Brattleboro, VT
Vermont Public Radio

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REFERENCE           CH#  233D  - 94.5 MHz, Pwr= 0.01  kW,   HAAT=32.6 M,   COR= 304 M      DISPLAY DATES
42 49 44 N                    Average Protected F(50-50)= 3.28 km                          DATA   07-23-03
72 35 52 W         Ave. F(50-10) 40 dBu= 10.5  54 dBu= 4.6  80 dBu= 1.6 100 dBu= .2       SEARCH 07-24-03
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| CH | CALL | TYPE | | AZI. | DIST | LAT. | Pwr(kW) | COR(M) | PRO(km) | *IN* | *OUT* |
CITY		STATE		<--	FILE #	LNG.	HAAT(M)	INT(km)	LICENSEE	(Overlap in km)	
233D	AP233	APP	C	260.3	0.18	42 49 43	0.010	347	6.4	-24.17*<	-16.36*<
Brattleboro		VT		80.3	BNPFT20030317HKW	72 36 00	119	10.2	Vermont Public Radio		
230A	WRSI	LIC	CN	179.3	32.80	42 32 01	2.500	284	28.5	27.05	4.12
Turners Falls		MA		359.3	BLH19951018KB	72 35 34	159	0.2	Great Northern Radio, Llc		
233A	WJEN	LIC	CN	338.5	93.86	43 36 49	3.000	261	13.9	34.90	69.80
Rutland		VT		158.5	BLH19890504KA	73 01 33	34	10.2	Pamal Broadcasting, Ltd.		
231D	AP231	APP	C	358.4	16.18	42 58 28	0.010	514	10.6	10.64	5.38
Brattleboro		VT		178.4	BNPFT20030317HKS	72 36 12	329	0.2	Vermont Public Radio		
233B	WJMN.C«	CP	CX	116.8	126.79	42 18 27	9.200	394	64.9	-4.64<	27.31
Boston		MA		296.8	BPH20030116ABJ	71 13 27	336	34.6	Amfm Radio Licenses, L.l.c		
233B	WJMN«	LIC	CN	116.8	126.79	42 18 27	11.500	365	65.0	-4.84<	27.18
Boston		MA		296.8	BLH19850408KT	71 13 27	307	34.6	Amfm Radio Licenses, L.l.c		
232A	WBTNFM	LIC	CN	285.9	49.10	42 56 52	3.000	475	13.2	26.42	31.44
Bennington		VT		105.9	BLH19780821AA	73 10 36	-210	4.4	Vermont Public Radio		
233A	WJEN.C	CP	NCN	336.1	101.03	43 39 31	0.140	657	20.4	34.58	70.52
Rutland		VT		156.1	BPH19970908ID	73 06 25	324	10.2	Pamal Broadcasting, Ltd.		
231D	AP231	APP	C	66.0	23.92	42 54 57	0.010	437	7.2	18.93	16.49
Keene		NH		246.0	BNPFT20030317BLE	72 19 48	155	0.2	Educational Media Foundati		
234B	WMASFM	LIC	CN	180.9	79.99	42 06 32	50.000	121	52.5	11.60	21.11
Springfield		MA		0.9	BLH19801010AD	72 36 44	79	6.3	Lappin Communications, Inc		
233A	WRCZ	LIC	CN	254.2	108.41	42 33 23	3.000	237	31.5	17.25	66.73
Ravena		NY		74.2	BLH19911212KD	73 52 05	180	10.2	Dot Communications, Inc.		
232D	970827	APP	DVN	128.6	41.64	42 35 42	0.003	339	3.8	27.98	26.18
Athol		MA		308.6	BPFT19970827TE	72 12 02	79	11.7	Deane Brothers Broadcastin		
236A	WJAN	LIC	NCN	311.8	56.55	43 09 58	0.096	1185	24.3	52.71	32.07
Sunderland		VT		131.8	BLH19940705KD	73 07 02	546	0.2	Pamal Broadcasting, Ltd.		
234D	AP234	APP	C	251.9	44.81	42 42 10	0.050	224	4.7	34.96	35.67
North Adams		MA		71.9	BNPFT20030714AAE	73 07 04	-363	4.4	Northeast Gospel Broadcast		
234D	AP234	APP	C	251.9	44.81	42 42 10	0.050	224	4.7	34.96	35.67
North Adams		MA		71.9	BNPFT20030312BBS	73 07 04	-363	4.4	Northeast Gospel Network,		
234L1	AP234	APP		10.2	49.43	43 16 00	0.000	0	0.0	43.41	40.99
Springfild		VT		190.2	BNPL20010615ATV	72 29 21	-209	8.4	New England Educational Fe		

