

TECHNICAL STATEMENT  
K300AE BRECKENRIDGE, COLORADO  
MOUNTAIN COMMUNITY TRANSLATORS, LLC  
MINOR CHANGE APPLICATION  
AUGUST 2023

This Technical Statement is to support a minor change application for FM translator station K300AE Breckenridge, CO, facility ID 12331. K300AE is currently silent under Special Temporary Authorization (“STA”) number 0000204424 as extended by 0000216156. This authority expires on October 13, 2023. K300AE is also part of a pending assignment application with K206EO Granite, Wyoming, facility ID 155323, file number 0000218139. This application is being filed contingent upon this assignment.

K300AE currently suffers from same channel interference from KBPI(FM) Fort Collins, Colorado operating on Channel 300C1. Figure 1 is a detailed channel interference study conducted at the currently licensed site for K300AE operating on channel 300D. Figure 2 documents that the 40 dB $\mu$  interference contour of KBPI(FM) completely encompasses the 60 dB $\mu$  contour of K300AE.

K300AE seeks to relocate to an existing 18 meter non-registered tower site located at the coordinates N 39° 37’ 48.6”, W 106° 02’ 51.1” NAD 83. It is proposing to use a one bay Nicom BKG77 non-directional antenna system with a height 15 meters Above Ground and 2789 meters Above Mean Sea Level. It is proposing to operate with 0.02 Kilowatts (20 watts) Effective Radiated Power with circular polarization. Figure 3 is a detailed channel interference study of channel 300D conducted at this new proposed site. Figure 4 shows that at this new site the 40 dB $\mu$  interference contour of KBPI(FM) would still completely encompass the 60 dB $\mu$  contour of K300AE. Figure 5 shows the 40 dB $\mu$  interference contour of KLNK-LP Minturn, Colorado, facility ID 131946 at the proposed site for K300AE.

Since K300AE is receiving interference from the same channel operations of KBPI(FM) and KLNK-LP, K300AE is seeking to change channels to non-adjacent channel 263A. This change of channels is permitted under Section 74.1233 (a)(1)(i)(A)(2) upon a showing of interference to or from any other broadcast station, remedial changes to any same-band frequency.

Figure 6 documents that Channel 263D would be available for use by K300AE at its proposed site. It shows that there is no prohibitive overlap with any same or adjacent channel stations, and that there is no incoming interference contour overlap with any other stations.

Figure 7 shows the present and proposed 60 dB $\mu$  contours for K300AE. It documents that the two contours will substantially overlap as required for a minor change application as specified in Section 74.1233(a)(1)(i)(B).

Figure 8 shows that the proposed primary station to be rebroadcast, KBKV(FM) Breckenridge, Colorado, facility ID 767308 operating on channel 204A, 60 dB $\mu$  contour will completely encompass the proposed 60 dB $\mu$  contour of K300AE operating on channel 263D.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY. CH. 300D

