

WHITE MOUNTAINS BROADCASTING, LLC.

FORM 301, APPLICATION FOR CONSTRUCTION PERMIT FOR NEW FM,

CHANNEL 231, C-3, CANAAN, VERMONT

FM AUCTION #93, MM-FM965-C3

ENGINEERING STATEMENT

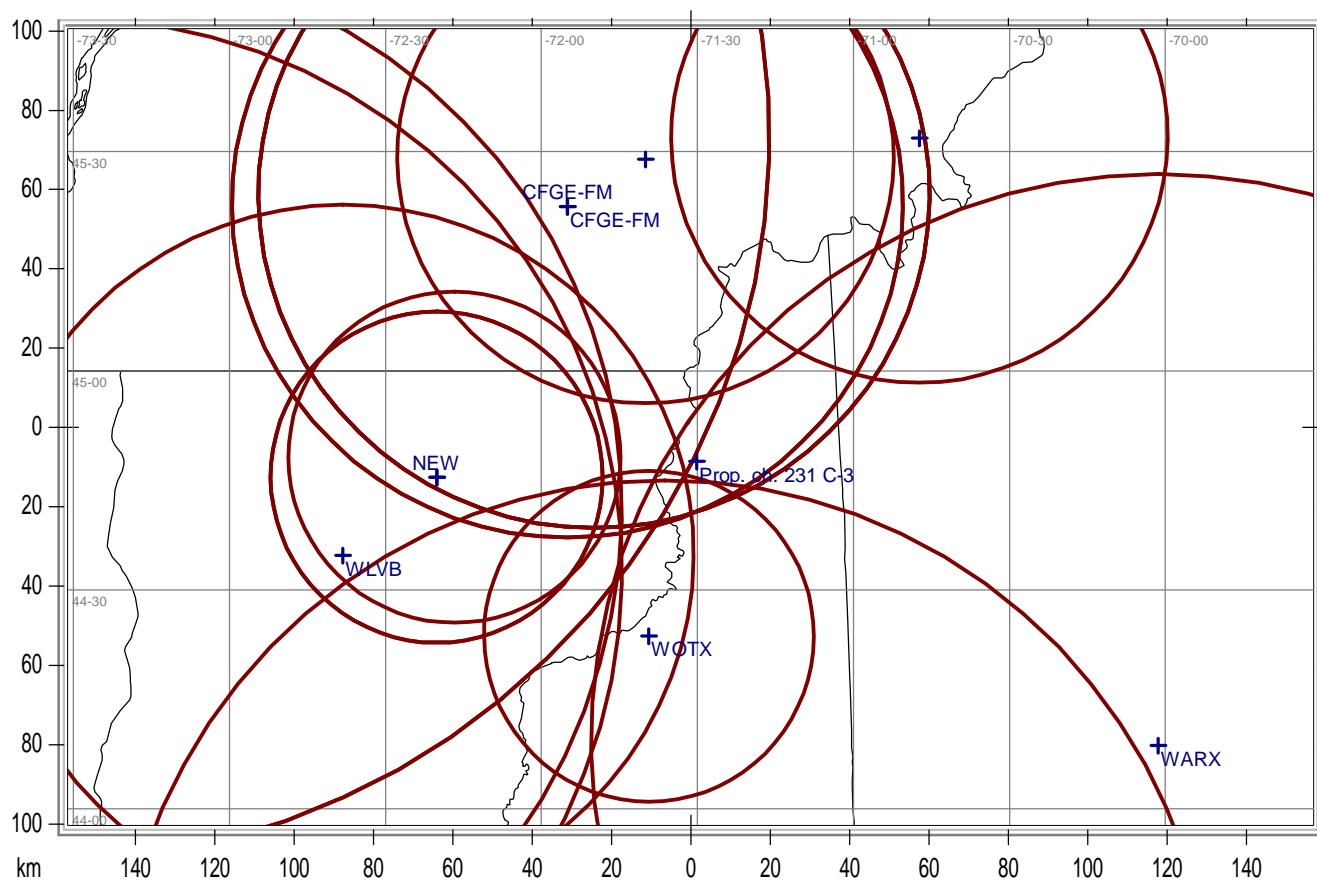
The Exhibits contained herein, are in support of an Application by White Mountains Broadcasting, LLC, for a New FM radio station on channel 231-C3, which will be licensed to Canaan, Vermont. The Applicant was the winning bidder in FCC Auction 93, permit number MM-FM965-C-3.

