

Channel Study

REFERENCE CH# 223D - 92.5 MHz, Pwr= 0.005 kW DA, HAAT= 96.4 M, COR= 437 M DISPLAY DATES
42 26 30.2 N. Average Protected F(50-50)= 4.8 km DATA 05-14-22
76 34 39.0 W. Standard Directional SEARCH 05-14-22

| 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* |
|------------------------|---------|------|--------------|----------------|---------------------------|----------------------------|----------------------|---------------------|---|-------------------------|-------|
| 223B Rochester | WBEE-FM | LIC | CN NY | 318.4 137.8 | 109.85 BMLH19900220KF | 43 10 37.20 77 28 37.90 | 50.000 152 | 134.6 284 | 61.9 Audacy License, LLC | -28.4* | 40.3 |
| 223D Ithaca | W223BR! | LIC | DCN NY | 231.1 51.1 | 9.69 BLFT20121206AAQ | 42 23 13.20 76 40 09.80 | 0.010 242 | 663 | ---Reference--- State University Of New Yo | | |
| 223A Conklin | WKGB-FM | LIC | CN NY | 121.2 301.7 | 69.94 BLH20011101AAM | 42 06 48.30 75 51 07.70 | 1.450 206 | 81.1 586 | 28.3 Ihm Licenses, LLC | -14.4* | 35.3 |
| 226B Syracuse | WNTQ | LIC | CN NY | 38.7 219.0 | 72.09 BMLH20000606AAN | 42 56 48.20 76 01 26.70 | 97.000 201 | 8.6 512 | 78.9 Radio License Holding Cbc, | 56.7 | -7.1* |
| 221D Ithaca | W221CW | LIC | DVN NY | 6.5 186.5 | 15.69 0000129623 | 42 34 55.20 76 33 20.70 | 0.250 | 1.1 372 | 12.9 Wskg Public Telecommunicat | 8.0 | 1.7 |
| 224A South Waverly | WENI-FM | LIC | NCN PA | 200.5 20.4 | 48.61 BLH20171121AAU | 42 01 55.00 76 47 01.00 | 1.250 221 | 45.0 620 | 29.3 Southern Belle, LLC | 2.2 | 16.7 |
| 220A Watkins Glen | WRFI | LIC | CN NY | 257.2 77.0 | 26.35 BLED20110826ADZ | 42 23 20.20 76 53 25.80 | 0.420 -114 | 1.4 263 | 8.1 Ithaca Community Radio, In | 23.3 | 18.2 |
| 220A Owego | WHVM | LIC | CN NY | 161.6 341.7 | 40.67 BLED20141028ABN | 42 05 40.20 76 25 18.70 | 0.160 128 | 0.9 501 | 13.9 Mt. St. Francis Hermitage. | 37.7 | 25.5 |
| 226D Elmira | W226BA | LIC | DCN NY | 206.9 26.8 | 38.73 BLFT20180522AAB | 42 07 51.30 76 47 24.80 | 0.250 | 0.1 611 | 6.0 Southern Belle, LLC | 37.0 | 31.1 |
| 222A Mansfield | WOGA | LIC | NCN PA | 215.3 35.0 | 73.89 BLH20010821AAN | 41 53 53.20 77 05 36.80 | 1.600 196 | 39.6 668 | 26.3 Southern Belle, LLC | 32.7 | 45.3 |
| 221D Sayre | W221AS | LIC | DHN PA | 178.5 358.5 | 46.43 BLFT19871230TC | 42 01 27.20 76 33 46.80 | 0.008 81 | 0.2 451 | 3.7 Bible Lighthouse, Inc. | 44.3 | 41.4 |
| 220D Penn Yan | W220CJ | LIC | CN NY | 301.1 120.8 | 48.96 BLFT19990222TD | 42 40 05.30 77 05 24.90 | 0.010 100 | 0.2 397 | 6.9 Family Life Ministries, In | 46.2 | 41.5 |
| 221B1 Baldwinsville | WOLF-FM | LIC | NCN NY | 21.5 201.8 | 85.06 BLH20171221AFE | 43 09 10.20 76 11 33.70 | 25.000 99 | 3.6 227 | 40.6 Foxfur Communications, LLC | 74.6 | 42.7 |
| 223D Syracuse | W223CP | LIC | DCN NY | 25.9 206.2 | 76.33 BLFT20170424AAC | 43 03 30.20 76 09 58.70 | 0.250 47 | 23.8 216 | 7.1 Wolf Radio, Inc. | 45.7 | 45.7 |
| 220D Corning | WCEB | LIC | HN NY | 229.5 49.1 | 54.91 BLED1249 | 42 07 10.20 77 05 00.80 | 0.015 123 | 0.3 542 | 6.0 Corning Community College | 53.0 | 46.3 |
| 221D Binghamton | W221EJ | APP | DCN NY | 129.5 309.9 | 66.75 0000173824 | 42 03 29.30 75 57 12.70 | 0.250 | 0.5 652 | 14.5 Townsquare License, LLC | 63.6 | 48.7 |
| 221D Binghamton | W221EJ | CP | DCN NY | 129.5 309.9 | 66.75 BNFFT20180502AAM | 42 03 29.30 75 57 12.70 | 0.250 | 0.5 652 | 14.5 Townsquare License, LLC | 63.6 | 48.7 |