REFERENCE		CH# 300D - 107.9 MHz, Pwr= 0.023 kW, HAAT= -51.7 M, COR= 3229 M							DISPLAY DATES		
39 29 46.90 N.		K300AE BRECKENRIDGE, CO							DATA 08-01-23		
106 01 46.00 W.		Average Protected F(50-50)= 3.87 km							SEARCH 08-02-23		
		Omni-directional									
CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
300D Breckenridge	K300AE	LIC _CN CO	0.0 281.6	0.00 BLFT20130521ADS	39 29 46.90 106 01 46.00	0.023 -52	3229	---Reference--- Educational Media Foundati			
300D Breckenridge	K300AE	STA _CN CO	0.0 281.6	0.00 0000204424	39 29 46.90 106 01 46.00	0.023 -52	3229	---Reference--- Educational Media Foundati			
300C1 Fort Collins	KBPI	LIC NCN CO	24.2 204.7	170.68 BLH20180212AAK	40 53 41.60 105 11 51.30	100.000 266	178.9 2221	76.7 -20.7* Ihm Licenses, LLC		54.9	
300L1 Minturn	KLNX-LP	LIC _CN CO	293.4 113.1	39.02 BLL20060627AEO	39 38 04.90 106 26 49.10	0.028 55	2974	-7.1* Minturn Public Radio		15.4	
300L1 Leadville	KLEV-LP	LIC _CN CO	218.9 38.8	36.49 BLL20030307AAJ	39 14 26.90 106 17 45.00	0.100 -86	3074	13.6 Colorado, State Of, Teleco		18.4	
300L1 Kremmling	KRLG-LP	LIC _CN CO	333.3 153.1	70.35 BLL20030225AAG	40 03 40.90 106 24 04.10	0.100 -97	2258	23.5R Colorado, State Of, Teleco		46.9M	
300C Grand Junction	KBKL	LIC NCN CO	259.3 77.6	239.43 BLH20140313AAQ	39 03 55.90 108 44 54.40	100.000 453	210.1 2245	99.1 25.0 Townsquare License, LLC		127.6	
300L1 Eagle	KEAE-LP	LIC _CN CO	284.1 103.6	71.23 BLL20040713AAN	39 38 58.90 106 50 04.10	0.100 -229	2021	23.5R Colorado, State Of, Teleco		47.7M	
300D Denver	K300CP	LIC DCN CO	72.3 252.9	93.53 BLFT20141202ACM	39 44 51.00 104 59 22.90	0.250	41.8 1796	11.2 44.4 Hope Media Group		68.4	
298C Lakewood	KQKS	LIC _CN CO	73.0 253.6	77.44 BLH19991214ABI	39 41 44.90 105 09 55.90	100.000 365	3.2 2081	31.0 66.7 Audacy License, LLC		46.1	
300L1 Aspen	KASP-LP	LIC _CN CO	247.1 66.6	77.92 BLL20021125AAM	39 13 17.90 106 51 41.10	0.100 -279	2368	23.5R Colorado, State Of, Teleco		54.4M	
300C0 Pueblo	KBPL	LIC ZCN CO	129.4 310.1	130.89 BLH20180212AAI	38 44 40.90 104 51 47.90	32.000 674	70.3 2928	21.8 57.1 Ihm Licenses, LLC		72.8	
300L1 Carbondale	KBDL-LP	LIC _CN CO	263.8 83.0	102.13 BLL20020814AAR	39 23 26.90 107 12 29.10	0.100 -238	1903	78.7 Colorado, State Of, Teleco		84.1	
297C2 Hayden	KQZR	LIC _CN CO	317.0 136.1	157.01 BLH20000731ACV	40 31 15.90 107 17 48.20	29.000 198	6.9 2252	58.9 136.9 Alwaysmountaintime, LLC		97.7	
299D Glenwood Springs	K299AC	LIC DCN CO	274.2 93.4	110.98 0000205852	39 33 43.30 107 19 02.90	0.100 65	2.9 2218	2.0 101.3 Public Broadcasting Of Col		103.0	
297D Colorado Springs	K297BQ	LIC DCN CO	128.2 308.9	129.53 0000213470	38 46 15.00 104 51 22.20	0.250	1.1 2145	7.1 124.6 Mountain Radio Group, Inc.		117.1	
298C1 Olathe	KSUF	LIC NCN CO	229.6 48.6	188.40 BMLED20150623AAI	38 23 15.00 107 40 28.20	20.000 531	7.1 2909	64.9 177.4 Montrose Christian Broadca		118.8	

Terrain database is GLOBE 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 restricted contour.

« = Station meets FCC minimum distance spacing for its class.

FIGURE 2 - INTERFERENCE CONTOUR WITH KBPI(FM)  
K300AE BRECKENRIDGE, CO

FMCommander Single Allocation Study - 08-02-2023 - GLOBE 30 Sec  
K300AE's Overlaps (In= -20.72 km, Out= 54.95 km)

K300AE CH 300 D  
Lat= 39 29 46.90, Lng= 106 01 46.00  
0.023 kW -51.7 m HAAT, 3229 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

KBPI CH 300 C1 73.215 N BLH20180212AAK  
Lat= 40 53 41.60, Lng= 105 11 51.30  
100.0 kW 266 m HAAT, 2221 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

