

EXHIBIT #1
ENGINEERING STATEMENT

Concerning the Application of
Vermont Public Radio
To Construct a New FM Translator
To Serve Rupert, Vermont
Long Form – BNPFT20030317HIR

August 2003

Channel 226D

0.01 kW ERP Omni

This engineering statement supports the application filed by Vermont Public Radio to construct a new FM translator to serve Rupert, Vermont on Channel 226. The applicant proposes to correct the base elevation and antenna height above ground.

Under the instant proposal, the off-air audio signal of primary station WVPR, channel 208, Windsor, will be delivered to a type-approved transmitter. This unit will deliver 0.0217 kW to the input of a 1 bay Shively 6812. The antenna has a power gain of 0.46 resulting in an effective radiated power of 0.01 kW, polarized circularly.

A total of 12 evenly spaced radials were used to determine the antenna height above average terrain. The highest radial of the 12 was used to determine the maximum effective radiated power. The USGS 30 arc-second terrain elevation database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. A tabular listing of the distance to the 1 mV/m contour can be found on page #3 of this exhibit. A coverage map can be found on page #4.

Exhibit #12 is an Allocation Study showing that no contour overlap will be caused any existing licenses, construction permits or allocations. The first page is a computer channel study of all stations having a frequency and distance relationship. The exhibit gives current operating powers, HAAT's bearings and distances. (All distances were computed according to the method described under Section 73.208 of the Commission's Rules.) Page #2 of this exhibit is an explanation of the methods used. Page 3 is a map and depicting the relationship between the proposed translator and third adjacent translator application BNPFT20030317HJP, Manchester.

The proposed station is within 320 kilometers of the US border with Canada, however there are no pertinent Canadian relationships. The Mexican border is more than 320 kilometers in distance. The proposed facility is okay with respect to AM stations, FCC monitoring stations, Table Mountain and the West Virginia Quiet Zone.

Exhibit #16 is an RF hazard compliance statement.

Page #5 of Exhibit #E1 is a statement of the qualifications of the preparer.

Kate Michler

Doug Vernier Telecommunications Consultants

N. Lat. = 43 16 19 W. Lng. = 73 10 03

HAAT and Distance to Contour - FCC Method - 30 Arc. Sec.

AP226 , Vermont Public Radio , BNPFT20030317HIR

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	34-F1
000	302.5	288.5	0.0100	-20.00	1.000	9.94	46.28
030	504.9	86.1	0.0100	-20.00	1.000	5.41	25.28
060	508.4	82.6	0.0100	-20.00	1.000	5.29	24.74
090	442.3	148.7	0.0100	-20.00	1.000	7.06	33.52
120	344.6	246.4	0.0100	-20.00	1.000	9.17	43.01
150	630.8	-39.8	0.0100	-20.00	1.000	3.15	14.16
180	554.9	36.1	0.0100	-20.00	1.000	3.44	15.64
210	456.9	134.1	0.0100	-20.00	1.000	6.72	31.75
240	256.5	334.5	0.0100	-20.00	1.000	10.67	49.89
270	273.4	317.6	0.0100	-20.00	1.000	10.40	48.53
300	287.1	303.9	0.0100	-20.00	1.000	10.19	47.45
330	299.1	291.9	0.0100	-20.00	1.000	9.99	46.53

