

MINOR CHANGE APPLICATION
POSITIVE ALTERNATIVE RADIO, INC.
W292CU FM TRANSLATOR STATION
CH 290D - 105.9 MHZ - 0.045 KW
CHRISTIANSBURG, VIRGINIA
September 2011

EXHIBIT B

As indicated on Exhibit B1, the proposed W292CU operation on Channel 290D, with an effective radiated power of 0.045 kilowatt at 33.8 meters (111.0 feet) above ground level, will not cause interference to any existing, applied for, or proposed facility. As noted on Exhibit B1, the proposed W292CU on Channel 290D is within the predicted 60 dBu contour of third adjacent station WBRW, Channel 287C2, Blacksburg, Virginia. Due to the relationship between W292CU on Channel 290D and WBRW, a 40 db ratio of the protected and interfering contours applies.

We have, therefore, calculated the level of signal of WBRW at the proposed W292CU site. A map showing the WBRW contour at the proposed W292CU site is attached as Exhibit B2. The WBRW contour at the W292BU site is 108.5 dBu (50/50), and the corresponding interfering contour for W292BU is 148.5 dBu (50/10). The 148.5 dBu contour of the proposed W292CU extends 0.002 kilometer (6.6 feet) from the proposed translator antenna, as indicated on Exhibit B3. As the W292CU antenna is to be mounted 33.8 meters (111.0 feet) above ground, this contour never reaches the ground. As such, WBRW will not receive interference from the proposed translator.

Based on the foregoing, it is believed that the proposed W292CU on Channel 290D is in compliance with §74.1204(d) of the Commission's rules. If a waiver of the rule is needed to address WBRW, one is respectfully requested, based on the absence of any population affected in the interference area.

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EXHIBIT B1

Interference Review for W292CU Christiansburg, Virginia
Using Proposed Site (and height) as Reference

REFERENCE		CH# 290D - 105.9 MHZ, Pwr= 0.045 kW, HAAT= 168.7 M, COR= 783.6 M						DISPLAY DATES			
37 11 13.4 N.		Average Protected F(50-50)= 11.0 km						DATA 09-28-11			
80 27 21.1 W.		Omni-directional						SEARCH 09-28-11			
CH CITY	CALL	TYPE STATE	ANT	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
292D Christiansburg	W292CU	LIC	C VA	0.0 0.0	0.0 BLFT-20110127AAJ	37 11 13.4 80 27 21.1	0.010 149	0.2 764	5.5 Positive Alternative Radio	-9.1*	-6.0*
287C3 Blacksburg	WBRW	LIC	ZCN VA	268.9 88.9	2.3 BLH-19960906KZ	37 11 12.0 80 28 54.0	12.000 146	4.5 753	44.6 Cumulus Licensing LLC	-15.2*	-42.8*
289C1 Clemmons	WMKS	CP	NCX NC	175.1 355.1	90.3 BPH-20100706IDS	36 22 36.4 80 22 08.6	30.000 472	105.7 794	71.7 Clear Channel Broadcasting	-25.8*	4.0
289C1 Clemmons	WMKS	LIC	NCX NC	175.4 355.5	90.5 BLH-20060724AEQ	36 22 28.0 80 22 31.0	34.000 443	104.3 763	70.8 Clear Channel Broadcasting	-24.2*	5.1
290B Mount Hope	WTNJ	LIC	CX WV	318.6 138.1	113.1 BLH-20070620AAF	37 56 51.0 81 18 29.0	4.400 467	120.0 1037	61.7 West Virginia Broadcasting	-16.2*	7.0
291A Vinton	WSFF	LIC	NCX VA	75.3 255.6	43.0 BLH-20020503AAG	37 17 03.0 79 59 14.0	6.000 29	33.0 426	22.1 Aloha Station Trust, LLC	-2.3	2.6
293D Pulaski	W293AS	LIC	C VA	235.0 54.9	31.5 BLFT-20061026ABN	37 01 29.0 80 44 46.0	0.010 359	0.2 1027	11.9 Liberty University, Inc.	18.7	19.1
293D Roanoke	W293AX	LIC	C VA	79.5 259.8	33.7 BLFT-20070910ADR	37 14 29.0 80 04 55.0	0.010 302	0.2 795	10.9 Educational Media Foundation	21.0	22.4
290A Lynchburg	WLNI	LIC	CN VA	76.8 257.6	121.1 BLH-19931206KC	37 25 37.0 79 07 26.0	6.000 81	84.2 305	26.3 Centennial Licensing, LLC	24.6	53.8
291C3 Jefferson	AL8777	RSV-A	N NC	227.5 46.9	115.9 RM-7494	36 28 46.0 81 24 41.0	25 000 100	70.3 995	47.4	33.7	51.1
292A Bluefield	WHKX	LIC	C VA	276.5 96.1	65.5 BLH-20000412ACV	37 15 05.0 81 11 20.0	0.330 420	1.3 1224	29.2 Monterey Licenses, LLC	50.9	35.8
290D Danville	W289AJ	CP	C VA	120.3 300.9	105.3 BPFT-20100414AAU	36 42 20.0 79 26 14.0	0.010 165	22.1 368	6.6 Calvary Chapel of Twin Falls	71.6	60.5
293D Martinsville	W296AF	CP	C VA	136.1 316.5	71.1 BPFT-20100824AAP	36 43 30.0 79 54 12.0	0.000 106	0.0 393	1.9 Bible Broadcasting Network	60.6	68.7
291C3 Jefferson	WMMY	LIC	NCN NC	227.0 46.3	138.7 BLH-20000104ABR	36 19 53.0 81 35 17.0	10.500 155	62.7 1226	42.5 High Country Adventures	64.1	78.8
292D Bassett Forks	W292DF	LIC	C VA	143.0 323.3	79.7 BLFT-20070328AFG	36 36 48.0 79 55 04.0	0.010 233	0.2 493	8.3 Educational Information Co.	69.8	70.9

Terrain database is 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.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside protected contour.

