

TECHNICAL STATEMENT
K228EZ FORT COLLINS, COLORADO 228D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
FEBRUARY 2011

This Technical Statement is in support of FCC form 349 filed by Mountain Community Translators, LLC for a minor change in the licensed facility of K228EZ Buford, Wyoming, facility ID 157751. It is proposing to relocate its current licensed tower site to an existing site, tower registration 1271533, located at N. $40^{\circ} 32' 47''$, W. $105^{\circ} 11' 53''$, NAD 27, with a decrease in Effective Radiated Power to 36 watts and utilizing a Nicom model BKG-1/P, one bay, directional vertical only dipole type antenna system. It also proposes to change its community of license from Buford, Wyoming to Fort Collins, Colorado. The antenna will be mounted at the 25.1 meter level on a 30 meter overall tower, with a Center of Radiation at 2198 Above Mean Sea Level, with the main lobe directed at 340 degrees.

Figure 1 shows a channel interference study conducted from the proposed site for K228EZ. It shows that the proposed operation of K228EZ on channel 228D, will not cause any prohibited outgoing interference to any licensed or proposed FM services, with the exception of KCWA Loveland, Colorado operating on channel 230A, facility ID 9761.

The proposed operation of K228EZ on 228D is located within the protected 60 dB μ contour of 2nd adjacent station KCWA. Figure 2 shows the predicted F(50-50) field strength of KCWA at the proposed K228EZ transmitter site is 77.8 dB μ . Therefore, the

respective predicted interfering contour F(50-10) generated by the proposed K228EZ on channel 228D is an additional 40 dB μ or 117.8 dB μ .

Figure 3 shows the coverage area for the worse case 100 dB μ interference contour F(50-10) and shows that there is no population in the area of interference. 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 area, with private access. The transmitter building is uninhabited and does not have indoor plumbing.

Figure 4 shows the antenna polar plot of the proposed directional antenna.

Figure 5 shows that the proposed operation of K228EZ will 60 dB μ overlap with the currently licensed operation of K228EZ as required.

Figure 6 shows the proposed 60 dB μ of K228EZ will be completely contained inside of the current 60 dB μ predicted coverage contour of the station being rebroadcast, KGCO Fort Collins, Colorado on channel 202A, facility ID 84102. The proposed operation of K228EZ will be considered a “fill-in” translator for KGCO, thus some of the maximum allowable ERP limits on some of the pertinent radials will be exceeded. However, the maximum ERP on any radial will not exceed 250 watts, thus this proposed operation is in compliance with 74.1235(a).

Figure 7 is a tabulation of the distance to contours for the pertinent contours used in this study for the proposed K228EZ.

It was concluded that the new proposed operation of K228EZ Fort Collins, Colorado on channel 228D will not cause any harmful interference to any existing stations, and will be in full compliance with the commission's rules.