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"*"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
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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 interference.

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".
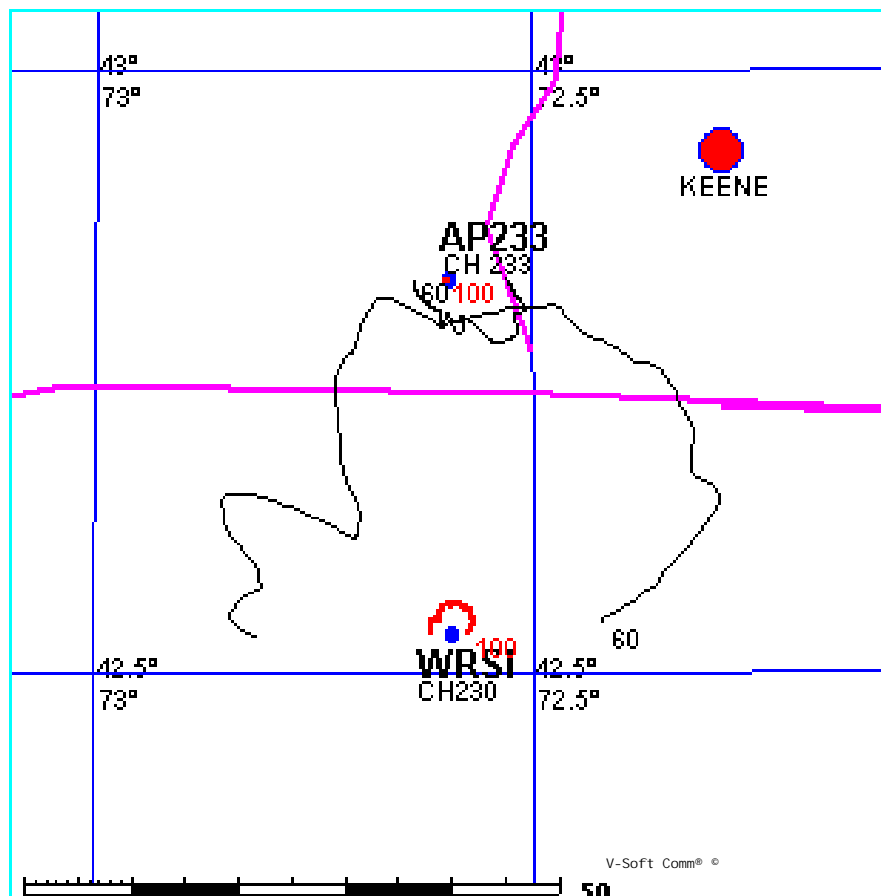
Brattleboro, VT
Vermont Public Radio

FMCONT Allocation Study

08-01-2003

AP233   CH 233 D
.01 kW   304M COR
Prot.   =   60 dBu
Intef. = 100 dBu

WRSI   CH 230 A
2.5kW,   284 M COR
Prot.   =   60 dBu
Intef. = 100 dBu
File # BLH19951018KB

