

TECHNICAL STATEMENT
NEW(FM) TRANSLATOR
FCC FORM 349
BUFORD, WYOMING, CH. 295D
MARY MEDICUS
MARCH 2013

This FCC “Long Form” 349 application is being submitted in response to DA 13-283 released February 26, 2013 regarding Non-Mutually exclusive Tech Box proposals outside Spectrum Limited Markets, or “Singleton” applications for new Auction 83 FM translator stations. This application is response to an original application filed by Mary Medicus, BNPFT-20030317LVW, facility ID 157875, for a new FM translator for Buford, WY on channel 295D. This application is listed in “Attachment A” of DA 13-283, report No. AUC-03-83D.

No technical changes are being proposed from the original application that would change the proposed coverage contours of this station. The only change being proposed is a change in the input station proposed to be rebroadcast. Since this translator will not be used to provide “fill-in” service, a change in the proposed input station will not be a factor.

This application proposes service on channel 295D (106.9 Mhz) from an existing non-registered tower located at the NAD 27 coordinates of N 41° 04’ 42”, W 105° 11’ 59”. The existing tower has an overall height of 31 meters. The proposed antenna will be a Nicom Model BKG 77, one bay, with circular polarization, mounted at the 13 meters above ground center of radiation, and 2388 meters height above mean sea level. An effective radiated power of 0.034 kilowatts (34 watts), both horizontal and vertical polarization will be utilized.

Figure 1 is a detailed channel interference study conducted at the proposed site. As can be seen, there will not be any outgoing prohibited overlap with any other stations on Co-channel or pertinent adjacent channels.

Figure 2 is a tabulation for the standard translator 12 radials, average heights above average terrain for each radial, and the distances to pertinent contours for the proposed operation on channel 295D.

Since no changes are being made to the original proposed operation, an LPFM “preclusion” study is not be submitted with this application.

This application will not overlap with any other proposed FM translator applications submitted in “Auction 83”.

It was determined that this form 349 FM translator application will comply with all of the technical requirements under part C.F.R. 74 of the Commission’s rules and regulation.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

NEW FM TRANSLATOR, BUFORD, WY, CH. 295D

REFERENCE 41 04 42.0 N. CH# 295D - 106.9 MHz, Pwr= 0.034 kW, HAAT= 169.1 M, COR= 2388 M DISPLAY DATES
105 11 59.0 W. Average Protected F(50-50)= 10.33 km DATA 03-20-13
SEARCH 03-20-13
Omni-directional