Although the FCC Allotment coordinates for this frequency are fully spaced to all domestic stations, applications, and allotments, there are Canadian issues, on the second adjacent channel, and the station would not be buildable at the Allotment point, because it is so close to the U.S. Canadian Border, that a large portion of the F(50,10) 74 dBu Interfering Contour, would cross the border in violation of the U.S. Canadian Agreement. The Applicant proposes to build the C-3 facilities on a mountain south of the Allotment point, which will afford 70 dBu City Grade contour to cover all of the Community of License (Canaan, Vt), and at the same time comply with the International Agreement. The site chosen is at 44-47-34.7 N, 71-30-10.9 W, at 971 meters ground above sea level. A two bay Shively 6812 (or equivalent) two bay antenna will be mounted on a 21 meter Rohn 45 tower (or equivalent) to be constructed on the site.

The Instant Application is made asking for Sec. 73.215 Contour Protection provisions, since the site is slightly short-spaced to station WARX, Class "B" in Maine. (full spacing requires 145 km separation. Sec. 73.215 requires 114 km separation. The site in the Instant Application is 138 km distant to WARX, thus is in compliance) The supporting exhibits will show that no prohibited contour overlap will exist.

The frequency as allotted is short-spaced to CFGE-FM "Class "B" in Sherbrook, Quebec. The U.S.-Canadian Agreement calls for a Class "B" to have a protected contour of F(50,50) 54 dbu, as represented by a 65km arc from it's center of radiation. This arc sweeps down into the United States, (see supporting Exhibit) thus requiring that the F(50,10) 74 dbu Interfering Contour of the Proposed ch. 231-C3, has to fall short of the border. (see supporting exhibit) The proposal in the Instant Application is believed to be in compliance with the International Agreement.