Terrain database is NGDC 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. 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.

Compliance with C.F.R. 74.1204

The proposed FM Translator operation on channel 223D is located within the protected 54dBu contour of third adjacent channel station WNTQ, channel 226B, Syracuse, 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 W223BR.P: | 5 watts |
| The proposed COR for W223BR.P: | 10 meters |
| WNTQ F(50/50) contour at proposed site: | 57.0dBu |
| The F(50/10) contour of proposed W223BR.P: | 97.0dBu |

The predicted distance to the 97.0dbu interfering contour is 221.5 meters. Taking into account the vertical elevation pattern of the Nicom BKG77 single bay antenna and the height above ground of 10M, it has been determined that the interfering contour of 97.0dbu extends 221.5m in all directions.

As can be seen in Exhibit 1–A2, the proposed antenna will be located at a distance greater than 221.5m from any potentially occupied structure. As seen in Exhibit 1-A2, the nearest potentially occupied structure is located at a distance of 259m from the proposed transmitter location.

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

EXHIBIT 1 - A1
74.1204(d) Showing
W223BR
Ithaca, NY


ERP (kw): 0.005
Height of Antenna Above Ground (m): 10
Translator's IX Contour: 97
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 | 0.0050 | 221.5568 | 10.000 |
| 5 | 0.999 | 0.0050 | 221.3352 | -9.291 |
| 10 | 0.982 | 0.0048 | 217.5687 | -27.780 |
| 15 | 0.954 | 0.0046 | 211.3651 | -44.705 |
| 20 | 0.918 | 0.0042 | 203.3891 | -59.563 |
| 25 | 0.872 | 0.0038 | 193.1975 | -71.649 |
| 30 | 0.818 | 0.0033 | 181.1226 | -80.561 |
| 35 | 0.758 | 0.0029 | 167.9400 | -86.326 |
| 40 | 0.691 | 0.0024 | 153.0957 | -88.408 |
| 45 | 0.616 | 0.0019 | 136.4790 | -86.505 |
| 50 | 0.538 | 0.0014 | 119.1975 | -81.311 |
| 55 | 0.465 | 0.0011 | 103.0239 | -74.392 |
| 60 | 0.391 | 0.0008 | 86.6287 | -65.023 |
| 65 | 0.313 | 0.0005 | 69.3473 | -52.850 |
| 70 | 0.239 | 0.0003 | 52.9521 | -39.759 |
| 75 | 0.176 | 0.0002 | 38.9940 | -27.665 |
| 80 | 0.129 | 0.0001 | 28.5808 | -18.147 |
| 85 | 0.103 | 0.0001 | 22.8203 | -12.734 |
| 90 | 0.104 | 0.0001 | 23.0419 | -13.042 |

W223BR Proposed

Cavell, Mertz & Associates

Legend

 Line Measure

 W223BR Proposed

Yellow Pin Marker:
42-26-30.2 N 76-34-39.0 W NAD83
Red Line Marker: 259m distance

