

TECHNICAL STATEMENT
K267CD LOVELAND, COLORADO
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
APRIL 2016

This Technical Statement is made in support of a minor change application for FM translator station, K267CD Loveland, Colorado, facility ID 158249. K267CD seeks to relocate its current authorization to a new site, and remain a fill-in translator for KVAM(AM) Loveland, Colorado, facility ID 35517. The following will show that the new proposed operation of K267CD will meet all of the Commissions technical requirements for an FM translator station.

The proposed operation of K267CD specifies a maximum Effective Radiated Power of 0.04 kilowatts. It will operate with a directional antenna with an “off the shelf” type antenna, or a Scala CA-5/CP with circular polarization. The antenna will be mounted on an existing tower with an over height of 27 meters above the ground. The antenna will be mounted with a Center of Radiation of 13 meters above the ground, and 2083 meters Above Mean Sea Level. The coordinates of this tower are located at N 40° 29’ 37”, W 105° 10’ 53”, NAD 27.

Figure 1 is a detailed interference study conducted on channel 267D with these new proposed facilities. It shows that the new operation of K267CD will not cause any interference to any existing or proposed FM stations on any of the pertinent same channel or adjacent channels to channel 267, with the exception of KOLT-FM Cheyenne, Wyoming on channel 264C1, facility ID 30225, and K269EQ Loveland, Colorado, facility ID 140256. No actual interference will be cause to either of these 2nd and 3rd

adjacent channel stations since the proposed worst case 100 dB μ interference contour will not cover any population. See the predicted 100 dB μ interference contour map at Figure 2. The applicant, Mountain Community Translators, LLC, respectfully requests a waiver of C.F.R. 74.1204(d) of the Commission's rules based on the fact that there is no population within the area of predicted interference. There are no homes nearby the proposed existing tower site, which is a privately owned 40 acre square wooded area, with private access. The transmitter building is uninhabited and does not have indoor plumbing. Should any unforeseen actual interference be caused, the licensee will immediately cease broadcasting with K267CD until such interference can be eliminated.

Figure 3 is the directional antenna data for the proposed Scala HDCA-10 antenna system proposed to be used.

Figure 4 shows the present and proposed 60 dB μ contour for K267BU. There will be overlap between the two as required.

The proposed operation of K267CD Loveland will be considered a “Fill-In” operation for KVAM(AM) Loveland, Colorado. KVAM(AM) operates with 7 kilowatts daytime with a non-direction antenna system on 1570 kHz. Figure 5 shows that the proposed 60 dB μ contour for the proposed K267CD will not extend beyond the daytime 2.0 mV/m contour of KVAM. It will also not extend beyond a 25 miles radius from the KVAM tower site. Since this is a “Fill-In” translator, the maximum ERP will not exceed the maximum permissible ERP of 250 watts in any azimuth.

It was found that the new proposed operation of K267CD Loveland, Colorado on channel 267D, will satisfy all of the required commission rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K267CD LOVELAND, CO, CH. 267D

REFERENCE
40 29 37.0 N.
105 10 53.0 W.CH# 267D - 101.3 MHz, Pwr= 0.04 kW DA, HAAT= 337.4 M, COR= 2083 M
Average Protected F(50-50)= 15.08 km
Standard DirectionalDISPLAY DATES
DATA 04-19-16
SEARCH 04-19-16