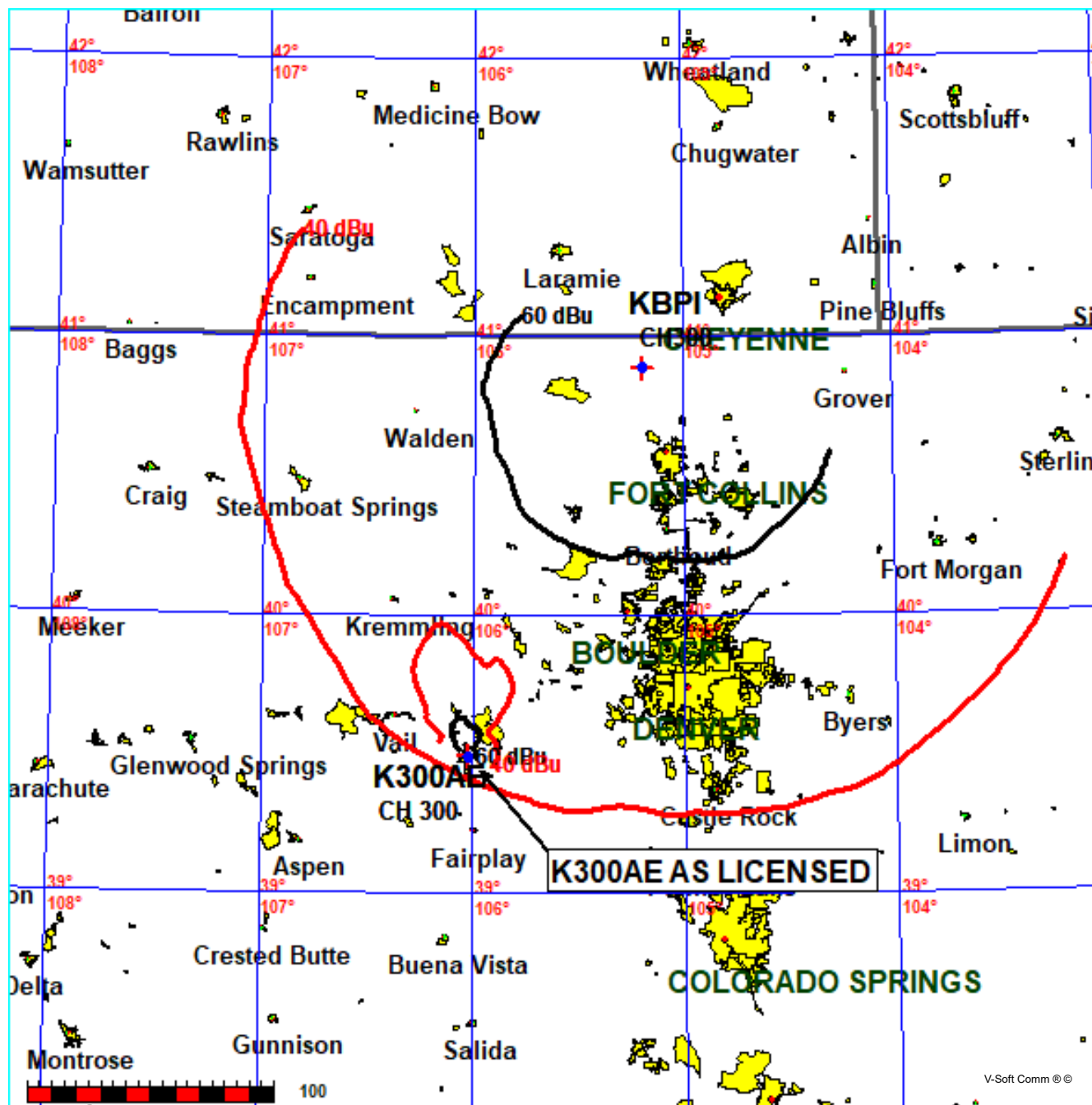


FIGURE 3 - DETAILED CHANNEL INTERFERENCE STUDY, CH. 300D

REFERENCE		CH# 300D - 107.9 MHz, Pwr= 0.02 kW, HAAT= -345.4 M, COR= 2789 M		K300AE BRECKENRIDGE, CO		Average Protected F(50-50)= 3.74 km		Omni-directional		DISPLAY DATES	
39 37 48.60 N.										DATA 08-01-23	
106 02 51.10 W.										SEARCH 08-02-23	
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*
300D Breckenridge	K300AE	LIC _CN CO		174.0 354.1	14.93 BLFT20130521ADS	39 29 46.90 106 01 46.00	0.023 -52	3229	---Reference--- Educational Media Foundati		
300D Breckenridge	K300AE	STA _CN CO		174.0 354.1	14.93 0000204424	39 29 46.90 106 01 46.00	0.023 -52	3229	---Reference--- Educational Media Foundati		
300C1 Fort Collins	KBPI	LIC NCN CO		26.9 207.4	157.95 BLH20180212AAK	40 53 41.60 105 11 51.30	100.000 266	178.9 2221	76.6 -24.9* Ihm Licenses, LLC		69.3
300L1 Minturn	KLNX-LP	LIC _CN CO		271.0 90.7	34.29 BLL20060627AEO	39 38 04.90 106 26 49.10	0.028 55	2974	-12.4* Minturn Public Radio		9.3
300L1 Kremmling	KRLG-LP	LIC _CN CO		327.9 147.7	56.63 BLL20030225AAG	40 03 40.90 106 24 04.10	0.100 -97	2258	23.5R Colorado, State Of, Teleco		33.1M
300L1 Leadville	KLEV-LP	LIC _CN CO		206.3 26.1	48.22 BLL20030307AAJ	39 14 26.90 106 17 45.00	0.100 -86	3074	25.9 Colorado, State Of, Teleco		30.6
300C Grand Junction	KBKL	LIC NCN CO		255.7 74.0	241.11 BLH20140313AAQ	39 03 55.90 108 44 54.40	100.000 453	210.2 2245	99.3 27.2 Townsquare License, LLC		129.6
298C Lakewood	KQKS	LIC _CN CO		84.2 264.8	76.03 BLH19991214ABI	39 41 44.90 105 09 55.90	100.000 365	3.2 2081	31.0 69.1 Audacy License, LLC		44.7