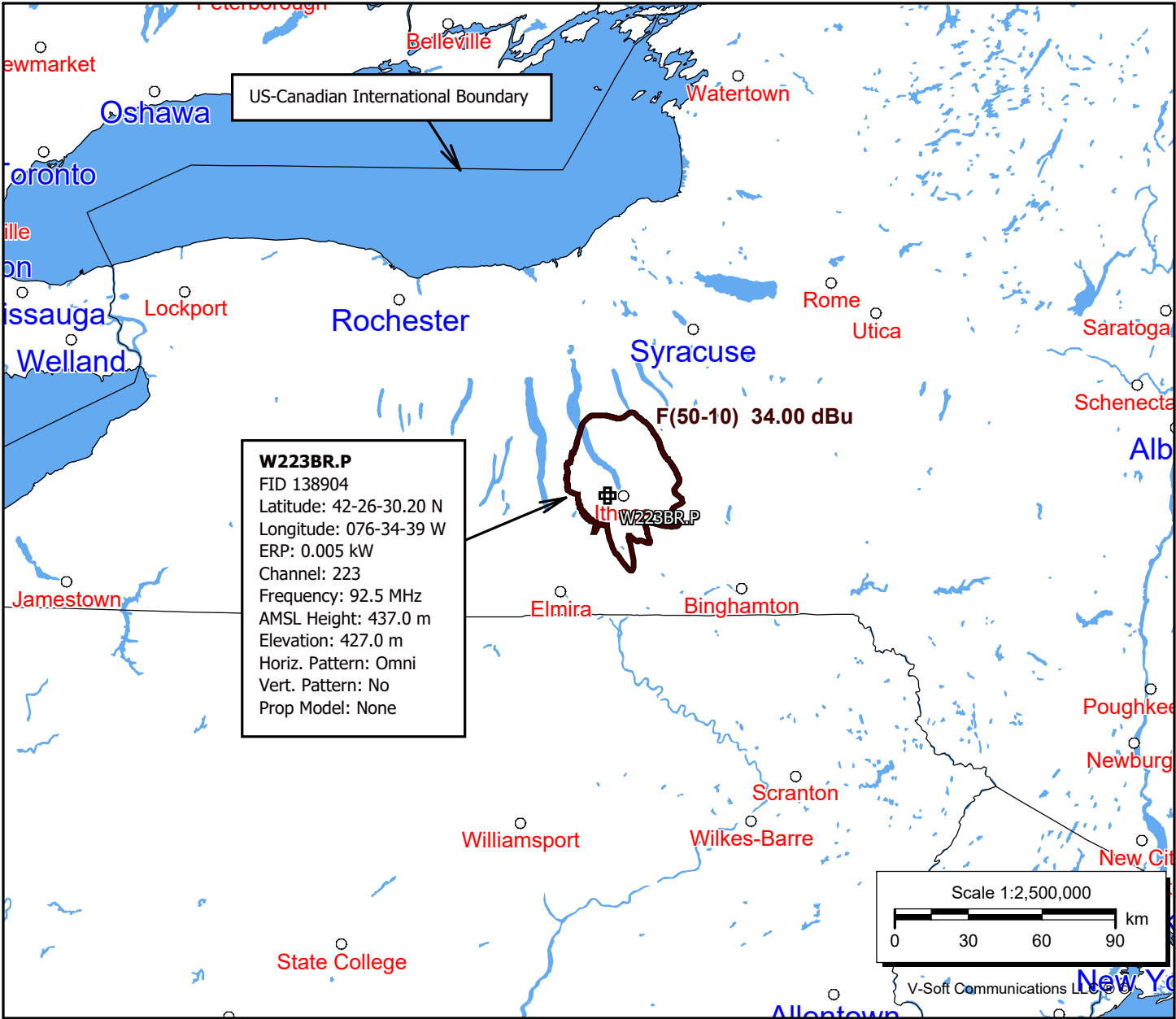
W223BR Proposed

Compliance with International Requirements

The proposed FM translator is located approximately 133km from the Canadian border. The attached map (see Exhibit 2-A) shows the 34dBu interfering contour of the proposed facility at no point extends beyond the Canadian border.

Therefore, the proposed facility will not cause interference to any existing or proposed Canadian facilities.

Exhibit 2-A
International Compliance



RF Radiation Compliance

According to 47 C.F.R. 1.1307(b)(1) Table 1, any “Part 74 – Subpart L” facility with an ERP greater than 100 watts, is subject to routine environmental evaluation.

Since the facility proposed in this application will operate with an ERP of less than 100 watts, it is “categorically excluded from making such studies or preparing an EA”
[1.1307(b)(1)]

State University of New York will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.