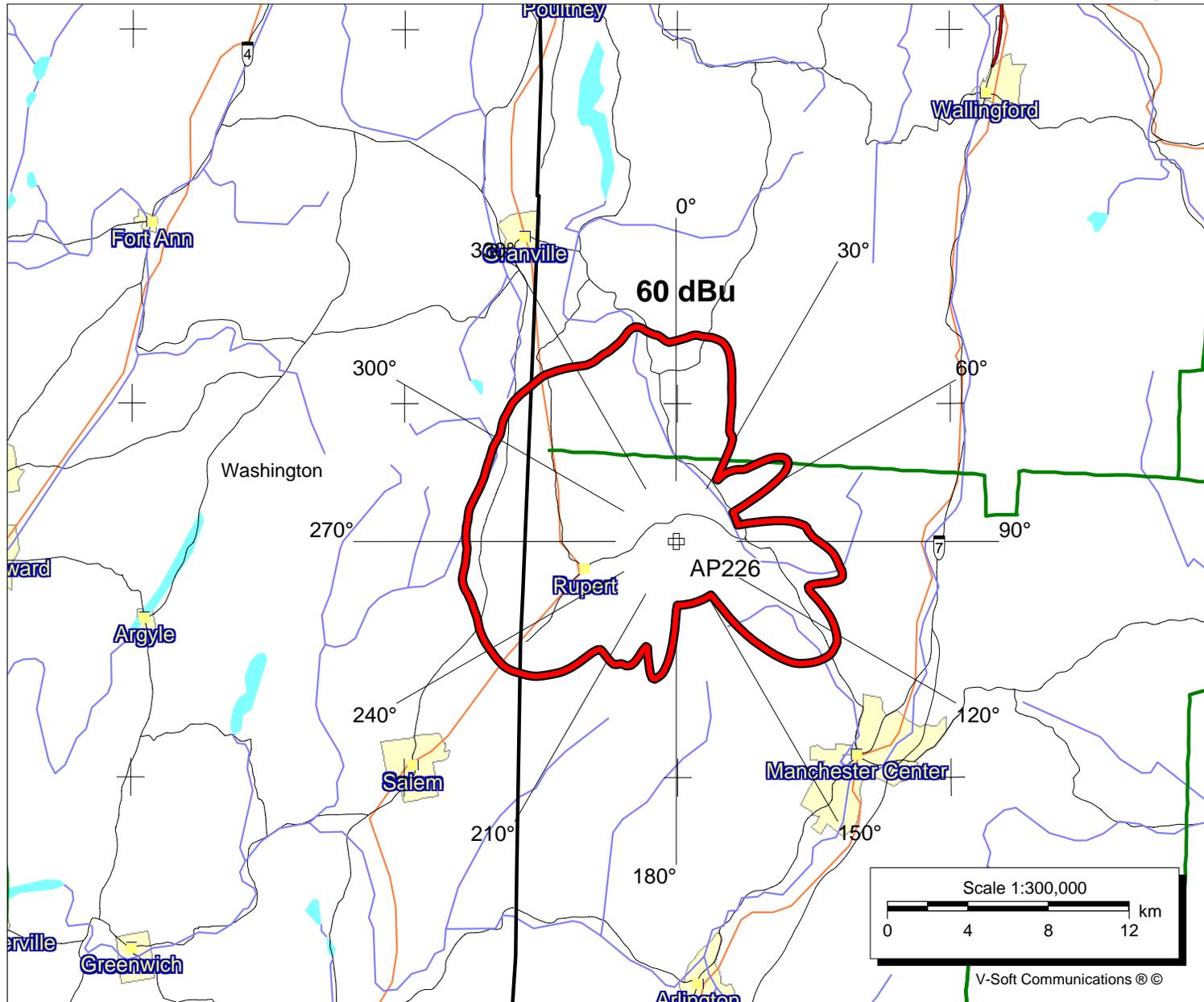
Ave EI = 405.11 M HAAT= 185.89 M AMSL= 591 M

Proposed Rupert Translator - Coverage

AP226
BNPFT20030317HIR
Latitude: 43-16-19 N
Longitude: 073-10-03 W
ERP: 0.01 kW
Channel: 226
Frequency: 93.1 MHz
AMSL Height: 591.0 m
Elevation: 573.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Contour

Pop = 2,482
Area = 214 sq km

August 6, 2003



Declaration:

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over five years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by Vermont Public Radio;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

That, under penalty of perjury, I declare that the foregoing is correct.

Katherine A. Michler Katherine A. Michler

Executed on August 6, 2003