016	1.0	0.0000	000.0789	000.0000	050.221

X-Field™ By V-Soft Communications®LLC



Google earth

feet      meters

400

100

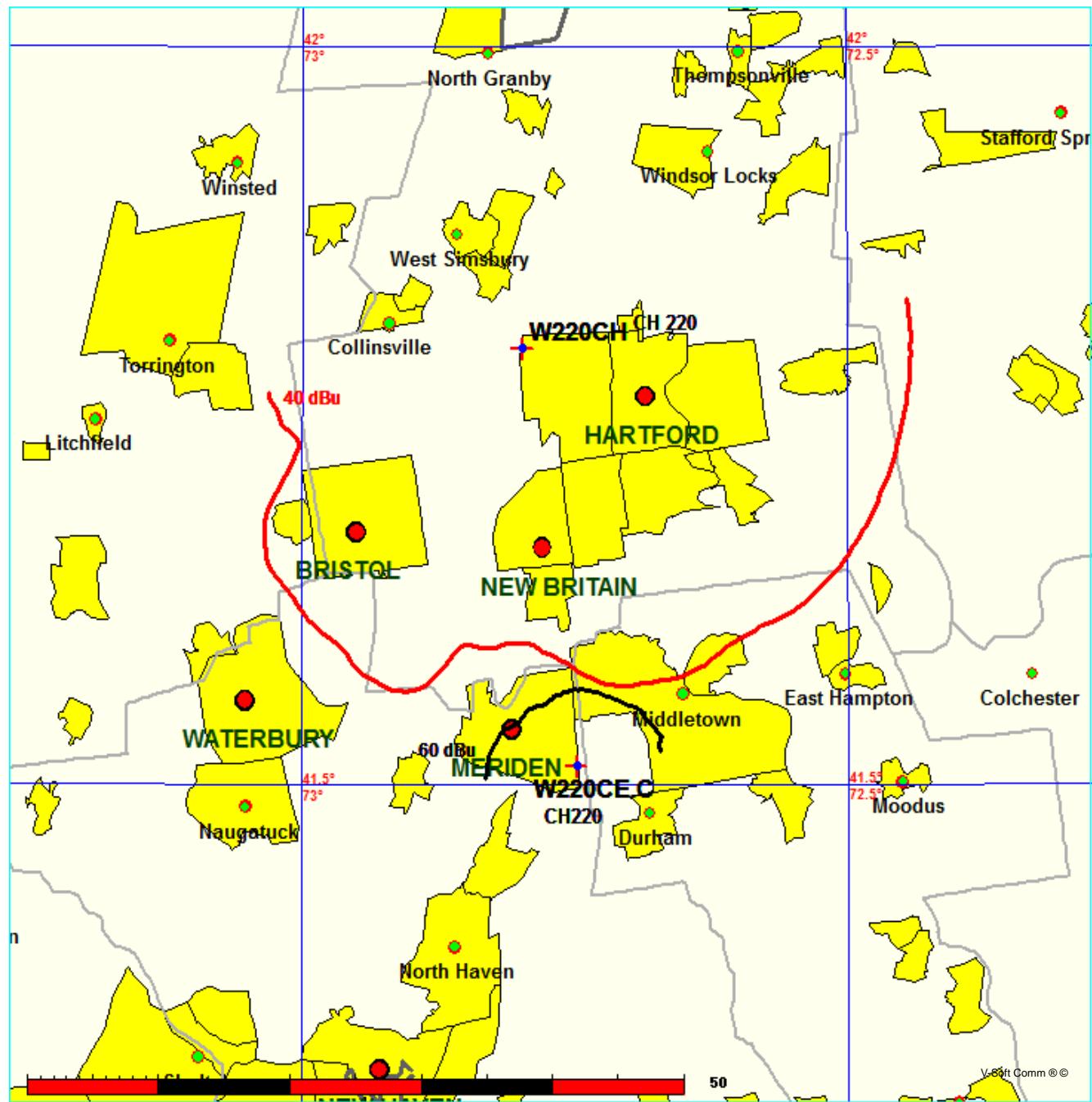


W220CH(New) vs. W220CE as modified  
Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 12-22-2015 - GLOBE 30 Sec  
W220CH's Overlaps (In= 4.53 km, Out= 0.89 km)

W220CH CH 220 D  
Lat= 41 47 48.0, Lng= 72 47 52.0  
0.01 kW 167.3 m HAAT, 257.3 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

W220CE CH 220 D DA BPFT20151112XRR  
Lat= 41 30 49.3, Lng= 72 44 48.3  
0.01 kW 0 m HAAT, 247 m COR  
Prot.= 60 dBu, Intef.= 40 dBu



12-22-2015

Terrain Data: GLOBE 30 Sec

FMOver Analysis

W220CE BPFT20151112XRR

W220CH

Channel = 220D  
 Max ERP = 0.01 kW  
 RCAMSL = 247 m  
 N. Lat. 41 30 49.3  
 W. Lng. 72 44 48.3  
 Protected  
 60 dBu