Prop. Site 44-47-34.7 N, 71-30-10.9 W



Sec. 73.215 Contour Protection Requested

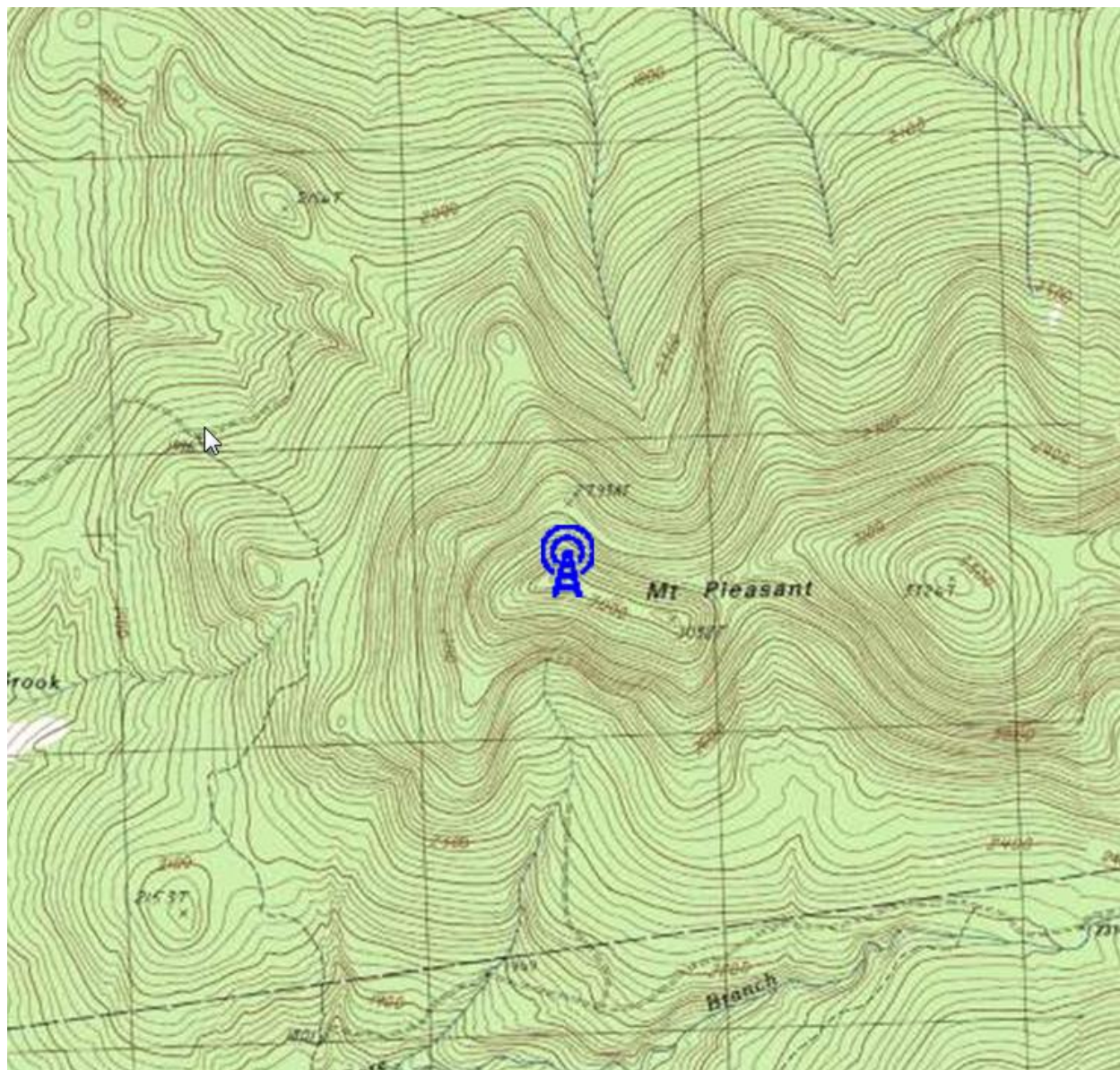
State Borders Lat/Lon Grid

Prop. Ch. 231 C-3 Canaan, Vt.
Frequency Separation Table
44-47-34.7 N, 71-30-10.9 W
94.1 Mhz, 1.1 Kw Non Directional