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*
267D Laramie	K267BU**	LIC DV_ WY	318.1 138.0	18.49 BLFT20150813ACC	40 37 02.0 105 19 40.0	0.250 2587	75.8 16.9	Mountain Community Transla	-60.7	-27.3**
266C Denver	KOSI	LIC DC_ CO	183.1 3.1	85.03 BLH20150622AFR	39 43 44.0 105 14 08.0	100.000 513	110.5 2280	Bonnevillie International C	-30.5*	1.1
267D Loveland	K267CD	LIC DH_ CO	217.7 37.7	10.18 BLFT20160318ACD	40 25 16.0 105 15 18.0	0.001 1960	21.0 0.6	Mountain Community Transla	-18.0*	-27.3
268C Strasburg	KJHM	LIC NCX CO	121.3 302.1	120.93 BMLH20141014ACF	39 55 22.0 103 58 18.0	97.000 625	138.3 2109	Max Radio Of Denver Lic	-23.6*	17.9
269D Loveland	K269EQ	LIC _C_ CO	0.0 0.0	0.00 BLFT201110103AAQ	40 29 37.0 105 10 53.0	0.010 338	0.2 2085	Mountain Community Transla	-6.0*	-10.7*
264C1 Cheyenne	KOLT-FM	LIC NC_ WY	21.5 201.7	66.32 BLH20080625AAB	41 02 55.0 104 53 28.0	100.000 202	9.6 2103	Citicasters Licenses, Inc.	51.1	-3.6*
268D Laramie	K267BU	CP DC_ WY	318.2 138.1	18.38 BPFT20151026AAL	40 37 00.0 105 19 36.0	0.005 2545	10.7 6.0	Mountain Community Transla	2.5	5.8
267C0 Bri dgeport	KOZY-FM	LIC _C_ NE	36.7 217.6	187.81 BLH20010827AAD	41 50 23.0 103 49 36.0	100.000 339	163.2 1630	Legacy Communications, Llc	18.6	100.0
270D Greel ey	K280EQ	CP DV_ CO	106.5 286.7	28.45 BPFT20160129AYN	40 25 15.0 104 51 35.0	0.020 1571	0.3 5.3	Cedar Cove Broadcasting, I	22.4	22.1
268D Commerce City	KJHM-FM1	LIC DC_ CO	163.8 344.0	94.59 BLFTB20050802ABY	39 40 31.0 104 52 22.0	20.000 84	60.1 1766	Max Radio Of Denver Lic	28.4	43.5
270C2 Burns	KIGN	LIC _CN WY	31.7 212.1	81.63 BMLH19950920KD	41 07 01.0 104 40 07.0	50.000 150	5.1 1963	Townsquare Media Cheyenne	70.9	35.4
269D Boul der	K269AE	LIC ?HN CO	182.7 2.7	59.25 BLFT221	39 57 38.0 105 12 52.0	0.103 -58	0.7 1747	Kse Radio Ventures, Llc	49.7	46.4
268D Commerce City	KJHM-FM6	CP DV_ CO	155.7 336.0	83.13 BNPFTB20130815AAL	39 48 39.0 104 46 52.0	8.000 11	6.6 1635	Max Radio Of Denver Lic	70.5	60.9
268D Cheyenne	K268BX	LIC _C_ WY	24.0 204.2	78.17 BLFT20130514ACH	41 08 09.0 104 48 07.0	0.250 5	10.1 1879	Brahmin Broadcasting Corpo	62.4	62.9
266D Cheyenne	K277BP	CP _C_ WY	24.0 204.2	78.17 BPFT20160129ACJ	41 08 09.0 104 48 07.0	0.250 1874	10.1 7.1	Cedar Cove Broadcasting, I	62.4	62.9
264D Granby	K264B0	LIC DC_ CO	183.1 3.1	85.00 BLFT20160211ACO	39 43 45.0 105 14 08.0	0.099 2262	0.7 21.5	Mountain Community Transla	75.3	63.3
268D Gol den	K268CK	LIC DC_ CO	183.1 3.1	84.97 BLFT20131101AJL	39 43 46.0 105 14 08.0	0.002 2251	11.0 7.0	Mary Medicus	65.0	69.5
270C3 Centenni al	KXWA	LIC NC_ CO	174.7 354.8	123.58 BLH20071207AAY	39 23 07.0 105 02 52.0	9.500 163	5.5 2226	Way Media, Inc.	109.8	65.1
270D Granby	K270AL	LIC DC_ CO	232.0 51.5	81.61 BLFT20120118AES	40 02 24.0 105 56 11.0	0.250 -165	0.3 2530	Al waysmountai ntime, Llc	71.3	74.7
268D Denver	KJHM-FM3	CP DV_ CO	164.0 344.2	87.01 BNPFTB20130430ACQ	39 44 24.0 104 54 05.0	0.750 8	3.6 1644	Max Radio Of Denver Lic	76.2	73.5
268D Greenwood Vill age	KJHM-FM5	CP DV_ CO	154.5 334.8	94.32 BNPFTB20130430ACU	39 43 35.0 104 42 23.0	6.500 64	8.4 1762	Max Radio Of Denver Lic	79.5	74.5
268D Gl endal e	KJHM-FM4	CP DV_ CO	166.7 346.8	89.34 BNPFTB20130430ACS	39 42 38.0 104 56 25.0	0.100 29	1.7 1675	Max Radio Of Denver Lic	80.2	76.6
269D Evergreen	K269CL	LIC DHN CO	185.5 5.4	97.07 BLFT19950811TB	39 37 24.0 105 17 24.0	0.035 354	0.0 2646	Citi casters Licenses, Inc.	87.8	87.0
269C1 Eagl e	KSKE-FM	LIC ZC_ CO	239.1 58.1	161.43 BLH20050915ADE	39 44 18.0 106 47 58.0	12.000 667	6.4 3171	Al waysmountai ntime, Llc	145.5	90.1
264D Dill on	K264AG	LIC _C_ CO	217.8 37.2	120.92 BLFT20060314AAU	39 37 51.0 106 02 47.0	0.240 -356	1.1 2790	Mountain Community Transla	109.3	113.6

