

TECHNICAL STATEMENT
KMPB BRECKENRIDGE, COLORADO, CHANNEL 214A
COMMUNITY RADIO OF NORTHERN COLORADO
FCC FORM 340
JULY 2013

This Technical Statement is prepared on behalf of Community Radio of Northern Colorado. It is proposing to minor change the licensed operation of KMPB, facility ID 176149, currently operating on channel 204A at Breckenridge, Colorado. It seeks to one step channel change to the equivalent class channel 214A and increase from 0.3 Kilowatts to 0.6 Kilowatts Effective Radiated Power, with circular polarization. The antenna Center of Radiation will remain at 3246 Meters, Height Above Mean Sea Level, and minus 76 meters Height Above Average Terrain and operate from the same tower location as it is currently licensed to operate from.

The new operation was evaluated for compliance with all of the Commission technical rules and regulations for Non-Commercial FM broadcast stations.

Compliance with Section 73.509 in regards to interference to other stations was determined as follows:

Figure 1 – Channel Interference Study. Shows compliance with interference contours towards other stations.

Figure 2 – Predicted 60 dbμ principle coverage contour for compliance with community coverage.

The application was determined to meet or exceed all of the technical requirements for an FM Non-Commercial Station set for by the Commission.

FIGURE 1, DETAILED CHANNEL INTERFERENCE STUDY, CH. 214A

KMPB BRECKENRIDGE, COLORADO

REFERENCE CH# 214A - 90.7 MHz, Pwr= 0.6 kW, HAAT= -76.0 M, COR= 3246 M
 39 29 44.0 N. Average Protected F(50-50)= 8.92 km
 106 01 44.0 W. Omni-directional