CH CITY	CALL	TYPE STATE	ANT AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
295D Buford	651392 *	APP _C_ WY	0.0 0.0	0.00 BNPFT20030317LVW	41 04 42.0 105 11 59.0	0.034 169	35.5 2388	10.7 Mary Medi cus	-46.3*	-46.3*
296D Laramie	K296BO	LIC _CN WY	308.9 128.7	28.33 BLFT19810724IA	41 14 16.0 105 27 48.0	0.080 244	19.1 2661	12.7 Laramie Pl ains Antenna Tv	2.6	8.5
294CO Denver	KBPI	LIC _CX CO	181.2 1.2	149.44 BLH20080602ADJ	39 43 58.0 105 14 08.0	100.000 408	128.3 2318	85.5 Citi casters Li censes, Inc.	8.2	44.4
296C Bennett	KDHT-FM	LIC NC_ CO	140.7 321.5	165.23 BMLH20081028ABZ	39 55 22.0 103 58 18.0	97.000 624	138.6 2109	93.5 Max Radi o Of Denver Lic	13.8	52.5
298D Laramie	K298AE	LIC DC_ WY	310.0 129.8	26.79 BLFT20010717AAR	41 13 58.0 105 26 42.0	0.040 302	0.4 2724	12.1 Western Inspi rational Broa	19.5	13.9
292A Cheyenne	KLEN	LIC NCX WY	95.2 275.4	31.04 BLH20051114AFQ	41 03 09.0 104 49 55.0	6.000 99	1.6 1977	15.8 Townsquare Medi a Cheyenne	16.7	14.6
296D Cheyenne	K296FZ	LIC _C_ WY	77.1 257.5	41.12 BLFT20090415ADM	41 09 34.0 104 43 19.0	0.250 45	10.1 1882	7.1 Mit chell A. Beranek	18.3	15.2
295C3 Mistatare	KHYY	LIC NCX NE	54.5 235.4	152.28 BLH20080725ADA	41 51 50.0 103 42 20.0	25.000 28	99.8 1270	22.7 Legacy Communi cations, Li c	38.5	84.0
295C Casper	KASS	LIC _C_ WY	334.0 153.3	206.58 BLH19980220KD	42 44 37.0 106 18 31.0	100.000 538	157.6 2496	60.7 Mt. Rushmore Broadcasing,	39.4	110.1
297D Loveland	K297AK	LIC DC_ CO	178.6 358.6	64.95 BLFT20080811ABV	40 29 37.0 105 10 53.0	0.010 349	0.2 2096	10.3 Mountain Communi ty Transla	51.6	53.0
292D Ft. Collins	631545	APP DE_ CO	178.6 358.6	64.98 BNPFT20030312ADN	40 29 36.0 105 10 52.0	0.006 332	0.0 2078	0.2 Educati onal Communi cations	51.8	61.3
298A Wheatland	KPAD	LIC _CX WY	7.8 187.9	82.78 BLH20090507ABX	41 49 00.0 105 03 48.0	0.530 333	1.6 2084	19.5 Brahmin Broadcasing Corpo	68.7	60.4
297C3 Albin	KKAW	LIC NC_ WY	63.3 244.1	104.04 BLH20001201ABA	41 29 31.0 104 05 07.0	9.300 162	2.9 1719	28.8 Brahmin Broadcasing Corpo	87.6	69.2
298C Lakewood	KQKS	LIC _C_ CO	178.9 358.9	153.54 BLH19991214ABI	39 41 45.0 105 09 54.0	100.000 365	11.0 2081	76.2 Lincol n Financi al Medi a Co	129.4	76.8
296D Aurora	KDHT-FM3	LIC DC_ CO	169.8 350.0	158.25 BLFTB20050729DSZ	39 40 31.0 104 52 22.0	20.000 1766	62.6 1766	42.0 Max Radi o Of Denver Lic	82.2	96.1
298D Wheatland	K298AY	LIC DV_ WY	10.2 190.3	108.95 BLFT20080325AHQ	42 02 37.0 104 58 01.0	0.095 18	0.4 1483	4.1 Robert R. Rule D.b.a. Rule	96.0	104.4
293A Wheatland	KRKU	LIC _CX WY	10.6 190.8	110.06 BLH20091228AFC	42 03 07.0 104 57 13.0	0.100 6	0.7 1462	5.6 Lorenz E. Proietti	96.8	104.0
292C2 Kremmling	KIFT	LIC NHX CO	219.8 39.1	137.95 BLH20051114AFN	40 07 12.0 106 14 13.0	50.000 150	2.7 2695	26.5 Nrc Broadcasing Mountai n	126.1	106.3
292C2 Kremmling	KIFT	RSV-A _ CO	223.5 42.7	141.81	40 08 51.0 106 20 49.0	50.000 150	2.7 2623	26.5 Nrc Broadcasing Mountai n	130.2	108.5
292D Granby	KIFT-FM1	LIC DC_ CO	208.6 28.1	131.09 BLFTB20090331ATN	40 02 24.0 105 56 11.0	0.400 2534	0.7 2534	6.0 Nrc Broadcasing Mountai n	119.9	121.0
292D Fraser	KIFT-FM7	LIC DV_ CO	202.7 22.3	136.05 BLFTB20070711AFO	39 56 49.0 105 48 57.0	0.400 2629	1.4 2629	8.0 Nrc Broadcasing Mountai n	123.4	127.7
292C3 Brush	KPRB	LIC NCX CO	126.6 307.5	159.11 BLH20080903ABD	40 13 02.0 103 41 46.1	7.000 76	2.7 1401	27.1 Northeast Colorado Broadca	143.7	131.2
292D Steamboat Springs	KIFT-FM2	LIC DV_ CO	242.4 61.4	147.56 BLFTB20061116ADJ	40 27 16.0 106 44 34.0	0.420 3165	0.0 3165	3.4 Nrc Broadcasing Mountai n	139.6	137.9
297C2 Hayden	KQZR	LIC _C_ CO	251.3 70.0	187.42 BLH20000731ACV	40 31 16.0 107 17 46.0	29.000 198	2.8 2252	23.5 Nrc Broadcasing Mountai n	177.3	138.4
292D Empire	KIFT-FM3	LIC DV_ CO	198.7 18.3	150.32 BLFTB20061215AAO	39 47 42.0 105 45 49.0	0.150 3818	0.0 3818	2.5 Nrc Broadcasing Mountai n	138.6	146.3