Channel = 220D  
 Max ERP = 0.01 kW  
 RCAMSL = 257.3 m  
 N. Lat. 41 47 48.0  
 W. Lng. 72 47 52.0  
 Interfering  
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
292.0	000.0045	0180.9	006.3	183.2	000.0100	0132.7	029.1	35.37	
293.0	000.0044	0180.4	006.3	183.1	000.0100	0132.6	029.0	35.42	
294.0	000.0043	0179.6	006.3	182.9	000.0100	0132.4	029.0	35.46	
295.0	000.0043	0178.3	006.2	182.8	000.0100	0132.2	028.9	35.50	
296.0	000.0042	0176.1	006.2	182.6	000.0100	0132.0	028.8	35.54	
297.0	000.0042	0172.8	006.1	182.4	000.0100	0132.0	028.7	35.57	
298.0	000.0041	0168.7	006.0	182.1	000.0100	0132.0	028.7	35.61	
299.0	000.0040	0164.4	005.9	181.8	000.0100	0132.0	028.6	35.64	
300.0	000.0040	0160.7	005.8	181.6	000.0100	0132.0	028.6	35.67	
301.0	000.0039	0157.8	005.7	181.4	000.0100	0132.0	028.5	35.71	
302.0	000.0039	0155.8	005.7	181.2	000.0100	0132.1	028.5	35.74	
303.0	000.0038	0154.4	005.6	181.0	000.0100	0132.1	028.4	35.78	
304.0	000.0038	0153.2	005.6	180.8	000.0100	0132.1	028.3	35.82	
305.0	000.0037	0152.6	005.6	180.6	000.0100	0132.1	028.3	35.86	
306.0	000.0037	0152.3	005.5	180.5	000.0100	0132.1	028.2	35.90	
307.0	000.0036	0153.0	005.5	180.4	000.0100	0132.1	028.1	35.95	
308.0	000.0036	0154.1	005.5	180.2	000.0100	0132.1	028.0	36.00	
309.0	000.0035	0155.5	005.5	180.1	000.0100	0132.1	028.0	36.05	
310.0	000.0035	0157.0	005.6	180.0	000.0100	0132.1	027.9	36.10	
311.0	000.0035	0158.7	005.6	179.9	000.0100	0132.1	027.8	36.15	
312.0	000.0034	0160.8	005.6	179.8	000.0100	0132.1	027.7	36.21	
313.0	000.0034	0162.4	005.6	179.7	000.0100	0132.1	027.6	36.26	
314.0	000.0034	0163.4	005.6	179.6	000.0100	0132.1	027.6	36.31	
315.0	000.0034	0164.1	005.6	179.4	000.0100	0132.1	027.5	36.35	
316.0	000.0033	0164.8	005.6	179.3	000.0100	0132.1	027.4	36.40	
317.0	000.0033	0165.8	005.6	179.1	000.0100	0132.2	027.4	36.44	
318.0	000.0033	0166.8	005.6	179.0	000.0100	0132.2	027.3	36.49	
319.0	000.0032	0167.1	005.6	178.8	000.0100	0132.2	027.2	36.53	
320.0	000.0032	0166.4	005.6	178.6	000.0100	0132.4	027.2	36.57	
321.0	000.0032	0164.6	005.5	178.4	000.0100	0132.8	027.2	36.61	
322.0	000.0032	0163.0	005.5	178.2	000.0100	0133.2	027.1	36.66	
323.0	000.0031	0161.8	005.5	178.0	000.0100	0133.7	027.1	36.71	
324.0	000.0031	0161.6	005.5	177.8	000.0100	0134.2	027.1	36.77	
325.0	000.0031	0161.3	005.5	177.6	000.0100	0134.8	027.0	36.84	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
326.0	000.0031	0160.0	005.4	177.4	000.0100	0135.3	027.0	36.89
327.0	000.0031	0158.0	005.4	177.2	000.0100	0136.0	027.0	36.94
328.0	000.0031	0155.4	005.3	177.0	000.0100	0136.6	027.0	36.98
329.0	000.0030	0152.6	005.3	176.7	000.0100	0137.3	027.0	37.02
330.0	000.0030	0150.5	005.2	176.5	000.0100	0138.0	027.0	37.07
331.0	000.0030	0150.3	005.2	176.3	000.0100	0138.6	027.0	37.13
332.0	000.0030	0150.8	005.2	176.2	000.0100	0139.2	026.9	37.19
333.0	000.0030	0151.5	005.2	176.0	000.0100	0139.7	026.9	37.26
334.0	000.0030	0153.1	005.3	175.8	000.0100	0140.2	026.8	37.33
335.0	000.0030	0156.6	005.3	175.7	000.0100	0140.7	026.7	37.41
336.0	000.0030	0160.2	005.4	175.6	000.0100	0141.1	026.6	37.50
337.0	000.0029	0161.9	005.4	175.4	000.0100	0141.5	026.6	37.56
338.0	000.0029	0163.1	005.4	175.2	000.0100	0141.9	026.5	37.62
339.0	000.0029	0165.5	005.4	175.0	000.0100	0142.3	026.5	37.68
340.0	000.0029	0168.8	005.5	174.9	000.0100	0142.7	026.4	37.75
341.0	000.0029	0171.8	005.5	174.7	000.0100	0143.1	026.4	37.82
342.0	000.0029	0174.1	005.6	174.5	000.0100	0143.6	026.3	37.89
343.0	000.0029	0175.3	005.6	174.3	000.0100	0144.2	026.3	37.95
344.0	000.0029	0174.9	005.6	174.1	000.0100	0144.8	026.3	38.00
345.0	000.0029	0173.2	005.5	173.9	000.0100	0145.4	026.3	38.03
346.0	000.0029	0171.7	005.5	173.6	000.0100	0146.0	026.3	38.06
347.0	000.0029	0172.2	005.5	173.4	000.0100	0146.6	026.3	38.11
348.0	000.0029	0174.1	005.5	173.2	000.0100	0147.2	026.2	38.17
349.0	000.0029	0176.6	005.6	173.0	000.0100	0147.8	026.2	38.24
350.0	000.0029	0178.6	005.6	172.8	000.0100	0148.5	026.2	38.30
351.0	000.0029	0179.9	005.6	172.6	000.0100	0149.3	026.1	38.37
352.0	000.0029	0181.3	005.6	172.4	000.0100	0150.1	026.1	38.43
353.0	000.0029	0182.7	005.6	172.2	000.0100	0151.0	026.1	38.50
354.0	000.0029	0184.1	005.7	172.0	000.0100	0151.9	026.1	38.56
355.0	000.0029	0185.9	005.7	171.7	000.0100	0152.8	026.1	38.63
356.0	000.0029	0187.4	005.7	171.5	000.0100	0153.8	026.1	38.70
357.0	000.0029	0187.5	005.7	171.3	000.0100	0154.8	026.1	38.76
358.0	000.0029	0187.1	005.7	171.1	000.0100	0155.8	026.1	38.81
359.0	000.0029	0186.6	005.7	170.9	000.0100	0156.8	026.1	38.86
000.0	000.0029	0186.1	005.7	170.6	000.0100	0157.8	026.1	38.90
001.0	000.0029	0186.8	005.7	170.4	000.0100	0158.9	026.1	38.96
002.0	000.0029	0187.3	005.7	170.2	000.0100	0159.9	026.1	39.01
003.0	000.0029	0187.9	005.7	170.0	000.0100	0160.9	026.2	39.06
004.0	000.0029	0188.3	005.7	169.8	000.0100	0161.9	026.2	39.11
005.0	000.0029	0188.4	005.7	169.6	000.0100	0162.8	026.2	39.14
006.0	000.0029	0187.3	005.7	169.4	000.0100	0163.7	026.2	39.17
007.0	000.0029	0186.2	005.7	169.2	000.0100	0164.5	026.3	39.19
008.0	000.0029	0185.8	005.7	169.0	000.0100	0165.4	026.3	39.21
009.0	000.0029	0185.1	005.7	168.8	000.0100	0166.3	026.4	39.23
010.0	000.0029	0184.5	005.7	168.6	000.0100	0167.2	026.4	39.25
011.0	000.0029	0183.8	005.7	168.4	000.0100	0168.1	026.4	39.27
012.0	000.0029	0183.1	005.7	168.2	000.0100	0168.9	026.5	39.29
013.0	000.0029	0183.2	005.7	168.0	000.0100	0169.8	026.5	39.31
014.0	000.0029	0184.5	005.7	167.8	000.0100	0170.7	026.5	39.35
015.0	000.0029	0185.8	005.7	167.6	000.0100	0171.6	026.6	39.37
016.0	000.0029	0185.7	005.7	167.4	000.0100	0172.5	026.6	39.39