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	Page # 2 *IN* (Overlap in km)	*OUT*
264C Pueblo	KGFT	LIC ZCY CO		171.9 352.1	196.05 BMLH20010216AAB	38 44 43.0 104 51 39.0	78.000 676	8.6 2930	85.5 Bison Media, Inc	179.4	110.5
266D Fort Morgan	K266BB	LIC _V_ CO		103.2 284.2	129.85 BLFT20070220AAI	40 13 02.0 103 41 46.0	0.099 36	9.4 1360	6.5 First Ventures Capital Par	114.5	114.4

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. Call signs with strikeout need not be protected.
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.

* No actual interference will be caused to second and third adjacent channel stations K269EQ and KOLT-FM since the proposed 100 dbu interference contour will not cover any population. See the Technical Statement for more details.

** K267BU Laramie, WY is no longer operating on channel 267. It has built out its Construction Permit on channel 268, BPFT-20151026AAL and has a pending license application BPFT-20151026AAL. Thus, this record can be ignored.

FIGURE 2 - PREDICTED 100 DBU INTEFERENCE CONTOUR
K267CD LOVELAND, CO, CH. 267D

Coverage Study - NGDC 30 SEC
04-19-2016

K267CD CH267 D , 0.04 kW, 337.4m HAAT, 2083.0m COR AMSL
Interference Contour = 100 dBu. Population = 0