DISPLAY DATES
 DATA 07-18-13
 SEARCH 07-18-13

CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (in km)
214A Minturn	KVNC	LIC DEX CO	290.5 110.3	38.54 BLED20100128AIM	39 36 58.0 106 26 58.0	0.140 -241	18.1 2727	6.0 Community Radio For	4.9	1.7 Northe
215A Leadville	KTOL	LIC _C_ CO	218.8 38.7	37.19 BLED20080606AAR	39 14 05.0 106 17 59.0	0.450 -207	11.7 3083	8.3 Educational Communi	16.6	16.4 cations
214A Estes Park	KENC	LIC DEX CO	24.1 204.4	105.43 BMLLED20130109AGF	40 21 38.0 105 31 12.0	0.200 13	9.1 2730	2.8 Community Radio For	67.6	22.3 Northe
212A Fraser	KPOY	LIC _CX CO	19.9 200.0	53.34 BLED20110715AED	39 56 49.0 105 48 57.0	0.400 -307	1.4 2635	8.0 Cedar Cove Broadcasting, I	22.9	43.8
216CO Morrison	KLDV	LIC _CX CO	80.4 260.9	71.36 BLED20060803AOY	39 36 00.0 105 12 35.0	100.000 356	5.5 2448	38.5 Educational Media Foundati	53.0	27.4
212C3 Salida	KADE	APP _CX CO	190.0 9.9	84.50 BPED20121029ACX	38 44 45.0 106 11 52.0	1.500 334	2.6 3303	53.8 Cedar Cove Broadcasting, I	71.1	28.8
213C2 Carbondale	KVOV	LIC DCX CO	266.2 85.3	115.69 BLED20040913AAA	39 25 08.0 107 22 10.0	0.450 775	73.1 3227	47.4 Public Broadcasting Of Col	31.6	50.5
211C1 Denver	KCFR-FM	LIC _CY CO	68.4 248.9	71.80 BLED19851115KB	39 43 49.0 105 14 59.0	50.000 277	2.7 2333	26.5 Public Broadcasting Of Col	52.1	33.3
217C3 Gypsum	KLRY	LIC _CX CO	294.2 113.7	76.68 BLED20051109AAM	39 46 30.0 106 50 45.0	0.110 859	0.7 3361	32.2 Educational Media Foundati	55.0	42.8
213CO Colorado Springs	KTLF	LIC _VX CO	129.3 310.0	130.92 BLED20040225AAB	38 44 43.0 104 51 39.0	20.000 673	65.7 2923	43.5 Educational Communi	56.7	53.2 cations
217C2 Salida	KTPF	LIC _C_ CO	179.2 359.2	116.45 BLED20070817ACM	38 26 48.0 106 00 36.0	0.390 900	1.4 3567	50.9 Educational Communi	104.5	64.0 cations
214A Longmont	KGUD	LIC _CN CO	44.8 225.4	117.35 BLED19821018AU	40 14 24.0 105 03 19.0	0.100 82	27.7 1613	8.7 Longmont Communi	64.9	78.2 ty Radio
215CO Chugwater	KLWV	LIC _CX WY	13.4 193.8	207.40 BLED20040621ABR	41 18 39.0 105 27 12.0	100.000 361	105.0 2765	68.5 Educational Media Foundati	71.5	90.3
211C2 Hayden	KHCO	LIC _VX CO	330.1 149.7	122.75 BLED20091125AGK	40 27 04.0 106 45 06.0	1.800 522	2.5 3140	32.2 Educational Media Foundati	87.0	88.8
213C3 Fort Collins	KCSU-FM	LIC _CN CO	30.9 211.5	143.48 BLED19850124LR	40 36 00.0 105 09 21.0	10.000 -108	26.8 1613	18.1 Board Of Governors Of The	88.7	88.7
212A Crested Butte	KBUT	CP _CX CO	231.2 50.6	104.82 BPED20120423ABG	38 54 07.0 106 58 21.0	1.000 -208	1.6 2969	10.2 Crested Butte Mountain Edu	94.3	93.0
212A Crested Butte	KBUT	LIC _CN CO	231.3 50.7	104.78 BLED19981125KH	38 54 11.0 106 58 23.0	0.225 -194	1.1 2985	6.9 Crested Butte Mountain Edu	94.8	96.2
215A Paonia	KVNF	LIC _CX CO	244.4 63.3	156.98 BLED20050826AAJ	38 52 28.0 107 39 40.0	2.600 -22	50.2 2120	29.1 North Fork Valley Public R	100.8	110.2
215A Rifle	KRJX	LIC _CX CO	268.6 87.4	166.88 BLED20120507AAJ	39 26 33.0 107 58 01.0	3.000 3	48.5 2242	13.2 Educational Communi	108.1	111.3 cations
216A Gunnison	KWSB-FM	LIC _CN CO	215.3 34.8	132.12 BLED19850430LR	38 31 22.0 106 54 28.0	0.135 91	0.8 2627	6.1 Western State College Of C	121.7	116.8
215C3 Rye	KRWA	LIC _CX CO	152.3 332.9	194.09 BLED20110307ABR	37 56 40.0 104 59 56.0	10.000 35	26.8 2577	18.1 Way Media, Inc.	158.4	134.3
268C Strasburg	KJHM	LIC NCY CO	74.2 255.6	182.68 BMLH20081028ABX	39 55 22.0 103 58 18.0	97.000 625	0.0 2109	0.0 Max Radio Of Denver Lic	29.0R	154.2M
214A Placerville	KTEI	LIC _HX CO	225.8 44.6	237.53 BLED20071012AOD	37 59 30.0 107 58 21.0	0.250 449	74.4 3359	24.5 Educational Communi	155.1	179.8 cations
06Z2 Des Moines	616943	AP _HN NM	147.5 328.8	357.49 BPRM20011009AEH	36 45 48.0 103 52 12.0	0.000	1.6 0	59.6 Sierra Grande Broadcasting	187.0R	171.0M
211A Laramie	KUWL	LIC _CX WY	13.4 193.7	207.28 BLED20080303AIZ	41 18 36.0 105 27 17.0	0.110 295	0.7 2699	14.7 Uni versi ty Of Wyomi	175.6	187.1 ng