300L1 Eagle	KEAE-LP	LIC _CN CO		272.1 91.6	67.58 BLL20040713AAN	39 38 58.90 106 50 04.10	0.100 -229	2021	44.7 Colorado, State Of, Teleco		49.9
300D Denver	K300CP	LIC DCN CO		81.5 262.1	91.67 BLFT20141202ACM	39 44 51.00 104 59 22.90	0.250	43.2 1796	12.5 44.7 Hope Media Group		66.2
300L1 Aspen	KASP-LP	LIC _CN CO		237.2 56.7	83.47 BLL20021125AAM	39 13 17.90 106 51 41.10	0.100 -279	2368	61.2 Colorado, State Of, Teleco		65.8
300C0 Pueblo	KBPL	LIC ZCN CO		133.6 314.3	141.88 BLH20180212AAI	38 44 40.90 104 51 47.90	32.000 674	71.7 2928	23.0 66.5 Ihm Licenses, LLC		81.3
300L1 Carbondale	KBDL-LP	LIC _CN CO		255.4 74.7	103.28 BLL20020814AAR	39 23 26.90 107 12 29.10	0.100 -238	1903	81.0 Colorado, State Of, Teleco		85.6
297C2 Hayden	KQZR	LIC _CN CO		313.4 132.6	145.39 BLH20000731ACV	40 31 15.90 107 17 48.20	29.000 198	6.9 2252	58.8 130.7 Alwaysmountaintime, LLC		86.2
299D Glenwood Springs	K299AC	LIC DCN CO		266.4 85.6	109.34 0000205852	39 33 43.30 107 19 02.90	0.100 65	3.0 2218	2.1 102.6 Public Broadcasting Of Col		101.7
297D Loveland	K297AK	LIC DVN CO		37.2 217.8	121.01 BLFT20150605ABL	40 29 36.90 105 10 54.90	0.250	0.0 2191	2.8 117.2 Ihm Licenses, LLC		117.8
298C1 Olathe	KSUF	LIC NCN CO		226.0 45.0	197.20 BMLED20150623AAI	38 23 15.00 107 40 28.20	20.000 531	6.9 2909	63.0 186.5 Montrose Christian Broadca		128.8

Terrain database is GLOBE 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 restricted contour.  
 « = Station meets FCC minimum distance spacing for its class.

FIGURE 4 - KBPI(FM) INTERFERENCE CONTOUR  
K300AE BRECKENRIDGE, CO

FMCommander Single Allocation Study - 08-02-2023 - GLOBE 30 Sec  
K300AE's Overlaps (In= -24.93 km, Out= 69.35 km)