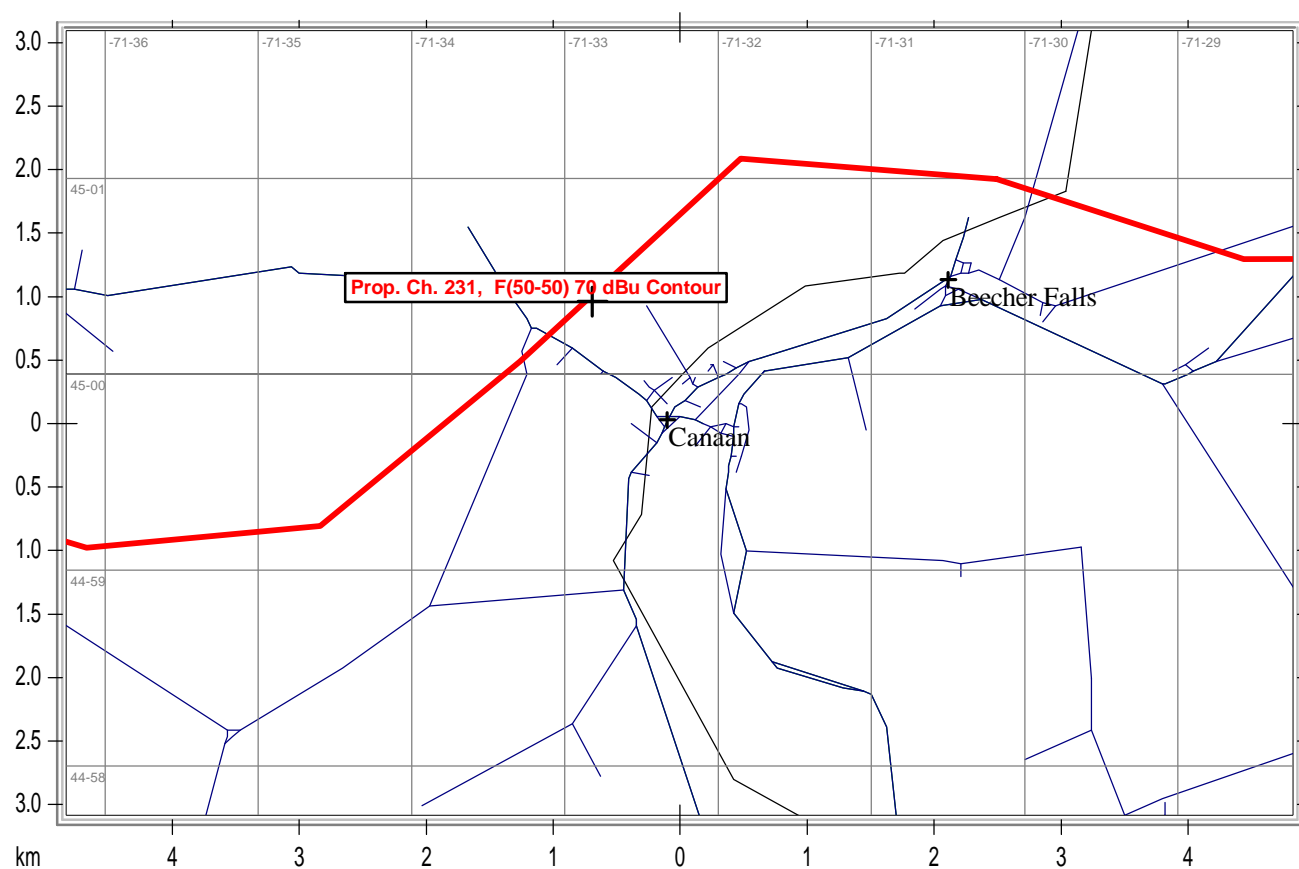
Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance_k Sep	Clr
	NY	KEESEVILLE	94.1	231	0	A	APP	163.68	142 21.7
	NY	KEESEVILLE	94.1	231	0	A	DEL	163.68	142 21.7
	NY	MORRISON	94.1	231	0	A	ADD	161.77	142 19.8
	QC	SHERBROO	93.7	229	0	B		71.91	84 -12.1
	QU	EAST-ANGL	93.7	229	0	A		77.79	62 15.8
	QU	LAC-MEGA	94.5	233	0	A		99.33	62 37.3
	VT	ALBANY	94.5	233	0	A	APP	66.04	42 24
CFGE-FM	QU	SHERBROO	93.7	229	5612	B		71.91	84 -12.1
CFGE-FM	QU	SHERBROO	93.7	229	25500	B		72.39	84 -11.6
CFGE-FM	QU	SHERBROO	93.7	229	25500	B		72.39	84 -11.6
CKMF	QC	MONTREAL	94.3	232	75000	C1		182.39	181 1.4
CKMFFM	QC	MONTREAL	94.3	232	92000	C1		182.39	181 1.4
NEW	QC	SHERBROO	93.7	229	5000	B		71.91	84 -12.1
NEW	VT	ALBANY	94.5	233	0	A	APP	66.04	42 24
NEW	VT	ALBANY	94.5	233	6000	A	APP	61.38	42 19.4
WARX	ME	LEWISTON	93.9	230	27500	B	LIC	138.09	145 -6.9
WFTN-FM	NH	FRANKLIN	94.1	231	0	A	USE	146.89	142 4.9
WFTN-FM	NH	FRANKLIN	94.1	231	6000	A	LIC	146.89	142 4.9
WLVB	VT	MORRISVIL	93.9	230	0	A	USE	91.08	89 2.1
WLVB	VT	MORRISVIL	93.9	230	5400	A	LIC	92.92	89 3.9
WOTX	VT	LUNENBUR	93.7	229	460	A	LIC	45.94	42 3.9