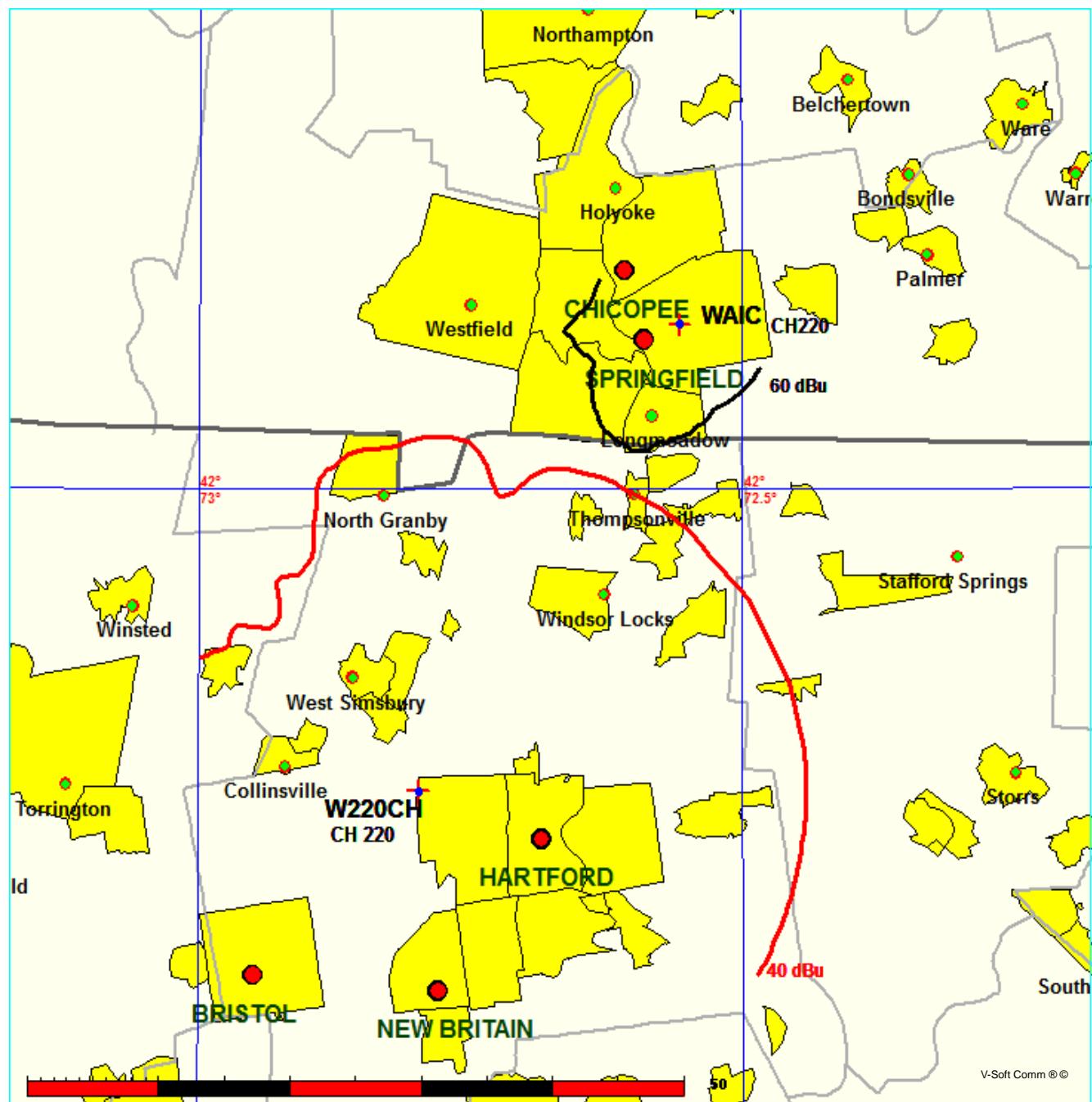
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
017.0	000.0029	0184.8	005.7	167.2	000.0100	0173.2	026.7	39.39
018.0	000.0029	0183.3	005.7	167.0	000.0100	0173.9	026.7	39.38
019.0	000.0029	0181.5	005.7	166.9	000.0100	0174.6	026.8	39.37
020.0	000.0029	0179.5	005.6	166.7	000.0100	0175.2	026.9	39.35
021.0	000.0029	0178.1	005.6	166.6	000.0100	0175.8	026.9	39.34
022.0	000.0029	0178.1	005.6	166.4	000.0100	0176.5	027.0	39.33
023.0	000.0029	0179.1	005.6	166.2	000.0100	0177.1	027.0	39.34
024.0	000.0030	0180.0	005.7	166.0	000.0100	0177.7	027.1	39.34
025.0	000.0030	0180.3	005.7	165.8	000.0100	0178.2	027.1	39.32
026.0	000.0030	0180.6	005.7	165.7	000.0100	0178.7	027.2	39.31
027.0	000.0030	0181.4	005.7	165.5	000.0100	0179.2	027.3	39.30
028.0	000.0030	0182.2	005.7	165.3	000.0100	0179.7	027.3	39.29
029.0	000.0030	0182.7	005.7	165.1	000.0100	0180.2	027.4	39.27
030.0	000.0030	0182.8	005.7	165.0	000.0100	0180.6	027.4	39.25
031.0	000.0030	0183.0	005.7	164.8	000.0100	0181.1	027.5	39.22
032.0	000.0031	0183.6	005.8	164.6	000.0100	0181.5	027.6	39.20
033.0	000.0031	0184.4	005.8	164.5	000.0100	0181.9	027.6	39.18
034.0	000.0031	0184.8	005.8	164.3	000.0100	0182.3	027.7	39.16
035.0	000.0031	0184.7	005.8	164.2	000.0100	0182.7	027.8	39.13
036.0	000.0031	0184.9	005.8	164.0	000.0100	0183.0	027.8	39.09
037.0	000.0031	0185.5	005.8	163.9	000.0100	0183.4	027.9	39.06
038.0	000.0032	0185.8	005.8	163.7	000.0100	0183.7	028.0	39.03
039.0	000.0032	0186.6	005.9	163.6	000.0100	0184.1	028.0	39.00
040.0	000.0032	0189.2	005.9	163.4	000.0100	0184.5	028.1	38.98
041.0	000.0032	0193.1	006.0	163.2	000.0100	0185.0	028.2	38.97
042.0	000.0033	0196.8	006.0	162.9	000.0100	0185.5	028.2	38.95
043.0	000.0033	0199.4	006.1	162.7	000.0100	0185.9	028.3	38.93
044.0	000.0033	0201.7	006.1	162.5	000.0100	0186.3	028.4	38.90
045.0	000.0034	0203.8	006.2	162.4	000.0100	0186.6	028.4	38.87
046.0	000.0034	0205.7	006.2	162.2	000.0100	0186.8	028.5	38.83
047.0	000.0034	0207.1	006.3	162.0	000.0100	0187.1	028.6	38.79
048.0	000.0034	0207.6	006.3	161.9	000.0100	0187.3	028.7	38.74
049.0	000.0035	0207.4	006.3	161.8	000.0100	0187.5	028.8	38.69
050.0	000.0035	0206.8	006.3	161.7	000.0100	0187.6	028.9	38.63
051.0	000.0035	0205.7	006.3	161.6	000.0100	0187.7	029.0	38.58