W292CU Proposed
Latitude: 37-11-13.40 N
Longitude: 080-27-21.10 W
ERP: 0.045 kW
Channel: 290D
Frequency: 105.9 MHz
AMSL Height: 783.6 m
Horiz. Pattern: Omni
Prop Model : FCC

Graham Brock, Inc. - Broadcast Technical Consultants

WBRW
BLH-19960906KZ
Latitude: 37-11-12 N
Longitude: 080-28-54 W
ERP: 12.00 kW
Channel: 287D
Frequency: 105.3 MHz
AMSL Height: 753.0 m
Horiz. Pattern: Directional
Prop Model : FCC

WBRW 108.5 dBu (50/50)

W292CU

WBRW

W292CU site

Blacksburg

Merrimac

Montgomery

37-10-00 N

37-15-00 N

EXHIBIT B2
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Scale 1:75,000

0 1 2 3 km

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EXHIBIT B3

Predicted contour:

N. Lat. = 37 11 13.4 - Tabulated Protected and Interfering Contour Data
W. Lng. = 80 27 21.1 - W292CU FM Translator - Christiansburg, Virginia

HAAT and Distance to Contour - NGDC 30 Second terrain database

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	40-F1	54-F1	100-F1	148.5-F1
000	674.0	109.6	0.0450	-13.47	1.000	8.86	29.64	12.40	0.47	0.002
010	662.2	121.4	0.0450	-13.47	1.000	9.31	31.20	13.01	0.47	0.002
020	668.6	115.0	0.0450	-13.47	1.000	9.07	30.38	12.68	0.47	0.002
030	663.6	120.0	0.0450	-13.47	1.000	9.26	31.03	12.94	0.47	0.002
040	629.2	154.4	0.0450	-13.47	1.000	10.53	35.22	14.78	0.47	0.002
050	580.2	203.4	0.0450	-13.47	1.000	12.08	40.13	17.85	0.47	0.002
060	617.3	166.3	0.0450	-13.47	1.000	10.97	36.50	15.71	0.47	0.002
070	574.2	209.4	0.0450	-13.47	1.000	12.25	40.73	18.16	0.47	0.002
080	563.0	220.6	0.0450	-13.47	1.000	12.56	41.88	18.72	0.47	0.002
090	532.8	250.8	0.0450	-13.47	1.000	13.35	44.61	20.02	0.47	0.002
100	556.9	226.7	0.0450	-13.47	1.000	12.72	42.47	19.01	0.47	0.002
110	580.9	202.7	0.0450	-13.47	1.000	12.06	40.05	17.81	0.47	0.002
120	599.7	183.9	0.0450	-13.47	1.000	11.53	38.21	16.79	0.47	0.002
130	624.9	158.7	0.0450	-13.47	1.000	10.69	35.69	15.18	0.47	0.002
140	649.5	134.1	0.0450	-13.47	1.000	9.77	32.81	13.66	0.47	0.002
150	656.8	126.8	0.0450	-13.47	1.000	9.50	31.88	13.28	0.47	0.002
160	632.2	151.4	0.0450	-13.47	1.000	10.42	34.88	14.61	0.47	0.002
170	631.2	152.4	0.0450	-13.47	1.000	10.46	35.00	14.67	0.47	0.002
180	629.2	154.4	0.0450	-13.47	1.000	10.53	35.23	14.78	0.47	0.002
190	623.3	160.3	0.0450	-13.47	1.000	10.75	35.86	15.29	0.47	0.002
200	614.0	169.6	0.0450	-13.47	1.000	11.08	36.83	15.93	0.47	0.002
210	608.1	175.5	0.0450	-13.47	1.000	11.28	37.42	16.30	0.47	0.002
220	591.2	192.4	0.0450	-13.47	1.000	11.77	39.03	17.25	0.47	0.002
230	577.6	206.0	0.0450	-13.47	1.000	12.16	40.39	17.98	0.47	0.002
240	567.6	216.0	0.0450	-13.47	1.000	12.43	41.41	18.49	0.47	0.002
250	581.3	202.3	0.0450	-13.47	1.000	12.05	40.01	17.78	0.47	0.002
260	580.5	203.1	0.0450	-13.47	1.000	12.07	40.09	17.83	0.47	0.002
270	545.2	238.4	0.0450	-13.47	1.000	13.03	43.56	19.53	0.47	0.002
280	544.0	239.6	0.0450	-13.47	1.000	13.06	43.68	19.58	0.47	0.002
290	564.4	219.2	0.0450	-13.47	1.000	12.52	41.73	18.65	0.47	0.002
300	614.3	169.3	0.0450	-13.47	1.000	11.07	36.80	15.91	0.47	0.002
310	643.6	140.0	0.0450	-13.47	1.000	9.99	33.54	13.98	0.47	0.002
320	664.5	119.1	0.0450	-13.47	1.000	9.23	30.92	12.90	0.47	0.002
330	670.7	112.9	0.0450	-13.47	1.000	8.99	30.10	12.57	0.47	0.002
340	648.9	134.7	0.0450	-13.47	1.000	9.79	32.88	13.70	0.47	0.002
350	664.1	119.5	0.0450	-13.47	1.000	9.24	30.97	12.92	0.47	0.002

AMSL= 783.6 M