

**Channel Study**

| REFERENCE            |         | CH# 284D - 104.7 MHz, Pwr= 0.099 kW, HAAT= 45.1 M, COR= 83 M |              |                |                          |                          |                    |                   |                                    | DISPLAY DATES    |                 |
|----------------------|---------|--|--------------|----------------|--------------------------|--------------------------|--------------------|-------------------|------------------------------------|------------------|-----------------|
| 41 45 22.0 N.        |         | Average Protected F(50-50)= 6.8 km                           |              |                |                          |                          |                    |                   |                                    | DATA 07-13-12    |                 |
| 71 26 42.0 W.        |         | Omni-directional   |              |                |                          |                          |                    |                   |                                    | SEARCH 07-13-12  |                 |
| CH<br>CITY           | CALL    | TYPE   | ANT<br>STATE | AZI.<br><--    | DIST<br>FILE #           | LAT.<br>LNG.             | Pwr(kW)<br>HAAT(M) | INT(km)<br>COR(M) | PRO(km)<br>LICENSEE                | *IN*<br>(Overlap | *OUT*<br>in km) |
| 286B<br>Providence   | WWLI    | LIC  | CX<br>RI     | 339.6<br>159.5 | 6.0<br>BMLH20070206ABO   | 41 48 24.0<br>71 28 13.0 | 50.000<br>152      | 6.9<br>214        | 71.1<br>Radio License Holding      | -7.0*<           | -66.5*<         |
| 284D<br>Warwick      | W284BA  | CP   | DV<br>RI     | 44.1<br>224.2  | 17.8<br>BPFT20120511AFU  | 41 52 14.0<br>71 17 45.0 | 0.070              | 49.9<br>280       | 15.1<br>Educational Media Foundati | -40.9*           | -26.3           |
| 284D<br>Warwick      | W284BA  | LIC  | C<br>RI      | 0.0<br>0.0     | 0.0<br>BLFT20081209ADT   | 41 45 22.0<br>71 26 42.0 | 0.038<br>45        | 18.0<br>83        | 5.5<br>Educational Media Foundati  | -24.9*           | -28.6*          |
| 284B<br>Orleans      | WOCN-FM | LIC  | E<br>MA      | 88.2<br>269.2  | 119.4<br>BMLH19991229AAA | 41 46 48.0<br>70 00 36.0 | 50.000<br>140      | 137.1<br>146      | 64.5<br>Cape Cod Broadcasting Lice | -27.0*<          | 10.2            |
| 283B<br>Fitchburg    | WXLO    | LIC  | CN<br>MA     | 339.5<br>159.2 | 89.2<br>BMLH19910920KB   | 42 30 27.0<br>71 49 37.0 | 37.000<br>172      | 85.0<br>404       | 71.0<br>Radio License Holding      | -1.8<            | 6.1             |
| 284A<br>Montauk      | WELJ    | LIC  | NCN<br>NY    | 209.0<br>28.6  | 91.8<br>BLH19930226KB    | 41 01 57.0<br>71 58 31.0 | 6.000<br>96        | 85.9<br>97        | 27.7<br>Volt Radio, Llc, As Truste | 0.3<             | 45.6            |