K300AE CH 300 D

Lat= 39 37 48.60, Lng= 106 02 51.10

0.02 kW -345.4 m HAAT, 2789 m COR

Prot.= 60 dBu, Intef.= 40 dBu

KBPI CH 300 C1 73.215 N BLH20180212AAK

Lat= 40 53 41.60, Lng= 105 11 51.30

100.0 kW 266 m HAAT, 2221 m COR

Prot.= 60 dBu, Intef.= 40 dBu

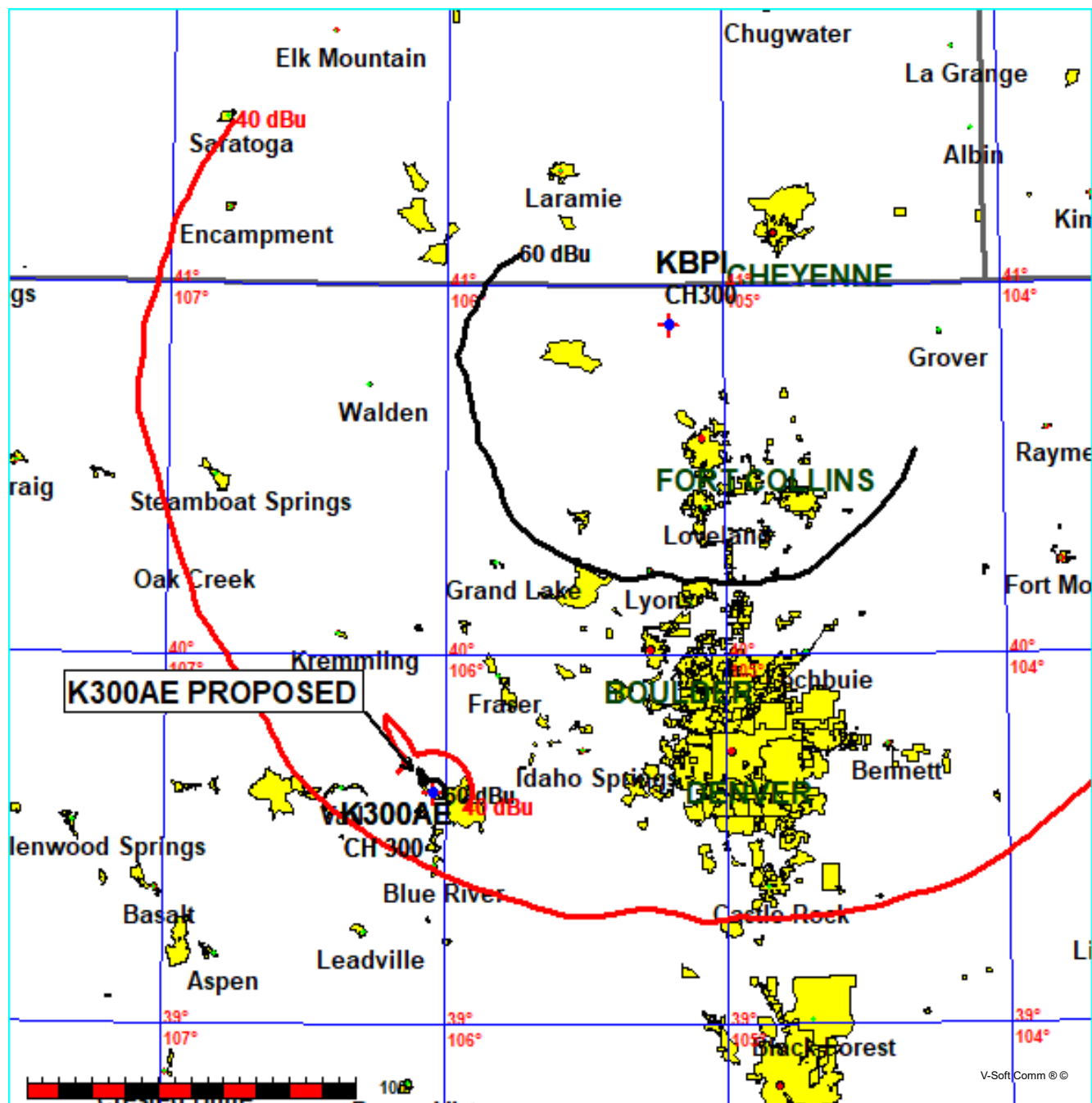


FIGURE 5 - KLNZ-LP INTERFERENCE CONTOUR  
K300AE BRECKENRIDGE, CO

FMCommander Single Allocation Study - 08-02-2023 - GLOBE 30 Sec  
K300AE's Overlaps (In= -12.42 km, Out= 9.3 km)