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT (M)	INT(km) COR (M)	PRO(km) LICENSEE	Page # 2 *IN* (Overlap in km)	*OUT*
298C2 Rawl ins	KPAD	CP	NCX WY	289.4 108.0	193.40 BPH20100127AAK	41 38 08.0 107 23 22.0	8.000 342	5.0 2603	54.0 Brahmin Broadcasting Corpo	183.2	139.2
292D Dillon	KIFT-FM5	LIC	_C_ CO	204.6 24.0	178.53 BLFTB20121031AAG	39 36 50.0 106 04 02.0	0.400	1.4 2863	8.0 Nrc Broadcasting Mountain	166.1	163.5
292D Eagle	KIFT-FM6	LIC	DV_ CO	218.8 37.9	201.77 BLFTB20090317ADS	39 39 20.0 106 40 39.0	0.920	1.6 2841	20.8 Nrc Broadcasting Mountain	190.9	173.8
294C1 Ogal lala	AL6539	RSV-A	____ NE	87.6 269.9	294.46 RM11246*	41 08 02.0 101 41 42.0	100.000 299	103.1 1311	70.7	178.5	203.9
295C0 Clifton	KMZK	LIC	_CX CO	243.6 61.2	360.22 BLH20110425AAI	39 34 52.0 108 57 36.0	100.000 440	167.6 2690	68.8 Charles D. Hall	184.7	264.0
295C2 Pueblo	KIQN	LIC	_CX CO	169.3 349.8	335.60 BLH20050107AAQ	38 06 22.0 104 29 18.0	27.500 203	136.3 1710	55.7 United States Cp, LIC	185.9	235.3
292C2 Widfield	KKLI	LIC	_CN CO	173.6 353.8	260.70 BLH19901205KE	38 44 41.0 104 51 46.0	1.600 678	2.7 2933	59.3 Capstar Tx LIC	244.6	200.5
296C3 Aspen	KPVW	LIC	_C_ CO	217.9 36.8	246.47 BMLH20121107AEE	39 18 56.0 106 57 32.0	20.500 110	33.3 2682	21.6 Entravision Holdings, LIC	203.8	210.6
296L1 Colorado Springs	KWIR-LP	LIC	____ CO	170.4 350.7	243.70 BLL20080227ACX	38 54 48.0 104 43 48.0	0.007 110	4.1 2094	2.9 Rocky Mountain Calvary Cha	226.2	220.5
293C1 Ogal lala	KMCX-FM	LIC	_CN NE	87.6 269.9	294.46 BLH19820520AC	41 08 02.0 101 41 42.0	100.000 96	5.5 1121	48.7 Capstar Tx LIC	276.1	240.7
294C1 Superior	KMRZ-FM	LIC	_CX WY	278.0 95.4	331.79 BLH20080801ARA	41 25 28.0 109 07 54.0	7.000 482	80.4 2664	53.9 Big Thicket Broadcasting C	246.0	270.8
296C Spearfish	KSLT	LIC	_CX SD	16.7 197.6	377.96 BLH20111026AEX	44 19 42.0 103 50 03.0	100.000 579	116.4 2290	78.5 Bethesda Christian Broadca	248.7	279.3
295L1 Salida	KHEN-LP	LIC	____ CO	193.7 13.1	289.59 BLL20070223AEL	38 32 29.9 105 59 11.1	0.100	18.6 2322	5.6 Tenderfoot Transmitting, I	258.9	249.9

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding
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.

* Associated application to this Long Form 349 application.

Contour.out

N. Lat. = 410442.0 W. Lng. = 1051159.0
HAAT and Distance to Contour,
FCC, FM 2-10 Mi, 51 pts Method - NGDC 30 SEC

FIGURE 2, DISTANCE TO CONTOURS

Azi.	AV EL	HAAT	dBk	60-F5	40-F1
000	2204.7	183.3	-14.69	10.76	35.71
030	2105.0	283.0	-14.69	13.28	44.22
060	2109.4	278.6	-14.69	13.17	43.90
090	2120.7	267.3	-14.69	12.89	43.06
120	2130.5	257.5	-14.69	12.65	42.31
150	2118.5	269.5	-14.69	12.95	43.22
180	2169.6	218.4	-14.69	11.69	39.00
210	2260.6	127.4	-14.69	8.88	29.72
240	2320.9	67.1	-14.69	6.41	21.42
270	2380.4	7.6	-14.69	4.27	13.63
300	2384.1	3.9	-14.69	4.27	13.63
330	2320.4	67.6	-14.69	6.44	21.50

Ave EI = 2218.73 M HAAT= 169.27 M AMSL= 2388.0