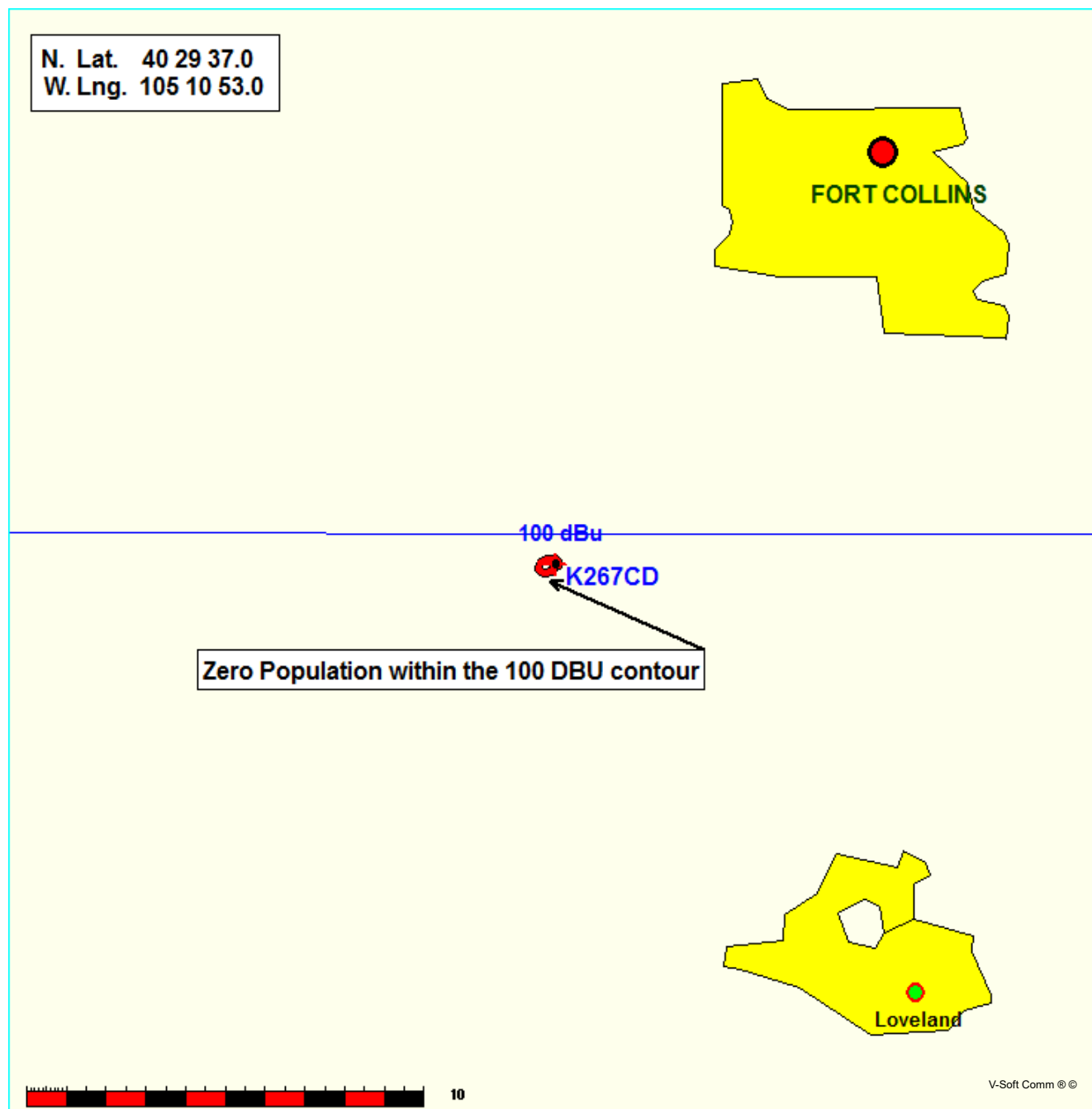


FIGURE 3 K267CD Loveland,
Colorado Directional
Antenna Data Scala CA-5-CP

04-19-2016

RMS(V) = .432

Graph is Relative Field

Azi	Field	dBk	kW
000	0.187	-28.543	0.001
010	0.171	-29.319	0.001
020	0.140	-31.057	0.001
030	0.123	-32.181	0.001
040	0.135	-31.373	0.001
050	0.160	-29.897	0.001
060	0.182	-28.778	0.001
070	0.193	-28.268	0.001
080	0.182	-28.778	0.001
090	0.160	-29.897	0.001
100	0.135	-31.373	0.001
110	0.123	-32.181	0.001
120	0.140	-31.057	0.001
130	0.171	-29.319	0.001
140	0.187	-28.543	0.001
150	0.181	-28.826	0.001
160	0.157	-30.061	0.001
170	0.142	-30.934	0.001
180	0.134	-31.437	0.001
190	0.190	-28.404	0.001
200	0.329	-23.635	0.004
210	0.528	-19.527	0.011
220	0.718	-16.857	0.021
230	0.866	-15.229	0.030
240	0.952	-14.407	0.036
250	1.000	-13.979	0.040
260	0.952	-14.407	0.036
270	0.866	-15.229	0.030
280	0.718	-16.857	0.021
290	0.528	-19.527	0.011
300	0.329	-23.635	0.004
310	0.190	-28.404	0.001
320	0.134	-31.437	0.001
330	0.142	-30.934	0.001
340	0.157	-30.061	0.001
350	0.181	-28.826	0.001