| 281B<br>Boston       | WBMX    | LIC  | CN<br>MA     | 24.3<br>204.6  | 72.2<br>BLH19911018KD    | 42 20 50.0<br>71 04 59.0 | 21.000<br>235      | 5.7<br>258        | 65.0<br>Infinity Broadcasting Corp | 57.8             | 5.8             |
| 282A<br>West Tisbury | VA9391  | VAC  | N<br>MA      | 122.8<br>303.3 | 76.5                     | 41 22 52.0<br>70 40 30.0 | 6.000<br>100       | 2.8<br>106        | 28.4                               | 64.4             | 47.5            |
| 282A<br>West Tisbury | 1443088 | RSV-A  | MA           | 122.8<br>303.3 | 76.5                     | 41 22 52.0<br>70 40 30.0 | 6.000<br>100       | 2.8<br>106        | 28.4<br>Calvary Chapel Of Cape Cod | 64.4             | 47.5            |
| 281B<br>Waterbury    | WMRQ-FM | LIC  | DCN<br>CT    | 259.9<br>79.0  | 118.5<br>BLH19880223KK   | 41 33 41.0<br>72 50 39.0 | 18.000<br>255      | 4.9<br>354        | 62.3<br>Red Wolf Broadcasting Corp | 108.0            | 54.9            |
| 281B<br>Waterbury    | WMRQ-FM | CP   | DCX<br>CT    | 259.9<br>79.0  | 118.6<br>BMPH20120615AEC | 41 33 42.0<br>72 50 41.0 | 14.000<br>255      | 4.9<br>354        | 62.2<br>Red Wolf Broadcasting Corp | 108.1            | 54.9            |
| 285D<br>Boston       | WRBB    | LIC  | CN<br>MA     | 24.2<br>204.4  | 71.0<br>BLED19831213AB   | 42 20 19.0<br>71 05 28.0 | 0.019<br>27        | 5.3<br>55         | 3.7<br>Northeastern University     | 57.2             | 55.2            |
| 283D<br>New London   | 640388  | APP  | C<br>CT      | 233.4<br>52.9  | 74.5<br>BNPFT20030317AOL | 41 21 16.0<br>72 09 38.0 | 0.055<br>31        | 6.9<br>65         | 4.8<br>Revival Christian Ministri  | 62.0             | 61.7            |
| 282A<br>West Tisbury | 1442816 | APP  | NCX<br>MA    | 120.3<br>300.8 | 80.5<br>BNPED20100226ADB | 41 23 19.0<br>70 36 47.0 | 6.000<br>22        | 1.6<br>27         | 15.8<br>Calvary Chapel Of Cape Cod | 69.6             | 64.1            |
| 282A<br>West Tisbury | 1357808 | APP  | NCX<br>MA    | 120.3<br>300.9 | 80.6<br>BNPED20100226ADP | 41 23 15.4<br>70 36 45.4 | 6.000<br>26        | 1.6<br>31         | 15.8<br>Cape Cod Catholic Radio, I | 69.7             | 64.1            |
| 285A<br>Middletown   | WIHS    | LIC  | CN<br>CT     | 254.9<br>74.1  | 104.9<br>BLH19891024KI   | 41 30 18.0<br>72 39 32.0 | 3.100<br>96        | 34.9<br>193       | 23.2<br>Connecticut Radio Fellowsh | 64.4             | 73.8            |
| 285A<br>Gloucester   | WBOQ    | LIC  | ZCN<br>MA    | 32.3<br>212.8  | 110.4<br>BLH19970627KD   | 42 35 36.0<br>70 43 28.0 | 3.200<br>136       | 35.1<br>146       | 23.5<br>Westport Communications Li | 66.3             | 74.3            |