K300AE CH 300 D

Lat= 39 37 48.60, Lng= 106 02 51.10

0.02 kW -345.4 m HAAT, 2789 m COR

Prot.= 60 dBu, Intef.= 40 dBu

KLNZ-LP CH 300 L1 BLL20060627AEO

Lat= 39 38 04.90, Lng= 106 26 49.10

0.028 kW 55 m HAAT, 2974 m COR

Prot.= 60 dBu, Intef.= 40 dBu

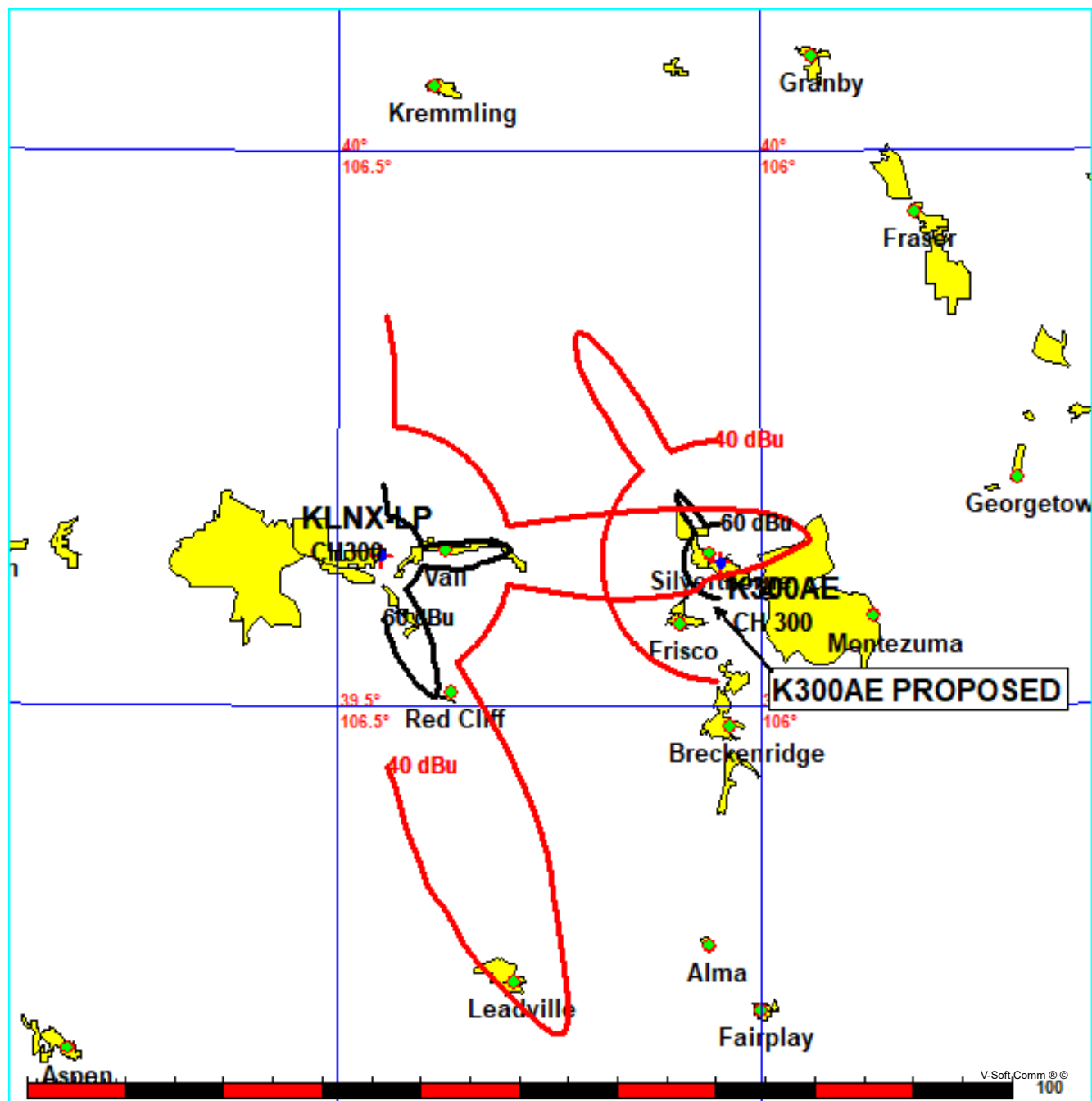


FIGURE 6 - DETAILED CHANNEL INTERFERENCE STUDY, CH. 263D

K300AE BRECKENRIDGE, CO

REFERENCE  
39 37 48.60 N.  
106 02 51.10 W.CH# 263D - 100.5 MHz, Pwr= 0.02 kW, HAAT= -345.4 M, COR= 2789 M  
Average Protected F(50-50)= 3.74 km  
Omni-directionalDISPLAY DATES  
DATA 08-01-23  
SEARCH 08-02-23