1: 750,000

WRSI   BLH19951018KB   AP233
Channel = 230A   Channel = 233D
Max ERP = 2.5 kW   Max ERP = 0.01 kW
RCAMSL = 284 M   RCAMSL = 304 M
N. Lat = 42 32 01   N. Lat = 424944
W. Lng = 72 35 34   W. Lng = 723552

        Protected   Interfering
         60 dBu   100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
342.0	002.5000	0162.5	028.8	237.1	000.0100	-0089.1	010.1	40.2
343.0	002.5000	0171.6	029.5	240.7	000.0100	-0097.4	009.4	41.3
344.0	002.5000	0178.1	030.0	243.3	000.0100	-0097.7	008.8	42.4
345.0	002.5000	0183.8	030.5	245.6	000.0100	-0100.6	008.2	43.6
346.0	002.5000	0190.2	030.9	248.6	000.0100	-0104.2	007.6	44.8
347.0	002.5000	0196.3	031.4	252.0	000.0100	-0109.5	007.0	46.2
348.0	002.5000	0197.9	031.6	252.7	000.0100	-0111.2	006.4	47.7
349.0	002.5000	0195.2	031.4	250.0	000.0100	-0105.6	005.9	49.1
350.0	002.5000	0190.1	030.9	244.8	000.0100	-0099.4	005.5	50.5
351.0	002.5000	0186.3	030.6	240.0	000.0100	-0096.6	005.1	51.8
352.0	002.5000	0182.9	030.4	234.5	000.0100	-0076.1	004.7	53.1
353.0	002.5000	0178.8	030.1	227.6	000.0100	-0039.9	004.4	54.1
354.0	002.5000	0175.3	029.8	220.4	000.0100	-0016.6	004.2	55.0
355.0	002.5000	0171.5	029.5	212.1	000.0100	0032.0	004.1	56.1
356.0	002.5000	0166.6	029.1	203.1	000.0100	0023.4	004.1	55.3
357.0	002.5000	0161.1	028.6	194.5	000.0100	0010.4	004.3	54.3
358.0	002.5000	0157.1	028.3	187.3	000.0100	0066.7	004.5	60.7
359.0	002.5000	0158.9	028.5	181.2	000.0100	0029.8	004.4	54.3
000.0	002.5000	0160.8	028.6	174.4	000.0100	0053.8	004.2	60.3
001.0	002.5000	0161.8	028.7	167.5	000.0100	0085.6	004.2	64.1
002.0	002.5000	0163.8	028.9	160.4	000.0100	0043.7	004.2	58.3
003.0	002.5000	0165.8	029.0	153.3	000.0100	0061.6	004.3	61.1
004.0	002.5000	0168.3	029.2	146.2	000.0100	0136.2	004.4	67.1
005.0	002.5000	0171.3	029.5	139.3	000.0100	0179.5	004.6	68.5
006.0	002.5000	0173.3	029.6	133.6	000.0100	0195.9	004.8	68.2
007.0	002.5000	0174.2	029.7	129.5	000.0100	0201.6	005.2	67.3
008.0	002.5000	0175.4	029.8	125.9	000.0100	0191.1	005.6	65.8
009.0	002.5000	0180.0	030.2	120.5	000.0100	0156.5	005.9	63.4
010.0	002.5000	0184.1	030.5	116.1	000.0100	0162.6	006.3	62.6
011.0	002.5000	0186.4	030.7	113.5	000.0100	0176.4	006.8	62.1
012.0	002.5000	0187.4	030.7	112.0	000.0100	0178.7	007.3	60.9
013.0	002.5000	0188.7	030.8	110.6	000.0100	0177.3	007.8	59.8
014.0	002.5000	0189.9	030.9	109.5	000.0100	0172.3	008.4	58.5
015.0	002.5000	0191.9	031.1	108.2	000.0100	0156.4	008.9	56.5
016.0	002.5000	0195.2	031.4	106.4	000.0100	0140.1	009.4	54.5