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)

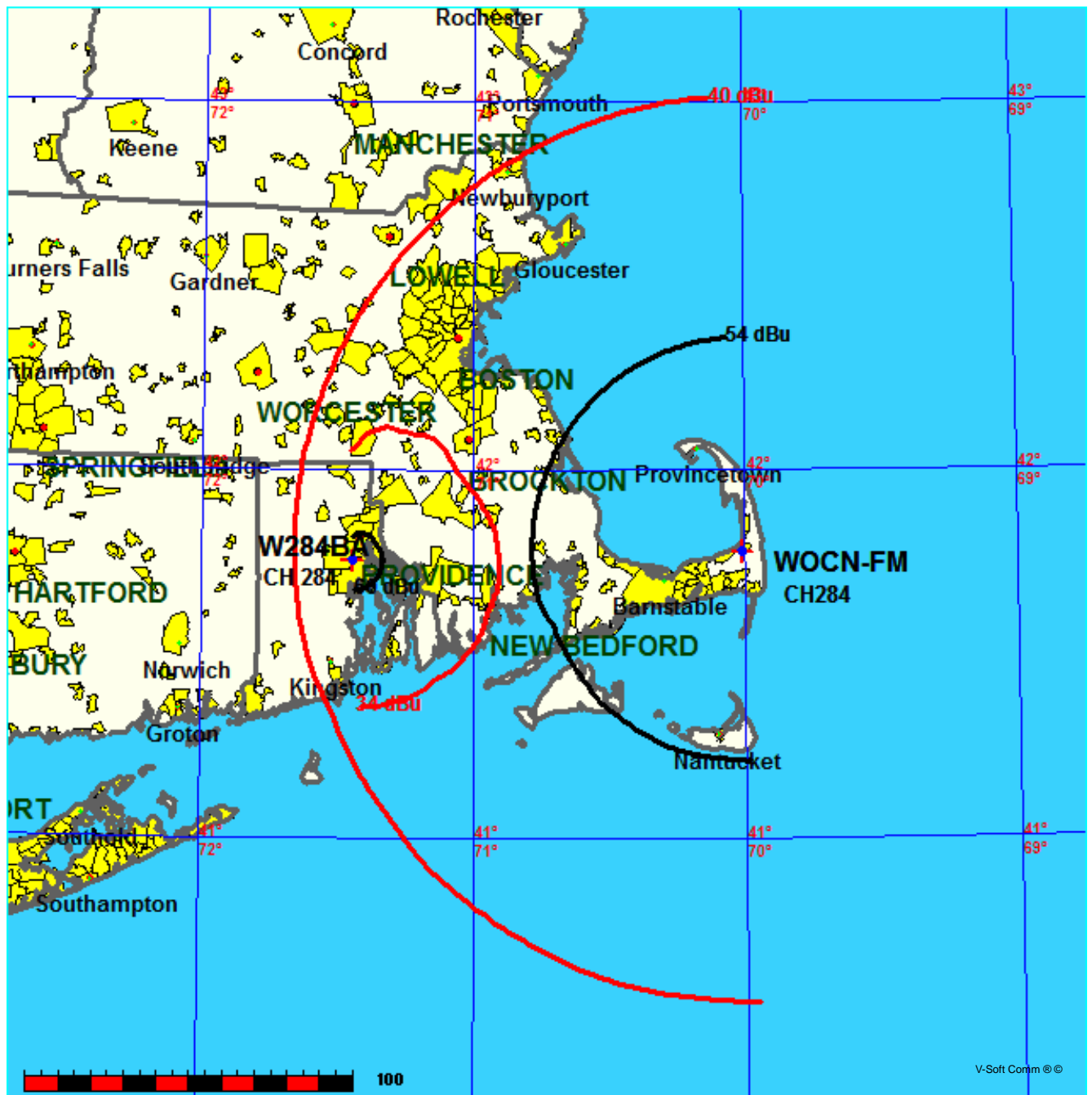
\*\*\*affixed to 'IN' or 'OUT' values = site inside protected contour.

< = Contour Overlap

FMCommander Single Allocation Study - 07-13-2012 - NGDC 30 SEC  
W284BA's Overlaps (In= -26.99 km, Out= 10.18 km)

W284BA CH 284 D  
Lat= 41 45 22.0, Lng= 71 26 42.0  
0.099 kW 45.1 M HAAT, 83 M COR  
Prot.= 60 dBu, Intef.= 34 dBu