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
263A El Jebel	KGHT	LIC NCN CO		246.2 65.6	85.89 BMLH20100816AAX	39 18 55.90 106 57 34.20	6.000 90	78.5 2682	17.0 Roaring Fork Broadcasting	6.5	51.6
261A Dotsero	DKKVC	VAC ____ CO		271.8 91.1	86.84	39 38 58.95 107 03 32.18	6.000 100	4.4 2438	55.2 From CDBS	78.1	30.3
262C0 Denver	KIMN	LIC DCN CO		85.9 266.4	71.36 BLH20151223ADT	39 40 24.30 105 13 04.40	100.000 344	19.9 2364	13.5 Kse Radio Ventures, LLC	47.7	37.1
266C0 Denver	KOSI	LIC DCN CO		85.9 266.4	71.36 BLH20180420AAZ	39 40 24.30 105 13 04.50	100.000 341	1.6 2364	14.2 Bonneville International C	66.0	40.6
264D Denver	K264BO	LIC DCN CO		80.7 261.3	70.47 BLFT20160802ABP	39 43 44.90 105 14 09.90	0.099	8.0 2262	5.6 Klz Radio, Inc.	58.8	56.3
264C Pueblo	KGFT	LIC ZCN CO		133.5 314.3	141.96 BMLH20010216AAB	38 44 43.00 104 51 40.90	78.000 676	78.7 2930	50.9 Bison Media, Inc	59.6	61.3
260C Pueblo	KVUU	LIC _CN CO		133.5 314.3	141.88 BLH19990311KF	38 44 44.00 104 51 43.90	79.000 670	5.6 2922	49.3 Ihm Licenses, LLC	132.6	62.9
263D Canyon Valley	K263AC	LIC _HN CO		323.8 143.3	114.97 BLFT20170817AAJ	40 27 42.90 106 51 00.20	0.250	43.0 2526	12.6 Don J. Tlappek	64.2	73.4
266D Aspen	K266AK	LIC _CN CO		235.6 55.1	80.08 BLFT20051019AAZ	39 13 16.00 106 48 49.10	0.010 254	0.2 3198	3.5 Soli Deo Gloria FM, LLC	76.1	72.3
261D Aspen	K261EG	LIC DHN CO		235.6 55.1	80.08 BLFT20161031AAK	39 13 16.00 106 48 49.10	0.025	0.0 3193	1.3 Roaring Fork Broadcasting	76.3	78.4
260D Arvada	K260AL	LIC DCN CO		59.7 240.2	84.90 BLFT20101126AAW	40 00 42.90 105 11 18.00	0.250 -34	1.1 1655	7.0 Public Broadcasting Of Col	80.1	77.6
260D Aspen	K260BZ	LIC DVN CO		238.6 58.0	87.16 BLFT20161024ABC	39 13 07.90 106 54 35.10	0.023 -171	0.0 2656	1.6 Pitkin County Translator D	83.4	81.6
264C1 Cheyenne	KOLT-FM	LIC NCN WY		31.5 212.2	185.61 BLH20080625AAB	41 02 54.90 104 53 29.90	100.000 202	98.9 2103	67.2 Ihm Licenses, LLC	83.0	112.6
261D Basalt	K261AK	LIC _CN CO		251.4 70.7	95.07 BLFT20110419AAB	39 21 09.90 107 05 35.20	0.006 129	0.2 2542	8.3 Pitkin County Translator D	91.2	84.8
265D Carbondale	K265CS	LIC DHN CO		259.0 78.2	116.52 BLFT20050607ADB	39 25 23.90 107 22 34.10	0.015 807	0.1 3247	7.0 Pitkin County Translator D	112.7	100.3
261D Glenwood Springs	K261AI	LIC _HN CO		266.5 85.7	109.29 BLFT278	39 33 47.90 107 19 01.10	0.008 -221	0.2 2220	3.0 Marc A Adler & Marvin L Sc	105.3	106.0
264C1 Grand Junction	KKVT	LIC _CN CO		255.7 74.0	240.83 BLH20061025ADV	39 03 59.30 108 44 43.30	30.000 475	126.9 2252	86.7 Mbc Grand Broadcasting, In	110.2	148.6
260C3 Laporte	KKPL	LIC _CN CO		27.7 208.3	163.33 0000168064	40 55 40.50 105 08 35.70	12.000 146	4.8 2129	48.5 Townsquare Media Of Ft. Co	154.6	113.1
266D Colorado Springs	K266CK	LIC DCN CO		129.3 310.1	129.60 BLFT20171102AAH	38 53 09.90 104 53 25.90	0.099	0.2 2213	2.7 Bison Media, Inc.	125.7	126.5