W220CH(New) vs. WAIC  
Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 12-22-2015 - GLOBE 30 Sec  
W220CH's Overlaps (In= -1.63 km, Out= 2.81 km)

W220CH CH 220 D  
Lat= 41 47 48.0, Lng= 72 47 52.0  
0.01 kW 167.3 m HAAT, 257.3 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

WAIC CH 220 A BLED20141016ABC  
Lat= 42 06 45.0, Lng= 72 33 24.0  
0.23 kW 20 m HAAT, 91 m COR  
Prot.= 60 dBu, Intef.= 40 dBu



12-22-2015

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WAIC BLED20141016ABC

W220CH

Channel = 220A  
 Max ERP = 0.23 kW  
 RCAMSL = 91 m  
 N. Lat. 42 06 45.0  
 W. Lng. 72 33 24.0  
 Protected  
 60 dBu

Channel = 220D  
 Max ERP = 0.01 kW  
 RCAMSL = 257.3 m  
 N. Lat. 41 47 48.0  
 W. Lng. 72 47 52.0  
 Interfering  
 40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
150.0	000.2300	0016.3	006.9	038.7	000.0100	0204.0	037.4	34.82	
151.0	000.2300	0016.6	006.9	038.7	000.0100	0203.9	037.2	34.87	
152.0	000.2300	0017.4	006.9	038.6	000.0100	0203.8	037.1	34.92	
153.0	000.2300	0018.6	006.9	038.5	000.0100	0203.7	037.0	34.97	
154.0	000.2300	0019.9	006.9	038.4	000.0100	0203.6	036.9	35.01	
155.0	000.2300	0021.6	006.9	038.4	000.0100	0203.5	036.8	35.06	
156.0	000.2300	0023.8	006.9	038.3	000.0100	0203.4	036.7	35.11	
157.0	000.2300	0026.5	006.9	038.2	000.0100	0203.3	036.6	35.16	
158.0	000.2300	0028.9	006.9	038.1	000.0100	0203.1	036.5	35.20	
159.0	000.2300	0030.5	007.0	038.1	000.0100	0203.1	036.4	35.27	
160.0	000.2300	0031.6	007.1	038.1	000.0100	0203.2	036.2	35.35	
161.0	000.2300	0032.5	007.2	038.1	000.0100	0203.2	036.0	35.43	
162.0	000.2300	0033.5	007.3	038.1	000.0100	0203.2	035.9	35.51	
163.0	000.2300	0034.4	007.4	038.2	000.0100	0203.2	035.7	35.59	
164.0	000.2300	0035.1	007.5	038.1	000.0100	0203.2	035.6	35.66	
165.0	000.2300	0035.9	007.5	038.1	000.0100	0203.2	035.4	35.73	
166.0	000.2300	0036.6	007.6	038.1	000.0100	0203.1	035.3	35.81	
167.0	000.2300	0037.4	007.7	038.1	000.0100	0203.1	035.1	35.89	
168.0	000.2300	0037.8	007.7	038.0	000.0100	0203.0	035.0	35.95	
169.0	000.2300	0038.1	007.8	037.9	000.0100	0202.8	034.9	36.00	
170.0	000.2300	0038.4	007.8	037.7	000.0100	0202.6	034.7	36.06	
171.0	000.2300	0038.8	007.8	037.7	000.0100	0202.5	034.6	36.12	
172.0	000.2300	0039.7	007.9	037.6	000.0100	0202.4	034.4	36.20	
173.0	000.2300	0041.3	008.1	037.7	000.0100	0202.5	034.2	36.32	
174.0	000.2300	0042.8	008.3	037.7	000.0100	0202.5	034.0	36.43	
175.0	000.2300	0043.1	008.3	037.5	000.0100	0202.3	033.9	36.49	
176.0	000.2300	0043.2	008.3	037.4	000.0100	0202.1	033.8	36.53	
177.0	000.2300	0043.6	008.4	037.2	000.0100	0201.8	033.6	36.59	
178.0	000.2300	0044.0	008.4	037.1	000.0100	0201.6	033.5	36.64	
179.0	000.2300	0044.6	008.5	037.0	000.0100	0201.3	033.4	36.71	
180.0	000.2300	0045.0	008.5	036.8	000.0100	0201.1	033.2	36.76	
181.0	000.2300	0045.2	008.6	036.6	000.0100	0200.7	033.1	36.80	
182.0	000.2300	0045.5	008.6	036.4	000.0100	0200.4	033.0	36.84	
183.0	000.2300	0046.2	008.7	036.3	000.0100	0200.2	032.9	36.91	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
184.0	000.2300	0047.1	008.8	036.2	000.0100	0200.0	032.7	36.99