PROPOSED CH. 231, C-3 TRANSMITTER SITE

44-47-34.7 N, 71-30-10.9 W



The Prop. 70-dBu Contour covers 100-percent of the Community of License



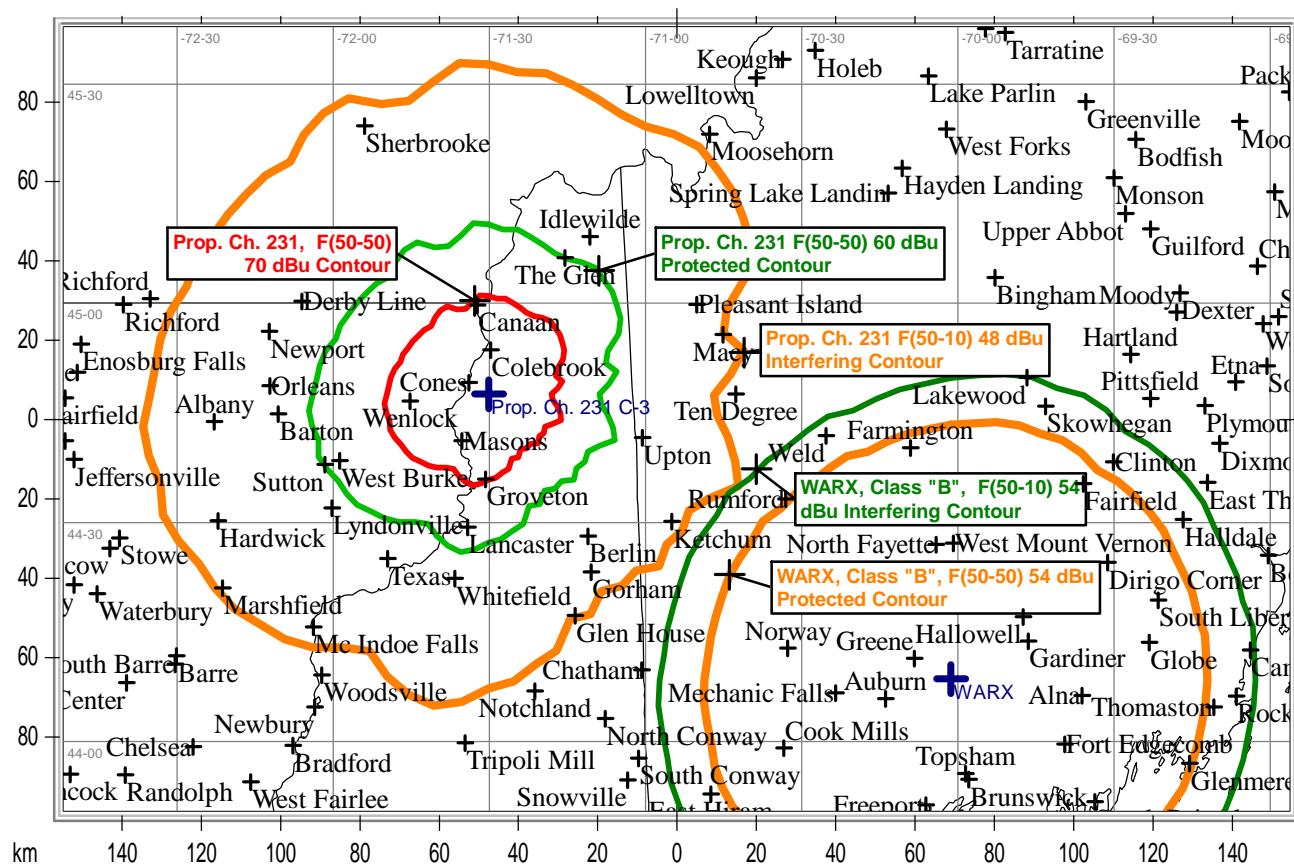
*Note that Canaan, Vermont is less than one mile from US-Canadian Border

