Vermont Public Radio
Bolton 234

REFERENCE	CH# 234D - 94.7 MHz, Pwr= 0.01 kW, HAAT=439.4 M, COR= 630 M	DISPLAY DATES
44 21 52 N	Average Protected F(50-50)= 12.03 km	DATA 08-12-03
72 55 53 W	Ave. F(50-10) 40 dBu= 42.0 54 dBu= 18.0 80 dBu= 2.1 100 dBu= .2	SEARCH 08-13-03

CH CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
234D AP234	APP C	0.0	0.00	44 21 52	0.010	630	5.1	-26.78*<	-39.38*<
Bolton	VT	180.0	BNPFT20030317HHY	72 55 53	78	34.3	Vermont Public Radio		
234C2 WYUL«	LIC DEN	294.9	112.33	44 46 56	50.000	542	26.5	-14.33<	45.73
Chateaugay	NY	114.9	BLH20010222AAN	74 13 09	-27	40.1	Cartier Communications Inc		
233D AP233	APP C	256.6	25.53	44 18 40	0.010	190	3.2	9.81	6.16
Burlington	VT	76.6	BNPFT20030317HKB	73 14 34	18	16.2	Vermont Public Radio		
232D AP232	APP C	168.6	28.22	44 06 56	0.250	332	7.1	23.96	20.91
Warren	VT	348.6	BNPFT20030317HIA	72 51 41	-167	0.2	Vermont Public Radio		
231D AP231	APP C	112.6	31.43	44 15 19	0.250	223	7.1	21.51	24.12
Montpelier	VT	292.6	BNPFT20030317HKR	72 34 05	-4	0.2	Vermont Public Radio		
235C WHOM«	LIC CY	94.1	130.24	44 16 12	50.000	1924	102.5	-30.88<	10.05
Mt. Washington	NH	274.1	BLH19930714KC	71 18 15	1264	17.7	Citadel Broadcasting Compa		
233A ALLO	VAC	47.0	64.37	44 45 26	6.000	0	15.8	36.70	42.73
Albany	VT	227.0	RM10507	72 20 09	-384	5.9			
235L1 WMDB-L	CP	219.7	43.76	44 03 41	0.001	415	5.5	24.32	23.02
Middlebury	VT	39.7	BNPL20010612ABT	73 16 52	317	15.2	Vermont Agency Of Transpor		
237D AP237	APP C	206.4	44.34	44 00 25	0.038	155	4.7	35.29	39.45
Middlebury	VT	26.4	BNPFT20030317HJW	73 10 40	34	0.2	Vermont Public Radio		
233A WJEN.C	CP NCN	190.2	79.68	43 39 31	0.140	657	23.9	33.28	42.59
Rutland	VT	10.2	BPH19970908ID	73 06 25	456	13.2	Pamal Broadcasting, Ltd.		
231D AP231	APP DC	151.1	54.45	43 56 07	0.000	442	0.0	51.30	54.23
Randolph	VT	331.1	BNPFT20030314BCU	72 36 10	60	0.2	Vox Vermont, Llc		
233A WJEN	LIC CN	185.2	83.77	43 36 49	3.000	261	16.2	51.88	56.40
Rutland	VT	5.2	BLH19890504KA	73 01 33	45	11.2	Pamal Broadcasting, Ltd.		
234A WBARFM	APP ZCX	208.9	136.12	43 17 22	0.751	463	28.7	46.24	77.83
Lake Luzerne	NY	28.9	BPH20010305AAL	73 44 35	289	29.6	Capital Media Corporation		
234A WBARFM	LIC NCN	208.9	136.12	43 17 22	0.300	463	23.1	57.94	83.36
Lake Luzerne	NY	28.9	BLH19920623KA	73 44 35	289	29.6	Capital Media Corporation		
237D AP237	APP C	13.6	59.28	44 52 58	0.013	279	3.4	49.30	55.69
Enosburg Falls	VT	193.6	BNPFT20030317HHU	72 45 18	14	0.2	Vermont Public Radio		
237A RADD	ADD	147.5	83.59	43 43 45	6.000	0	15.8	78.86	67.62
Hartford	VT	327.5		72 22 22	-368	0.2			

"*"Affixed to 'IN' or 'Out' values = site inside protected contour.
ERP and HAAT are on direct line to and from reference station.
"«" = Station meets FCC minimum distance spacing for its class. "<" = Contour Overlap

HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "* IN *" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap inter-ference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates omni. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N".