185.0	000.2300	0048.0	008.9	036.0	000.0100	0199.8	032.5	37.06
186.0	000.2300	0048.9	009.0	035.9	000.0100	0199.6	032.4	37.14
187.0	000.2300	0050.0	009.1	035.7	000.0100	0199.4	032.2	37.22
188.0	000.2300	0050.1	009.1	035.5	000.0100	0199.1	032.1	37.25
189.0	000.2300	0049.5	009.0	035.2	000.0100	0198.9	032.1	37.25
190.0	000.2300	0049.3	009.0	034.9	000.0100	0198.8	032.1	37.28
191.0	000.2300	0050.7	009.1	034.8	000.0100	0198.8	031.9	37.38
192.0	000.2300	0052.9	009.4	034.7	000.0100	0198.8	031.6	37.53
193.0	000.2300	0055.1	009.6	034.5	000.0100	0198.9	031.3	37.67
194.0	000.2300	0057.2	009.7	034.4	000.0100	0199.0	031.1	37.80
195.0	000.2300	0059.4	009.9	034.2	000.0100	0199.1	030.9	37.93
196.0	000.2300	0060.8	010.0	033.9	000.0100	0199.2	030.7	38.03
197.0	000.2300	0061.5	010.1	033.6	000.0100	0199.4	030.6	38.09
198.0	000.2300	0062.0	010.1	033.3	000.0100	0199.5	030.5	38.15
199.0	000.2300	0062.8	010.2	033.0	000.0100	0199.5	030.4	38.20
200.0	000.2300	0063.4	010.2	032.7	000.0100	0199.4	030.4	38.25
201.0	000.2300	0063.5	010.2	032.4	000.0100	0199.0	030.3	38.25
202.0	000.2300	0062.9	010.2	032.1	000.0100	0198.5	030.3	38.23
203.0	000.2300	0062.0	010.1	031.7	000.0100	0197.8	030.4	38.18
204.0	000.2300	0061.2	010.1	031.4	000.0100	0197.1	030.4	38.13
205.0	000.2300	0061.2	010.1	031.0	000.0100	0196.4	030.4	38.11
206.0	000.2300	0061.6	010.1	030.7	000.0100	0195.8	030.3	38.11
207.0	000.2300	0061.7	010.1	030.4	000.0100	0195.2	030.3	38.10
208.0	000.2300	0061.3	010.1	030.1	000.0100	0194.6	030.3	38.06
209.0	000.2300	0060.8	010.0	029.7	000.0100	0194.1	030.4	38.02
210.0	000.2300	0060.5	010.0	029.4	000.0100	0193.7	030.4	37.99
211.0	000.2300	0060.2	010.0	029.1	000.0100	0193.2	030.4	37.96
212.0	000.2300	0059.8	010.0	028.7	000.0100	0192.7	030.4	37.91
213.0	000.2300	0059.5	009.9	028.4	000.0100	0192.2	030.5	37.86
214.0	000.2300	0059.3	009.9	028.1	000.0100	0191.6	030.5	37.82
215.0	000.2300	0059.2	009.9	027.8	000.0100	0191.0	030.5	37.78
216.0	000.2300	0058.9	009.9	027.5	000.0100	0190.5	030.6	37.73
217.0	000.2300	0058.2	009.8	027.2	000.0100	0189.9	030.7	37.66
218.0	000.2300	0057.4	009.8	026.9	000.0100	0189.3	030.7	37.58
219.0	000.2300	0056.7	009.7	026.6	000.0100	0188.8	030.8	37.50
220.0	000.2300	0055.8	009.6	026.3	000.0100	0188.3	031.0	37.42
221.0	000.2300	0054.8	009.5	026.1	000.0100	0187.8	031.1	37.32
222.0	000.2300	0053.5	009.4	025.8	000.0100	0187.3	031.3	37.21
223.0	000.2300	0052.3	009.3	025.6	000.0100	0186.9	031.4	37.10
224.0	000.2300	0051.4	009.2	025.4	000.0100	0186.4	031.5	37.01
225.0	000.2300	0050.9	009.2	025.1	000.0100	0185.9	031.6	36.93
226.0	000.2300	0050.4	009.1	024.9	000.0100	0185.4	031.7	36.85
227.0	000.2300	0049.7	009.0	024.7	000.0100	0184.9	031.9	36.76
228.0	000.2300	0048.9	009.0	024.5	000.0100	0184.4	032.0	36.67
229.0	000.2300	0048.0	008.9	024.3	000.0100	0184.0	032.1	36.57
230.0	000.2300	0047.0	008.8	024.1	000.0100	0183.5	032.3	36.46
231.0	000.2300	0045.6	008.6	024.0	000.0100	0183.2	032.5	36.34
232.0	000.2300	0044.5	008.5	023.8	000.0100	0182.8	032.7	36.23
233.0	000.2300	0043.9	008.4	023.7	000.0100	0182.4	032.8	36.14
234.0	000.2300	0043.7	008.4	023.5	000.0100	0181.8	032.9	36.07