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FI LE #	LAT LNG	PWR(kW) HAAT (M)	INT(km) COR (M)	PRO(km) LI CENSEE	Page # 2 *IN* (Overl ap in km)	*OUT*
217C2 Grand Junction	KMSA	CP _CX CO		259.3 77.6	239.40 BPED20100319ADZ	39 03 56.0 108 44 52.0	3.100 407	3.6 2204	60.4 Col orado Mesa	224.0	177.1 Uni versi ty
212C2 Grand Junction	KLFV	LIC _CX CO		259.3 77.6	239.30 BLED20031118AAP	39 03 57.0 108 44 48.0	3.000 399	3.6 2196	59.9 Educational Media Foundati	224.0	177.5
217C2 Grand Junction	KMSA	LIC _CX CO		259.3 77.6	239.34 BLED20070823ACH	39 03 58.0 108 44 50.0	3.000 388	3.6 2185	59.6 Col orado Mesa	224.0	177.9 Uni versi ty
213A Brush	KBEI	LIC _CX CO		66.2 247.7	221.71 BLED20120221ABO	40 16 30.0 103 38 33.0	1.000 56	21.6 1370	14.2 Educational	181.0	194.6 Communi cations
214A Sterling	KDRE	LIC _VX CO		63.0 244.9	284.20 BLED20051006AAI	40 36 56.0 103 02 02.0	1.600 154	79.2 1447	26.7 Educational Media Foundati	184.7	227.1
212C2 Cheyenne	KWYC	LIC _CX WY		34.5 215.5	233.60 BLED20100511ABH	41 13 01.0 104 26 53.0	20.500 130	4.0 1848	38.9 Calvary Chapel Of Twin Fal	202.1	192.9
215A Alamosa	KASF	LIC _C_ CO		176.6 356.7	224.98 BLED20010419AAA	37 28 20.0 105 52 39.0	1.100 27	14.5 2316	10.4 Adams State College	200.0	202.1
212A Ouray	KTOW	CP _CX CO		221.3 40.3	217.35 BNPED20071018AWW	38 00 57.0 107 39 59.0	3.000 -764	1.6 2521	13.2 Educational	206.6	202.3 Communi cations
267C1 Wal senburg	KFEZ«	LIC _C_ CO		144.3 325.3	232.20 BLH20090105AGJ	37 47 20.0 104 29 12.0	95.500 305	0.0 2095	0.0 Edward Magnus	22.0R	210.7M
217C3 Brush	KLZV	LIC _CX CO		71.9 253.7	245.91 BLED20070927AIN	40 08 56.0 103 17 04.0	6.000 129	3.1 1526	32.4 Educational Media Foundati	225.2	211.7
268C2 Fruita	KGJX«	LIC _C_ CO		259.3 77.6	239.21 BLH20120917AFH	39 04 00.0 108 44 45.0	3.150 418	0.0 2215	0.0 Kbdx Lic	15.0R	224.7M
211C1 Red River	KCEI	CP DCX NM		179.8 359.8	292.60 BPED20130424ABT	36 51 34.0 106 01 02.0	2.050 739	3.0 3335	57.9 Cul tural Energy	279.0	233.0
211C1 Ignacio	KUTE	LIC DVN CO		213.3 32.3	281.80 BLED19980717KA	37 21 51.0 107 46 56.0	3.000 599	1.6 3029	12.2 Kute, Inc.	270.4	247.4
217C2 Ignacio	KSUT	LIC _CX CO		206.7 25.8	286.41 BLED20100713AGQ	37 11 03.0 107 29 06.0	2.000 497	2.5 2713	30.7 Kute, Inc.	273.6	249.5
213A Dul ce	KCIE	LIC DEN NM		196.7 16.1	290.77 BLED19901001KA	36 59 00.0 106 58 12.0	0.100 468	15.3 2757	10.8 Jicari lla Apache Tribe	264.7	264.2

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= - Zone 2, 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)
« = Station meets FCC minimum distance spacing for its class.

FIGURE 2, PREDICTED 60 DBU CONTOUR
KMPB BRECKENRIDGE, COLORADO, CH. 214A

Coverage Study - NGDC 30 SEC
07-18-2013

KMPB CH214 A , 0.6 kW, -76.0M HAAT, 3246.0M COR AMSL
Service Contour = 60 dBu. Population = 27,168