Vermont Public Radio
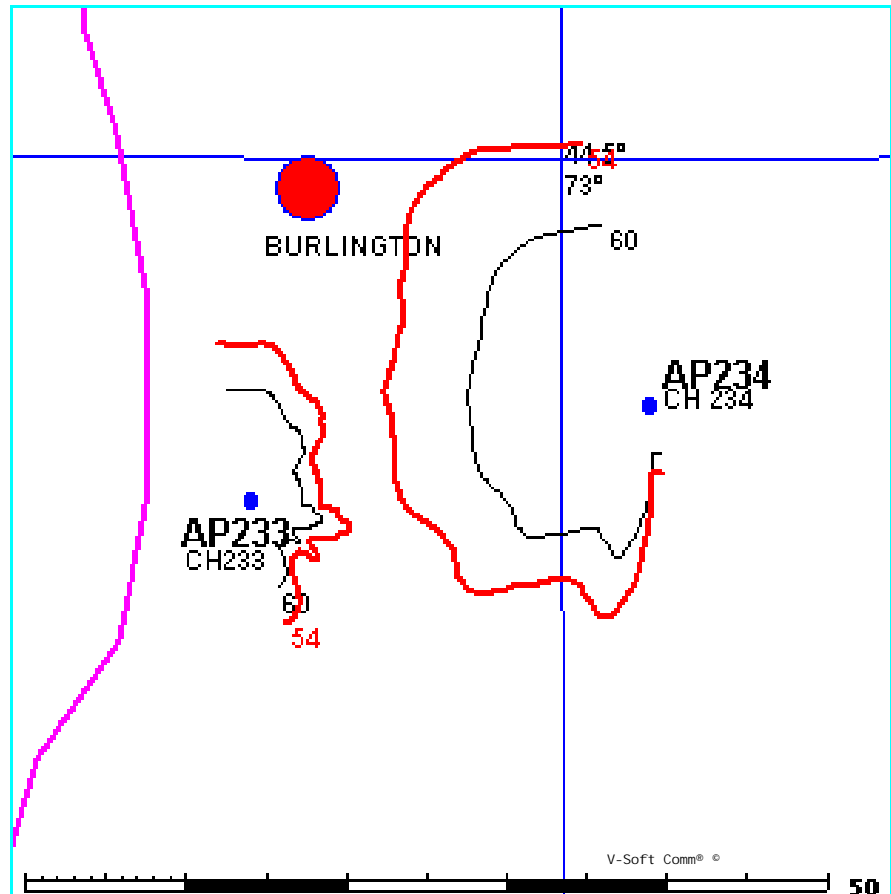Bolton 234 v Burlington 233

FMCONT Allocation Study

08-13-2003

AP234 CH 234D Bolton
.01 kW 630M COR
Prot. = 60 dBu
Intef. = 54 dBu

AP233 CH 233D Burlington
.01kW, 190 M COR
Prot. = 60 dBu
Intef. = 54 dBu
File # BNPFT20030317HKB

1:500,000

```
AP233      BNPFT20030317HKB              AP234      BNPFT20030317HHY
Channel = 233D                           Channel = 234D
Max ERP = 0.01 kW                        Max ERP = 0.01 kW
RCAMSL =   190 M                         RCAMSL =   630 M
N. Lat = 44 18 40                        N. Lat = 44 21 52
W. Lng = 73 14 34                        W. Lng = 72 55 53


         Protected                              Interfering
         60 dBu                                  54 dBu
```

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
059.0	000.0100	0027.5	003.2	259.1	000.0100	0372.6	022.5	48.9
060.0	000.0100	0026.0	003.2	258.9	000.0100	0372.6	022.5	48.9
061.0	000.0100	0025.0	003.2	258.8	000.0100	0372.6	022.5	48.9
062.0	000.0100	0024.7	003.2	258.7	000.0100	0372.6	022.5	48.9
063.0	000.0100	0025.4	003.2	258.5	000.0100	0372.6	022.5	48.9
064.0	000.0100	0026.5	003.2	258.4	000.0100	0374.1	022.5	49.0
065.0	000.0100	0027.7	003.2	258.2	000.0100	0374.1	022.4	49.0
066.0	000.0100	0029.2	003.2	258.1	000.0100	0374.1	022.4	49.0
067.0	000.0100	0029.1	003.2	258.0	000.0100	0374.1	022.4	49.0
068.0	000.0100	0027.3	003.2	257.8	000.0100	0374.1	022.4	49.0
069.0	000.0100	0024.5	003.2	257.7	000.0100	0374.1	022.4	49.0
070.0	000.0100	0022.0	003.2	257.6	000.0100	0374.1	022.4	49.0
071.0	000.0100	0021.2	003.2	257.4	000.0100	0377.0	022.4	49.1
072.0	000.0100	0020.6	003.2	257.3	000.0100	0377.0	022.4	49.1
073.0	000.0100	0019.7	003.2	257.1	000.0100	0377.0	022.4	49.1
074.0	000.0100	0017.8	003.2	257.0	000.0100	0377.0	022.4	49.1
075.0	000.0100	0017.1	003.2	256.9	000.0100	0377.0	022.4	49.1
076.0	000.0100	0017.3	003.2	256.7	000.0100	0377.0	022.4	49.1
077.0	000.0100	0017.8	003.2	256.6	000.0100	0377.0	022.4	49.1
078.0	000.0100	0016.5	003.2	256.4	000.0100	0380.5	022.4	49.2
079.0	000.0100	0014.2	003.2	256.3	000.0100	0380.5	022.4	49.2
080.0	000.0100	0013.7	003.2	256.1	000.0100	0380.5	022.4	49.2
081.0	000.0100	0015.0	003.2	256.0	000.0100	0380.5	022.4	49.2
082.0	000.0100	0018.4	003.2	255.9	000.0100	0380.5	022.4	49.2
083.0	000.0100	0021.3	003.2	255.7	000.0100	0380.5	022.4	49.2
084.0	000.0100	0023.1	003.2	255.6	000.0100	0380.5	022.4	49.2
085.0	000.0100	0022.1	003.2	255.4	000.0100	0383.6	022.4	49.2
086.0	000.0100	0021.2	003.2	255.3	000.0100	0383.6	022.4	49.2
087.0	000.0100	0019.9	003.2	255.2	000.0100	0383.6	022.4	49.2
088.0	000.0100	0018.5	003.2	255.0	000.0100	0383.6	022.4	49.2
089.0	000.0100	0018.9	003.2	254.9	000.0100	0383.6	022.5	49.2
090.0	000.0100	0019.4	003.2	254.8	000.0100	0383.6	022.5	49.2
091.0	000.0100	0020.0	003.2	254.6	000.0100	0383.6	022.5	49.2
092.0	000.0100	0019.0	003.2	254.5	000.0100	0385.1	022.5	49.2
093.0	000.0100	0018.9	003.2	254.4	000.0100	0385.1	022.5	49.2