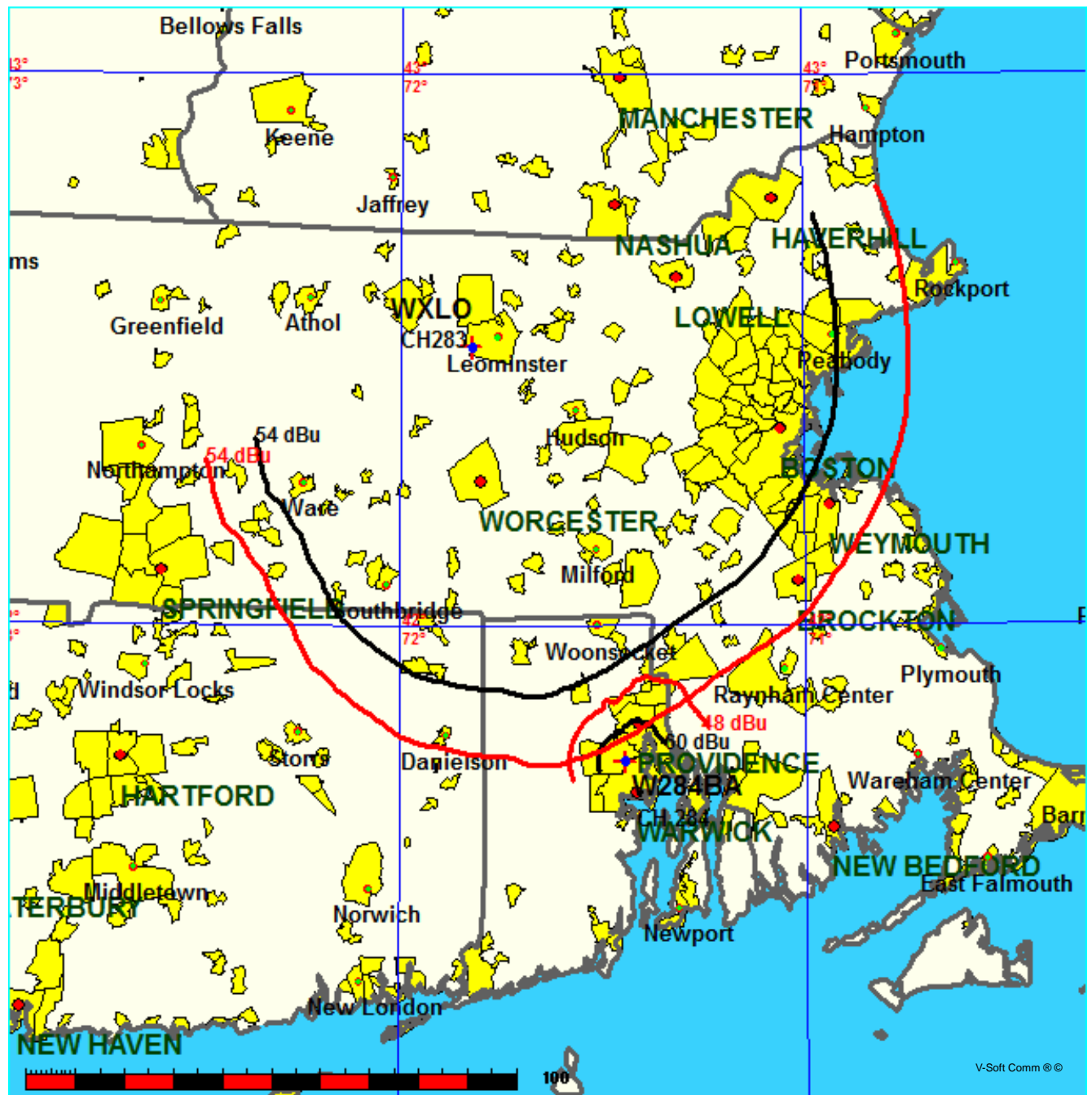
WOCN-FM CH 284 B BMLH19991229AAA  
Lat= 41 46 48.0, Lng= 70 00 36.0  
50.0 kW 140 M HAAT, 146 M COR  
Prot.= 54 dBu, Intef.= 40 dBu



FMCommander Single Allocation Study - 07-13-2012 - NGDC 30 SEC  
W284BA's Overlaps (In= -1.84 km, Out= 6.12 km)

W284BA CH 284 D  
Lat= 41 45 22.0, Lng= 71 26 42.0  
0.099 kW 45.1 M HAAT, 83 M COR  
Prot.= 60 dBu, Intef.= 48 dBu

WXLO CH 283 B BMLH19910920KB  
Lat= 42 30 27.0, Lng= 71 49 37.0  
37.0 kW 172 M HAAT, 404 M COR  
Prot.= 54 dBu, Intef.= 54 dBu