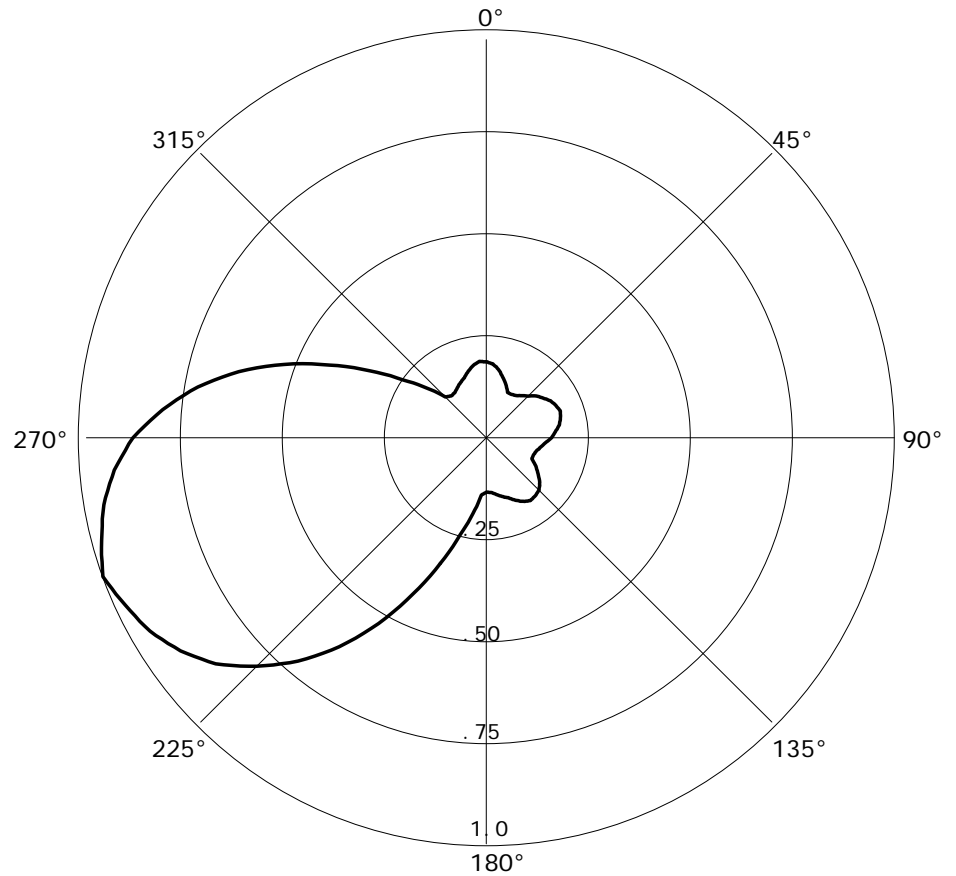
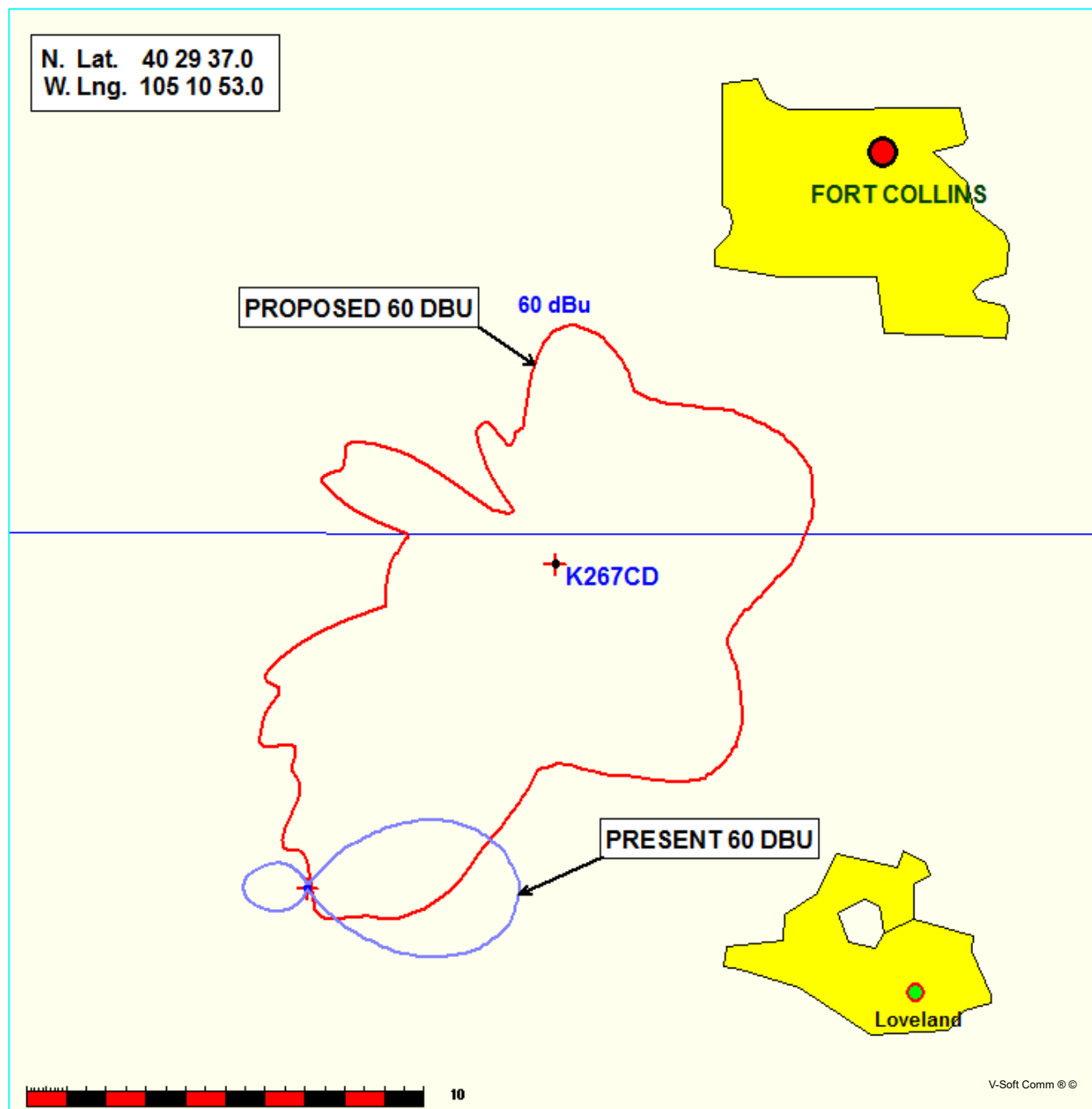


FIGURE 4 - PRESENT AND PROPOSED 60 DBU
K267CD LOVELAND, CO, CH. 267D

Coverage Study - NGDC 30 SEC
04-19-2016



K267CD

BLFT20110103AAQ

Latitude: 40-29-37 N

Longitude: 105-10-53 W

ERP: 0.04 kW

Channel: 267

Frequency: 101.3 MHz

AMSL Height: 2083.0 m

Elevation: 1997.205 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: None

**FIGURE 5 FILL-IN MAP
KVAM(AM) WITH K267CD
LOVELAND, CO**