

Channel Study

REFERENCE CH# 231D - 94.1 MHz, Pwr= 0.25 kW DA, HAAT= 182.1 M, COR= 731 M DISPLAY DATES
 42 03 18.2 N. Average Protected F(50-50)= 17.7 km DATA 10-08-21
 78 27 27.1 W. Standard Directional SEARCH 10-15-21

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*
231D Bradford	W231AH!	LIC	CN PA	235.3 55.2	19.44 BLFT20000516ABQ	41 57 19.20 78 39 03.00	0.044 -115	469	---Reference--- Family Life Ministries, In		
233B Buffalo	WNED-FM	LIC	CN NY	338.6 158.4	69.61 BLED20121220AAP	42 38 15.10 78 46 06.00	96.000 221	6.1 570	65.8 Western New York Public Br	59.4	3.7
231L1 Jamestown	WIHR-LP	LIC	CN NY	274.2 93.7	65.02 BLL20070410AAZ	42 05 42.20 79 14 37.10	0.100 9	441	Advent Radio Ministries Co	30.9	9.0
230B1 St. Marys	WKBI-FM	LIC	NCN PA	194.7 14.6	76.83 BLH19960925KE	41 23 11.20 78 41 31.00	2.350 244	53.0 787	40.8 Laurel Media, Inc.	12.7	16.2
231C1 Toronto	CBLFM	LIC	DCN ON	337.1 156.4	191.99	43 38 33.20 79 23 14.20	38.000 421	166.3 521	87.5	21.9	85.4
228A Wellsville	WQRW	LIC	CN NY	73.8 254.2	54.59 BLH20070208ABH	42 11 25.20 77 49 16.00	1.100 234	2.1 835	30.8 Pembroke Pines Mass Media	43.6	23.5
229B Depew	WBLK	LIC	CN NY	339.9 159.6	98.49 BLH19970128KC	42 53 10.20 78 52 24.10	47.000 154	5.8 338	63.9 Townsquare Media Of Buffal	88.6	34.5
230A Dansville	WDNY-FM	LIC	CN NY	52.8 233.3	84.64 BLH19900409KD	42 30 45.20 77 38 05.90	0.570 226	36.5 684	24.2 Genesee Media Corporation	38.5	47.0
231D Corry	W231DW	LIC	CN PA	262.8 82.0	99.85 0000125312	41 56 10.20 79 39 19.20	0.250	23.8 498	7.1 Lake Erie College Of Osteo	59.4	39.3

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.

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)