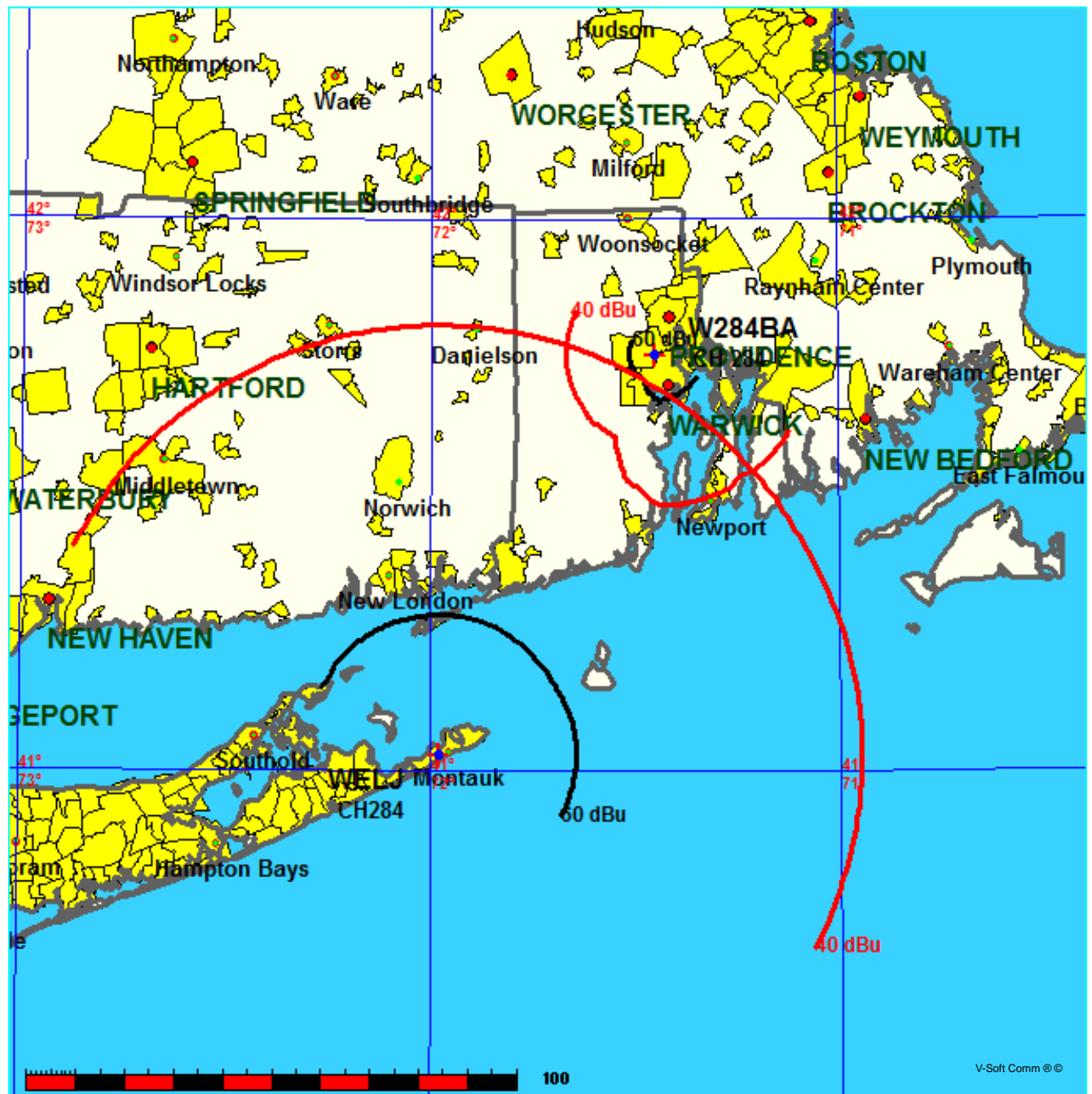
FMCommander Single Allocation Study - 07-13-2012 - NGDC 30 SEC  
W284BA's Overlaps (In= 0.29 km, Out= 45.59 km)

W284BA CH 284 D

Lat= 41 45 22.0, Lng= 71 26 42.0  
0.099 kW 45.1 M HAAT, 83 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

WELJ CH 284 A 73.215 N BLH19930226KB

Lat= 41 01 57.0, Lng= 71 58 31.0  
6.0 kW 96 M HAAT, 97 M COR  
Prot.= 60 dBu, Intef.= 40 dBu



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

The proposed FM Translator is located within the protected 54dBu contour of second adjacent channel station WWLI, channel 286B, Providence, RI. 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 W284BA:                           | 99 watts   |
| The proposed COR for W284BA:                           | 66 meters  |
| WWLI F(50/50) contour at proposed site:                | 102.3 dBu  |
| The F(50/10) contour of proposed W284BA                | 142.3 dBu  |
| The predicted distance to W284BA interference contour: | 5.4 meters |

The signal is predicted to not reach the ground. As can be seen in Exhibit 13–A1, there are no regularly occupied structures at the base of the tower and there are no structures which could be tall enough to enter the 5.4 meter aperture.

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





Google earth

feet  
meters



NAD 27

41-45-21.6 N Latitude

71-26-41.8 W Longitude