State Borders Highways Streets Lat/Lon Grid

Antenna is Non Directional Circularly Polarized

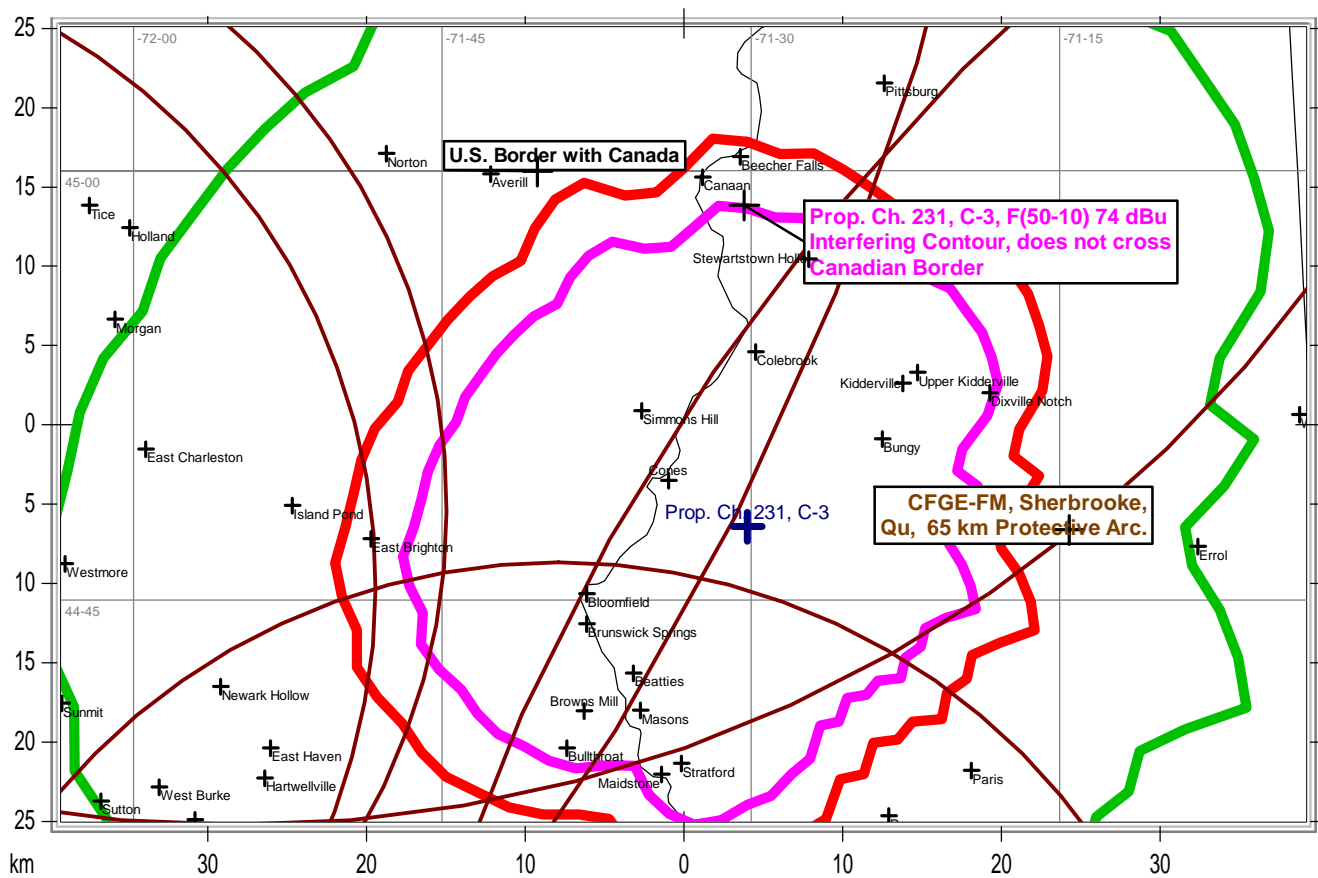
 State Borders
 Lat/Lon Grid

Like Colors cannot overlap.