Terrain database is GLOBE 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)



FIGURE 7 - PRESENT AND PROPOSED 60 DBU  
K300AE BRECKENRIDGE, CO

Coverage Study - GLOBE 30 Sec  
08-02-2023

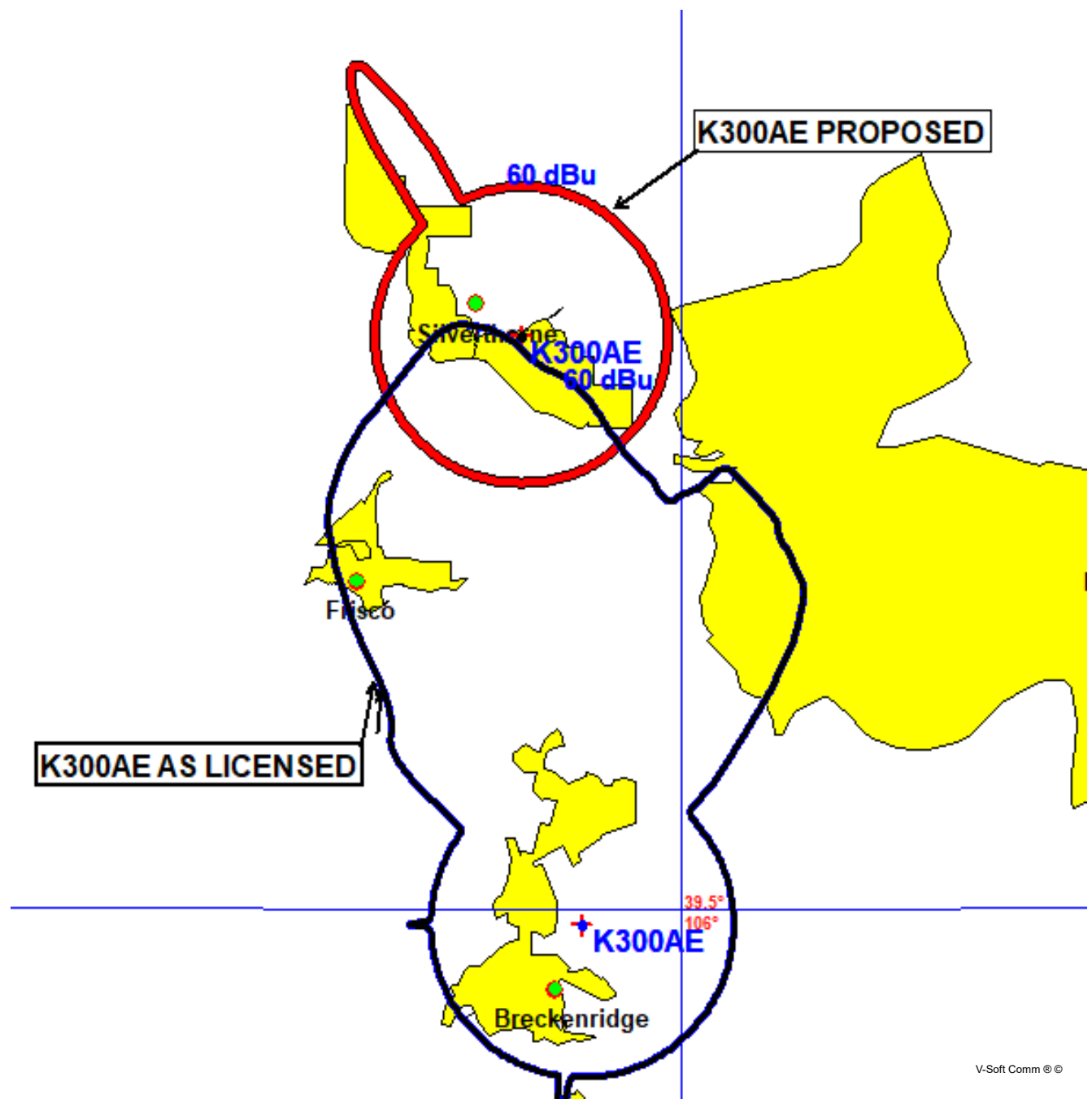


FIGURE 8 - FILL-IN MAP WITH KBKV(FM)  
K300AE BRECKENRIDGE, CO

Coverage Study - GLOBE 30 Sec  
08-02-2023