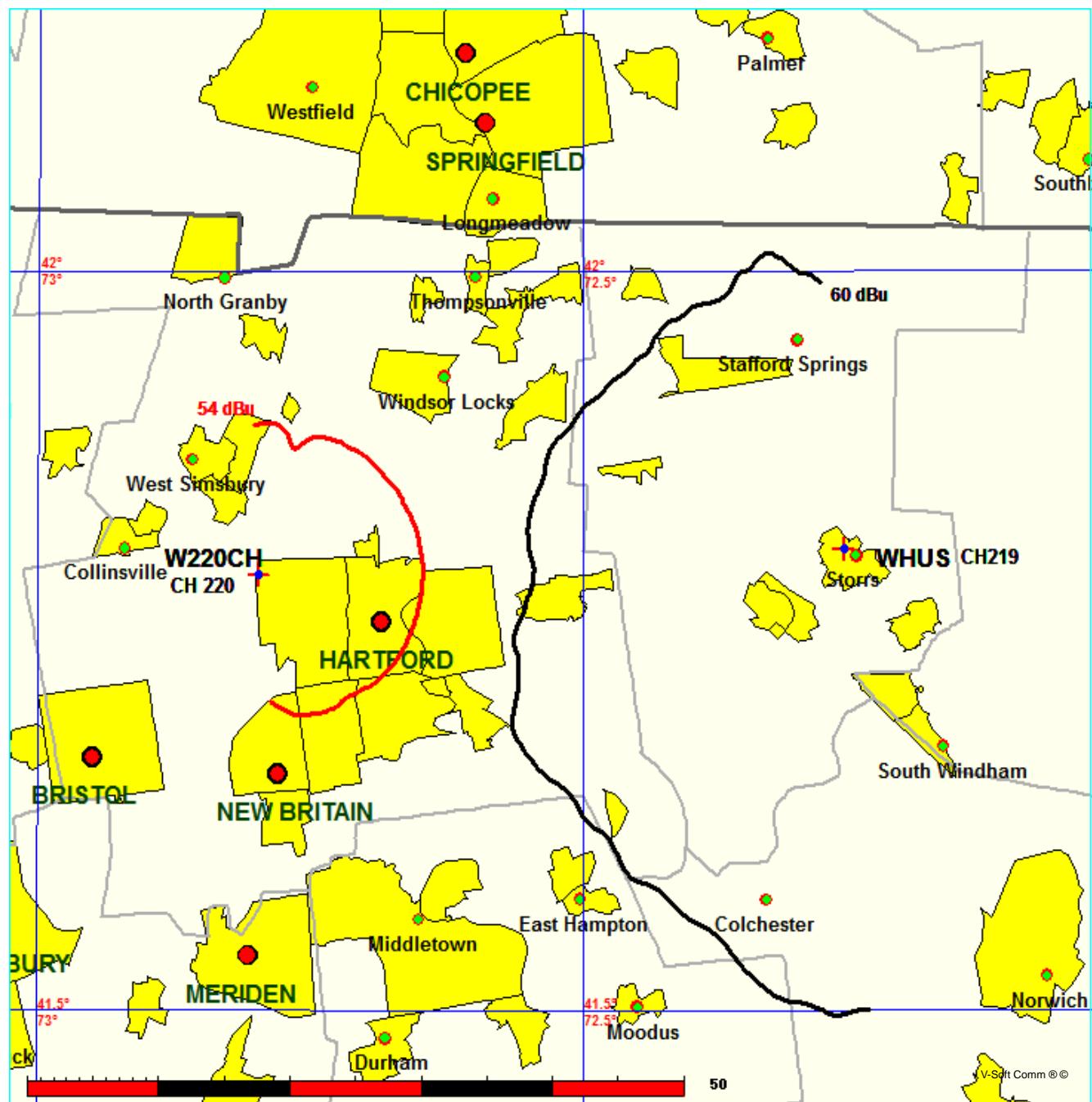
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
235.0	000.2300	0043.3	008.4	023.3	000.0100	0181.3	033.0	35.98
236.0	000.2300	0042.4	008.2	023.2	000.0100	0180.9	033.2	35.88
237.0	000.2300	0041.2	008.1	023.1	000.0100	0180.6	033.4	35.77
238.0	000.2300	0040.3	008.0	023.0	000.0100	0180.3	033.5	35.67
239.0	000.2300	0039.8	008.0	022.9	000.0100	0179.8	033.7	35.58
240.0	000.2300	0039.4	007.9	022.7	000.0100	0179.3	033.8	35.49
241.0	000.2300	0038.4	007.8	022.6	000.0100	0179.0	034.0	35.39
242.0	000.2300	0037.0	007.7	022.6	000.0100	0179.0	034.2	35.29
243.0	000.2300	0035.5	007.5	022.6	000.0100	0179.0	034.4	35.18
244.0	000.2300	0034.4	007.4	022.6	000.0100	0178.9	034.5	35.08
245.0	000.2300	0033.5	007.3	022.5	000.0100	0178.7	034.7	34.99
246.0	000.2300	0032.9	007.2	022.4	000.0100	0178.3	034.8	34.91
247.0	000.2300	0032.8	007.2	022.3	000.0100	0177.8	034.9	34.84
248.0	000.2300	0033.2	007.3	022.1	000.0100	0177.0	035.0	34.77
249.0	000.2300	0033.8	007.3	021.9	000.0100	0176.1	035.0	34.70
250.0	000.2300	0034.5	007.4	021.7	000.0100	0175.2	035.1	34.63
251.0	000.2300	0035.6	007.5	021.4	000.0100	0173.8	035.1	34.55
252.0	000.2300	0036.8	007.6	021.1	000.0100	0172.1	035.1	34.46
253.0	000.2300	0037.8	007.7	020.8	000.0100	0170.4	035.2	34.35
254.0	000.2300	0038.4	007.8	020.6	000.0100	0168.9	035.2	34.24
255.0	000.2300	0039.2	007.9	020.4	000.0100	0167.1	035.3	34.12
256.0	000.2300	0039.9	008.0	020.1	000.0100	0165.3	035.4	33.99
257.0	000.2300	0040.3	008.0	019.9	000.0100	0163.7	035.4	33.86
258.0	000.2300	0041.3	008.1	019.7	000.0100	0161.3	035.5	33.71
259.0	000.2300	0041.9	008.2	019.5	000.0100	0159.4	035.6	33.56
260.0	000.2300	0042.1	008.2	019.3	000.0100	0158.0	035.7	33.43
261.0	000.2300	0042.6	008.3	019.1	000.0100	0156.3	035.8	33.29
262.0	000.2300	0042.8	008.3	019.0	000.0100	0155.1	035.9	33.16
263.0	000.2300	0043.6	008.4	018.7	000.0100	0153.1	036.0	33.00
264.0	000.2300	0045.4	008.6	018.4	000.0100	0149.8	036.1	32.79
265.0	000.2300	0047.1	008.8	018.0	000.0100	0147.2	036.1	32.62
266.0	000.2300	0047.7	008.8	017.8	000.0100	0146.0	036.2	32.49
267.0	000.2300	0047.1	008.8	017.8	000.0100	0146.1	036.4	32.41
268.0	000.2300	0045.8	008.6	017.9	000.0100	0146.8	036.6	32.36
269.0	000.2300	0044.4	008.5	018.1	000.0100	0147.8	036.8	32.32

W220CH(New) vs. WHUS  
Town Of Monroe, Connecticut

FMCommander Single Allocation Study - 12-22-2015 - GLOBE 30 Sec  
W220CH's Overlaps (In= -0.24 km, Out= 7.56 km)

W220CH CH 220 D  
Lat= 41 47 48.0, Lng= 72 47 52.0  
0.01 kW 167.3 m HAAT, 257.3 m COR  
Prot.= 60 dBu, Intef.= 54 dBu