Reference station has protected zone issue: Canada

Compliance with International Requirements

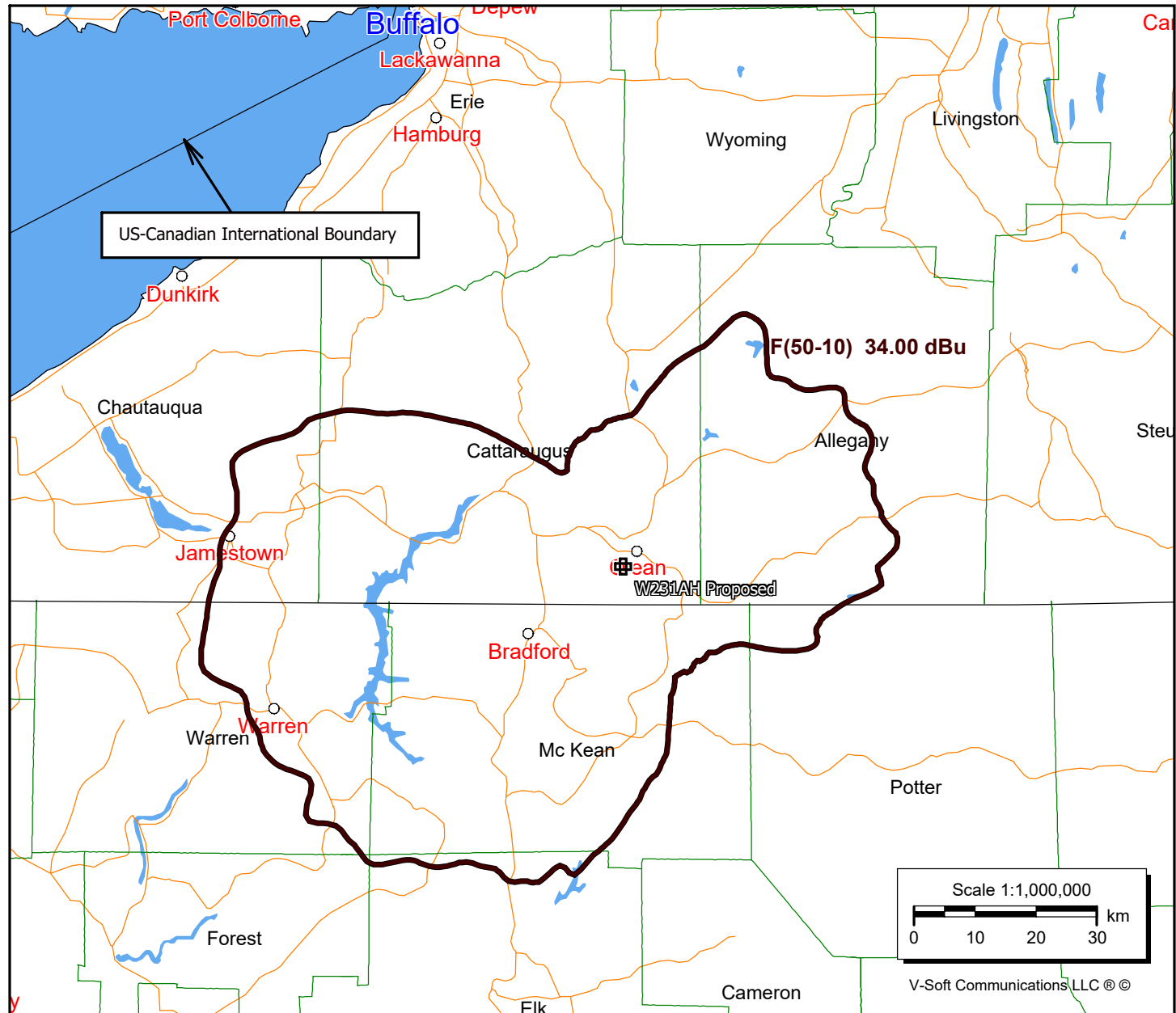
The proposed FM translator is located approximately 95km from the Canadian border. Family Life Ministries has included the attached map (see Exhibit 2-A) to show that the 34dBu interfering contour of the proposed facility at no point extends beyond the Canadian border.

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

Exhibit 2-A
US-Canadian International Compliance

W231AH Proposed

Latitude: 42-03-18 N
Longitude: 078-27-27 W
ERP: 0.25 kW
Channel: 231
Frequency: 94.1 MHz
AMSL Height: 731.4 m
Elevation: 658.4 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None



Human exposure to excess levels of radiofrequency radiation

The proposed facility will be built utilizing a Scala CA2 horizontally polarized antenna.

According to OET 65, "Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% "contour" where the appropriate limits are found to be exceeded."

The proposed facility's maximum contribution to RF on the site is $0.56\mu\text{W}/\text{cm}^2$ at a distance of 87 meters from the tower, which is 0.28% of the uncontrolled (public) exposure limit.

Therefore, because the proposed facility will not cause an RF field that is equal to or greater than 5% of the $200\mu\text{W}/\text{cm}^2$ limit for uncontrolled exposure at any point, the proposed facility complies with the requirements of OET 65.

Family Life Ministries 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.

Antenna Tower/Mounting

The proposed tower, ASR 1033427, is also the location of WTWT Bradford, PA (FIN 172674). WTWT operates with a directional antenna mounted 61 meters above ground. Since the proposed W231AH antenna will be mounted above the WTWT antenna, care will be taken to not alter the WTWT directional pattern. FLM has obtained a letter from Shively Labs that explains the mounting method of the proposed W231AH transmission line in order to have no effect on the WTWT directional pattern. Care will be taken to abide by this recommendation from Shively Labs. A copy of the letter is included in this exhibit.

November 12, 2021

Family Life Network

7634 Campbell Creek

Bath, NY 14810

To Whom It May Concern,

Shively Labs recommends that the placement of the ½" flex cable feeding the W231AH Translator, Bradford, PA, 94.1 MHz, Facility ID No. 85146, must be attached to the inside of any one of the tower legs when running through the WTWT antenna aperture, for a distance of 10' above and below the WTWT antenna center.

If the ½" flex cable is installed per the note above, we have concluded that it will not have any adverse effect on the directional antenna of WTWT, Bradford, PA, 90.5 MHz, on an Aldena Yagi system.

Please do not hesitate to contact us with any questions or concerns.

Best,



Al Plummer

Customer Support Specialist, Shively Labs

Overlap of 60dbu Service Contours
Proposed W231AH 250w CA2 at 240 degrees 73m AG