State Borders Lat/Lon Grid

CFGE-FM, 65km protective arc sweeps down into the US. Prop. Ch. 231 74 dbu cannot cross Border



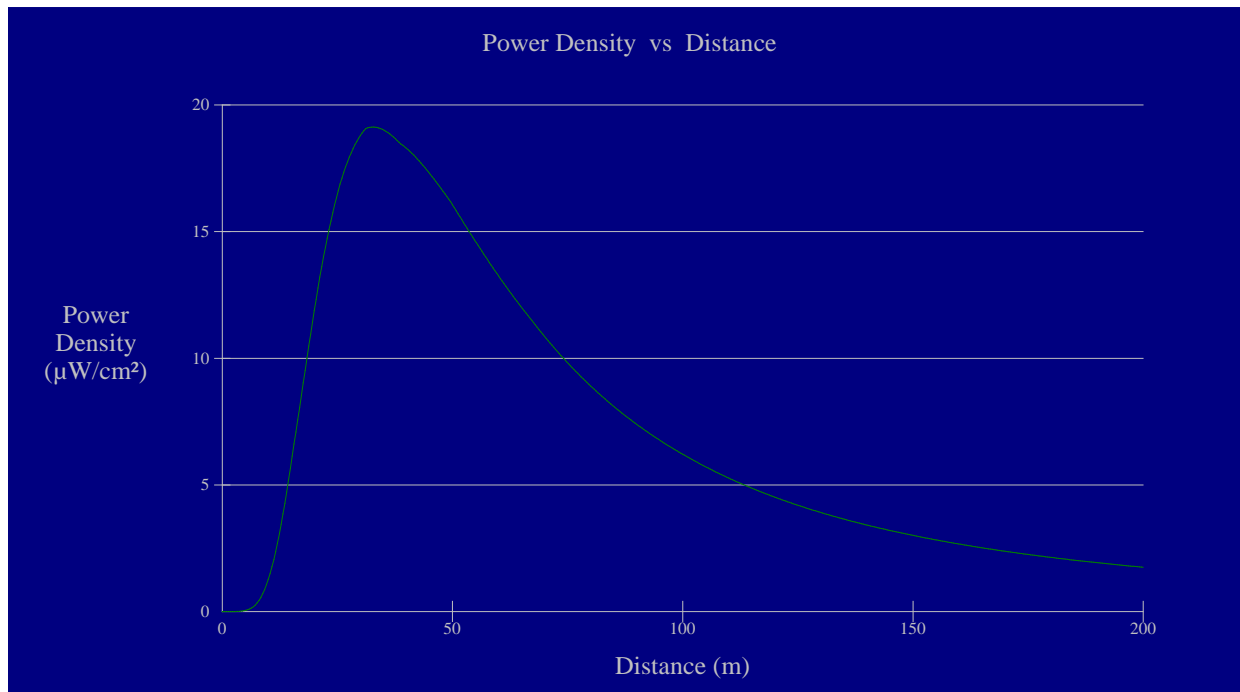
Prop. Ch. 231, C-3, F(5010) Interfering Contour for 2nd adjacent ch. is 74 dBu

State Borders Lat/Lon Grid

Ch. 231, C-3 Canaan, Vermont, RF Emissions Study FCC's FM-Model Program

Employing a Shively 6810 Circularly Polarized 2 Bay antenna (or equivalent) Half wave spaced.

Antenna height, 20 m. Distance 200 m. Horizontal ERP 1.1kw, Vertical ERP 1.1 kw.



The Applicant proposes to mount its antenna with the center of radiation at 20 meters above ground level. Figure 1. above, shows the maximum power density produced by the proposed facility at a point 2 meters above ground is 19.129 $\mu\text{W}/\text{cm}^2$, 10.46 percent of the 200 $\mu\text{W}/\text{cm}^2$ ANSI limit for uncontrolled general population exposure. Therefore, this proposal complies with ANSI standards.