WHUS CH 219 B1 DA BLED19990413KA  
Lat= 41 48 50.0, Lng= 72 15 36.0  
4.4 kW 150 m HAAT, 313 m COR  
Prot.= 60 dBu, Intef.= 54 dBu



12-22-2015

Terrain Data: GLOBE 30 Sec

FMOver Analysis

WHUS BLED19990413KA

W220CH

Channel = 219B1  
 Max ERP = 4.4 kW  
 RCAMSL = 313 m  
 N. Lat. 41 48 50.0  
 W. Lng. 72 15 36.0  
 Protected  
 60 dBu

Channel = 220D  
 Max ERP = 0.01 kW  
 RCAMSL = 257.3 m  
 N. Lat. 41 47 48.0  
 W. Lng. 72 47 52.0  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
208.0	002.9716	0158.0	029.5	128.0	000.0100	0222.8	039.2	34.81	
209.0	002.9398	0157.7	029.4	128.0	000.0100	0222.8	038.6	35.05	
210.0	002.9083	0158.4	029.4	128.1	000.0100	0222.8	038.1	35.29	
211.0	002.8861	0160.3	029.5	128.3	000.0100	0222.5	037.6	35.52	
212.0	002.8641	0162.5	029.7	128.7	000.0100	0222.3	037.1	35.74	
213.0	002.8421	0164.0	029.7	128.9	000.0100	0222.1	036.6	35.98	
214.0	002.8202	0163.9	029.7	128.9	000.0100	0222.1	036.1	36.23	
215.0	002.7984	0162.1	029.5	128.6	000.0100	0222.3	035.6	36.50	
216.0	002.7767	0159.5	029.2	128.2	000.0100	0222.7	035.1	36.78	
217.0	002.7551	0156.6	028.9	127.7	000.0100	0223.0	034.5	37.05	
218.0	002.7335	0153.9	028.6	127.3	000.0100	0223.4	034.0	37.32	
219.0	002.7121	0151.8	028.4	126.9	000.0100	0223.9	033.5	37.58	
220.0	002.6907	0151.1	028.3	126.6	000.0100	0224.1	033.0	37.84	
221.0	002.6763	0152.0	028.3	126.6	000.0100	0224.1	032.6	38.09	
222.0	002.6619	0153.3	028.4	126.7	000.0100	0224.0	032.1	38.34	
223.0	002.6475	0154.6	028.5	126.8	000.0100	0224.0	031.6	38.60	
224.0	002.6332	0155.1	028.5	126.7	000.0100	0224.1	031.1	38.87	
225.0	002.6189	0154.4	028.4	126.4	000.0100	0224.4	030.6	39.15	
226.0	002.6047	0152.9	028.2	125.9	000.0100	0224.9	030.1	39.44	
227.0	002.5905	0151.5	028.1	125.5	000.0100	0225.4	029.7	39.73	
228.0	002.5763	0150.8	028.0	125.1	000.0100	0225.8	029.2	40.02	
229.0	002.5622	0151.1	028.0	124.9	000.0100	0226.0	028.7	40.31	
230.0	002.5481	0152.2	028.0	124.7	000.0100	0226.1	028.2	40.62	
231.0	002.5414	0154.3	028.2	124.8	000.0100	0226.1	027.7	40.95	
232.0	002.5348	0156.7	028.4	124.9	000.0100	0226.0	027.2	41.30	
233.0	002.5281	0158.6	028.5	124.8	000.0100	0226.0	026.7	41.64	
234.0	002.5214	0160.0	028.6	124.7	000.0100	0226.1	026.2	41.99	
235.0	002.5148	0161.0	028.7	124.5	000.0100	0226.3	025.7	42.34	
236.0	002.5081	0161.7	028.7	124.2	000.0100	0226.5	025.2	42.69	
237.0	002.5015	0162.6	028.8	123.8	000.0100	0226.6	024.7	43.04	
238.0	002.4948	0163.2	028.8	123.4	000.0100	0226.7	024.2	43.39	
239.0	002.4882	0163.5	028.8	122.9	000.0100	0226.7	023.8	43.73	
240.0	002.4816	0163.7	028.8	122.4	000.0100	0226.8	023.3	44.06	
241.0	002.4790	0163.4	028.8	121.7	000.0100	0226.9	022.9	44.39	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
242.0	002.4763	0161.9	028.6	120.8	000.0100	0227.2	022.5	44.68
243.0	002.4737	0159.1	028.4	119.6	000.0100	0227.6	022.2	44.93
244.0	002.4710	0155.4	028.1	118.3	000.0100	0227.8	022.0	45.11
245.0	002.4684	0151.0	027.7	116.7	000.0100	0228.1	021.8	45.26
246.0	002.4658	0146.7	027.4	115.2	000.0100	0228.3	021.7	45.38
247.0	002.4631	0143.2	027.1	113.8	000.0100	0228.5	021.5	45.51
248.0	002.4605	0140.7	026.9	112.5	000.0100	0228.7	021.3	45.67
249.0	002.4579	0138.6	026.7	111.2	000.0100	0229.1	021.2	45.83
250.0	002.4552	0136.5	026.5	110.0	000.0100	0229.3	021.0	45.97
251.0	002.4441	0134.4	026.3	108.6	000.0100	0229.5	020.8	46.09
252.0	002.4329	0133.2	026.2	107.4	000.0100	0229.7	020.7	46.24
253.0	002.4218	0133.7	026.2	106.4	000.0100	0229.9	020.4	46.46
254.0	002.4107	0134.1	026.2	105.3	000.0100	0230.0	020.1	46.67
255.0	002.3997	0133.3	026.1	104.1	000.0100	0229.7	020.0	46.78
256.0	002.3886	0130.3	025.8	102.5	000.0100	0229.8	020.0	46.76
257.0	002.3776	0126.5	025.5	101.0	000.0100	0230.1	020.1	46.68
258.0	002.3667	0122.9	025.2	099.5	000.0100	0230.2	020.3	46.59
259.0	002.3557	0120.1	024.9	098.1	000.0100	0230.0	020.3	46.51
260.0	002.3448	0117.5	024.7	096.7	000.0100	0230.0	020.4	46.43
261.0	002.3242	0115.3	024.4	095.3	000.0100	0230.6	020.6	46.36
262.0	002.3038	0113.7	024.2	094.1	000.0100	0231.0	020.7	46.30
263.0	002.2835	0112.5	024.1	092.8	000.0100	0231.0	020.7	46.24
264.0	002.2633	0111.4	023.9	091.6	000.0100	0230.9	020.8	46.17
265.0	002.2431	0110.6	023.8	090.5	000.0100	0230.6	020.9	46.10
266.0	002.2230	0110.4	023.7	089.3	000.0100	0230.8	020.9	46.08
267.0	002.2031	0111.7	023.8	088.2	000.0100	0231.0	020.8	46.16
268.0	002.1832	0113.2	023.9	087.0	000.0100	0231.2	020.7	46.24
269.0	002.1634	0114.6	024.0	085.9	000.0100	0231.1	020.7	46.29
270.0	002.1437	0116.0	024.0	084.7	000.0100	0230.4	020.6	46.31
271.0	002.1149	0117.3	024.1	083.5	000.0100	0229.7	020.6	46.28
272.0	002.0863	0118.6	024.1	082.4	000.0100	0228.9	020.6	46.23
273.0	002.0580	0119.7	024.1	081.2	000.0100	0228.3	020.7	46.16
274.0	002.0298	0120.4	024.1	080.1	000.0100	0227.9	020.8	46.06
275.0	002.0018	0121.2	024.1	079.0	000.0100	0227.6	020.9	45.96
276.0	001.9740	0122.1	024.1	077.9	000.0100	0227.5	021.1	45.85
277.0	001.9464	0121.7	024.0	076.9	000.0100	0227.4	021.3	45.67
278.0	001.9190	0121.8	023.9	075.9	000.0100	0227.5	021.5	45.50
279.0	001.8917	0121.7	023.8	075.0	000.0100	0227.6	021.7	45.32
280.0	001.8647	0121.3	023.7	074.1	000.0100	0227.5	022.0	45.11
281.0	001.8322	0121.1	023.6	073.3	000.0100	0227.2	022.3	44.88
282.0	001.8000	0120.9	023.5	072.5	000.0100	0226.6	022.6	44.63
283.0	001.7680	0121.8	023.5	071.6	000.0100	0225.8	022.8	44.42
284.0	001.7364	0123.6	023.5	070.7	000.0100	0224.8	023.0	44.25
285.0	001.7050	0125.5	023.6	069.8	000.0100	0223.8	023.2	44.07
286.0	001.6739	0127.1	023.6	068.9	000.0100	0222.9	023.4	43.87
287.0	001.6432	0128.3	023.6	068.1	000.0100	0222.2	023.7	43.65
288.0	001.6126	0129.6	023.6	067.4	000.0100	0221.6	023.9	43.44
289.0	001.5824	0130.2	023.5	066.7	000.0100	0221.2	024.2	43.19
290.0	001.5525	0130.0	023.4	066.2	000.0100	0220.9	024.6	42.91
291.0	001.5296	0128.5	023.2	065.8	000.0100	0220.7	025.0	42.60
292.0	001.5068	0126.2	023.0	065.6	000.0100	0220.6	025.5	42.27

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
293.0	001.4842	0124.5	022.8	065.3	000.0100	0220.5	025.9	41.96
294.0	001.4618	0123.9	022.6	064.9	000.0100	0220.4	026.3	41.70
295.0	001.4396	0124.3	022.6	064.5	000.0100	0220.4	026.6	41.47
296.0	001.4175	0125.0	022.6	064.0	000.0100	0220.3	027.0	41.24
297.0	001.3957	0125.6	022.5	063.5	000.0100	0220.2	027.3	41.02
298.0	001.3739	0125.4	022.4	063.2	000.0100	0220.3	027.7	40.78
299.0	001.3524	0124.6	022.3	063.0	000.0100	0220.3	028.1	40.52
300.0	001.3310	0123.4	022.1	062.9	000.0100	0220.3	028.5	40.25
301.0	001.3170	0122.2	022.0	062.7	000.0100	0220.3	028.9	40.00
302.0	001.3031	0121.0	021.8	062.5	000.0100	0220.4	029.3	39.76
303.0	001.2892	0120.7	021.7	062.3	000.0100	0220.4	029.7	39.54
304.0	001.2754	0121.0	021.7	062.0	000.0100	0220.5	030.0	39.34
305.0	001.2617	0121.5	021.7	061.7	000.0100	0220.6	030.3	39.14
306.0	001.2481	0121.3	021.6	061.5	000.0100	0220.6	030.7	38.93
307.0	001.2346	0120.0	021.5	061.5	000.0100	0220.6	031.1	38.71
308.0	001.2211	0118.2	021.3	061.5	000.0100	0220.6	031.5	38.48
309.0	001.2077	0117.6	021.2	061.4	000.0100	0220.7	031.9	38.28
310.0	001.1943	0118.2	021.2	061.2	000.0100	0220.7	032.3	38.10
311.0	001.1884	0119.0	021.2	060.9	000.0100	0220.8	032.6	37.93
312.0	001.1824	0118.9	021.2	060.7	000.0100	0220.8	033.0	37.75
313.0	001.1765	0117.5	021.0	060.8	000.0100	0220.8	033.4	37.55
314.0	001.1706	0116.4	020.9	060.7	000.0100	0220.8	033.7	37.36
315.0	001.1647	0117.0	020.9	060.5	000.0100	0220.8	034.1	37.18
316.0	001.1588	0119.3	021.1	060.1	000.0100	0220.7	034.4	37.03
317.0	001.1530	0122.0	021.3	059.7	000.0100	0220.6	034.7	36.86
318.0	001.1471	0123.7	021.4	059.4	000.0100	0220.4	035.0	36.68
319.0	001.1413	0124.3	021.4	059.2	000.0100	0220.3	035.4	36.50
320.0	001.1355	0125.3	021.4	059.1	000.0100	0220.1	035.8	36.32
321.0	001.1283	0126.9	021.5	058.8	000.0100	0219.9	036.1	36.13
322.0	001.1212	0127.6	021.6	058.7	000.0100	0219.8	036.5	35.94
323.0	001.1141	0126.6	021.4	058.8	000.0100	0219.9	036.9	35.76
324.0	001.1071	0125.1	021.3	059.0	000.0100	0220.0	037.3	35.58
325.0	001.1000	0124.8	021.2	059.0	000.0100	0220.1	037.6	35.41
326.0	001.1097	0125.4	021.3	058.8	000.0100	0219.9	038.0	35.22
327.0	001.1194	0125.7	021.4	058.7	000.0100	0219.8	038.4	35.04