FIGURE 1, DETAILED CHANNEL STUDY K288EZ FORT COLLINS, CO, CHANNEL 228D CH# 228D - 93.5 MHz, Pwr= 0.036 kW DA, HAAT= 382.1 M, COR= 2198 M Average Protected F(50-50)= 15.61 km Standard Directional											
REFERENCE		CH#		228D		- 93.5 MHz, Pwr= 0.036 kW DA, HAAT= 382.1 M, COR= 2198 M		DISPLAY DATES		DATA 02-05-11	
40 32 47.0 N.								SEARCH 02-06-11			
105 11 53.0 W.											
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR (kW)	INT (km)	PRO (km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT (M)	COR (M)	LICENSEE	(Overlap	in km)
228D	K228EZ *	LIC DC_		359.5	58.9	41 04 35.0	0.250	71.2	20.3	-28.2	-25.3 *
Buford		WY		179.5	BLFT20100811CSG	105 12 15.0		2432	Mountain Community Transla		
228D	K228EZ *	CP DV_		305.9	13.5	40 37 03.0	0.250	54.1	15.1	-90.0	-15.9 *
Buford		WY		125.8	BPFT20101005ACI	105 19 39.0		2583	Mountain Community Transla		
227C1	KTCL	LIC DCX		182.1	90.4	39 43 59.0	71.000	114.1	76.1	-28.5 <	3.9
Wheat Ridge		CO		2.0	BLH20070621AQR	105 14 10.0	346	2256	Citicasters Licenses, Inc.		
230A	KCWA **	LIC ZCX		166.5	6.0	40 29 37.0	0.580	1.6	16.8	-1.3<	-10.8 **
Loveland		CO		346.5	BLH20101214ACL	105 10 53.0	319	2098	Way Media, Inc.		
225D	631551	APP DE_		166.3	6.1	40 29 36.0	0.010	0.2	5.1	0.3	0.1
Windsor		CO		346.4	BNPFT20030312AEB	105 10 52.0		2078	Educational Communications		
230D	631544	APP DE_		166.3	6.1	40 29 36.0	0.010	0.1	2.1	0.5	3.9
Windsor		CO		346.4	BNPFT20030312ADM	105 10 52.0		2078	Educational Communications		
225C2	KOLT-FM	LIC _CX		359.6	58.9	41 04 35.0	33.000	7.5	55.9	34.0	2.5
Warren Afb		WY		179.6	BLH20070131ABW	105 12 10.0	185	2404	Joli A. Lofstedt, Chapter		
229D	631534	APP DE_		160.6	36.1	40 14 24.0	0.100	13.1	9.2	17.4	16.7
Berthoud		CO		340.6	BNPFT20030312ADC	105 03 23.0		1637	Educational Communications		
229C3	KAZY	LIC _CX		32.9	78.0	41 08 04.0	25.000	35.6	22.7	23.7	27.2
Cheyenne		WY		213.2	BLH20060615AAH	104 41 32.0	35	1859	Freisland Broadcasting Cor		
225D	631529	APP DE_		160.6	36.1	40 14 24.0	0.100	0.2	4.8	30.5	31.2
Longmont		CO		340.6	BNPFT20030312ACQ	105 03 23.0		1637	Educational Communications		
229D	K229BT	LIC DH_		194.1	54.3	40 04 20.0	0.090	14.1	9.3	35.2	34.8
Estes Park		CO		14.0	BLFT20101126AAU	105 21 12.0		2425	Cedar Cove Broadcasting, I		
225D	631576	APP DE_		113.8	43.2	40 23 19.0	0.050	0.1	2.5	36.9	40.5
Kersey		CO		294.2	BNPFT20030312AWS	104 43 56.0		1528	Educational Communications		
228L1	KOCA-LP	LIC ____		339.3	91.1	41 18 48.0	0.100	18.6	5.6	56.6	46.2
Laramie		WY		159.1	BLL20021223AAQ	105 35 00.0		2218	La Radio Montanesa: Voz De		
230D	644473	APP _C_		140.4	60.7	40 07 28.1	0.115	0.8	13.0	54.3	47.6
Fort Lupton		CO		320.7	BNPFT20030317GEL	104 44 36.1		1630	Radio Assist Ministry, Inc		
229D	K229AC	LIC _E_		203.3	69.3	39 58 22.0	0.028	8.3	4.5	56.2	50.1
Ward		CO		23.1	BLFT20061218ACR	105 31 13.0		2655	Boulder Community Broadcas		
231D	K231AA	LIC _CN		182.8	64.6	39 57 54.0	0.205	1.0	13.4	58.0	51.2
Boulder		CO		2.7	BLFT19960111TK	105 14 05.0	-133	1719	Citicasters Licenses, Inc.		
230D	630344	APP _C_		144.5	65.3	40 04 05.0	0.170	0.9	13.0	58.6	52.2
Fort Lupton		CO		324.7	BNPFT20030317AZW	104 45 08.0		1611	Horizon Christian Fellowsh		
226C3	1170083	APP _HX		277.8	115.3	40 40 42.0	25.000	6.3	52.4	103.5	62.6
Walden		CO		96.9	BNPH20070125ACD	106 33 00.0	14	2727	Laramie Mountain Broadcast		
229D	K229BS	LIC DC_		182.0	90.8	39 43 46.0	0.099	22.4	14.7	62.7	66.5
Lakewood		CO		2.0	BLFT20100719AFS	105 14 08.0		2246	Mountain Community Transla		
231D	K231BL	LIC DC_		343.9	80.0	41 14 16.0	0.089	0.5	7.3	66.2	72.3
Laramie		WY		163.7	BLFT20050916AAA	105 27 48.0		2679	Laramie Plains Antenna Tv		
229C1	KIIQ	RSV-A ____		135.0	182.7	39 22 34.0	100.000	107.3	73.3	68.4	98.5
Limon		CO		315.9		103 41 43.0	299	1996	Percheron Associates, Llc		
227C0	AL9347	RSV-A ____		45.6	218.7	41 54 26.0	100.000	130.8	87.6	69.7	104.6
Gering		NE		226.8	RM10864*	103 18 44.0	450	1726			
227C0	KMOR	LIC NCX		38.1	184.0	41 50 23.0	100.000	92.4	61.8	73.1	92.7
Gering		NE		219.0	BLH20070827AED	103 49 36.0	311	1598	Legacy Communications, Llc		
229C1	KIIQ	APP NCX		135.0	182.7	39 22 34.0	100.000	97.6	65.5	78.1	106.0
Limon		CO		315.9	BPH20070313ABN	103 41 43.0	205	1901	Percheron Associates, Llc		
229C1	KRAI-FM	LIC _CN		271.7	204.1	40 34 35.0	100.000	110.4	75.5	85.1	122.0
Craig		CO		90.2	BLH6997	107 36 29.0	299	2315	Wild West Radio, Inc.		

CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR (kW)	INT (km)	PRO (km)	Page # 2	
CITY		STATE		<--	FILE #	LNG	HAAT (M)	COR (M)	LICENSEE	*IN*	*OUT*
(Overlap in km)											
229C1	KIIQ	CP	_CX	135.0	182.7	39 22 34.0	100.000	87.9	57.1	87.9	113.5
Limon		CO		315.9	BPH20070313ABN	103 41 41.0	117	1823	Percheron Associates, Llc		
231C2	KEZZ	LIC	NCX	261.5	128.2	40 22 03.0	1.750	2.7	36.8	122.0	91.1
Phippsburg		CO		80.6	BLH20090522ACV	106 41 28.0	380	3107	Youngers Colorado Broadcas		
230A	KYSL	LIC	_CN	215.6	134.9	39 33 22.0	0.560	1.6	42.5	127.6	92.2
Frisco		CO		35.0	BLH19940808KA	106 06 53.0	324	3549	Krystal Broadcasting, Inco		
226C3	AL7155	VAC	___	279.1	113.4	40 42 01.0	25.000	6.4	56.5	100.1	113.0
Walden		CO		98.3	RM11387	106 31 21.0	100	2758	Laramie Mountain Broadcast		
225C	KKPK	LIC	_C_	171.7	202.0	38 44 44.0	79.000	16.2	101.3	180.1	100.6
Colorado Springs		CO		351.9	BLH19990311KE	104 51 42.0	670	2922	Radio License Holding Cbc,		
228C3	KTND	LIC	_C_	228.2	203.3	39 18 56.0	21.000	96.1	21.8	101.2	159.3
Aspen		CO		47.1	BLH20100816ABF	106 57 32.0	109	2682	Bs&t Wireless, Inc.		
231C1	KNEB-FM	LIC	_CN	44.2	180.8	41 42 04.0	100.000	7.2	57.2	156.0	123.2
Scottsbluff		NE		225.2	BLH19810904AB	103 40 49.0	207	1512	Nebraska Rural Radio Assoc		
228A	AU7052710	VAC	___	223.0	204.7	39 11 24.0	6.000	68.3	15.8	130.4	160.9
Aspen		CO		42.0	RM9994	106 49 06.0	100	3078	Roaring Forks Broadcasting		
229C2	KSBV	LIC	_CX	196.9	243.4	38 26 47.0	1.000	87.8	59.0	149.9	175.5
Salida		CO		16.4	BLH20020828AAQ	106 00 37.0	830	3572	Arkansas Valley Broadcasti		
228C1	KWYX	LIC	_CX	339.7	260.7	42 44 28.0	3.800	90.6	33.0	154.1	173.4
Casper		WY		158.9	BMLH20100607AFR	106 18 31.0	530	2497	Cochise Broadcasting Llc		
229A	KIIQ	LIC	_CX	137.4	192.0	39 16 00.0	1.000	14.2	10.2	171.1	172.2
Limon		CO		318.3	BLH20041025AEJ	103 41 15.0	-32	1649	Percheron Associates, Llc		

Terrain database is USGS 03 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 = 2, 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.

* THIS APPLICATION PROPOSES TO MODIFY THIS TRANSLATOR.

** THE PROPOSED 100 DBU INTERFERENCE CONTOUR WILL COVER ANY PERSONS TOWARDS THIS STATION. SEE
THE TECHNICAL STATEMENT FOR MORE INFORMATION.

FIGURE 2, KCWA 77.8 DBU CONTOUR AT THE K228EZ SITE
K288EZ FORT COLLINS, CO, CHANNEL 228D

Coverage Study - USGS 03 SEC
02-06-2011

KCWA CH230 A , 0.58 kW, 319.0M HAAT, 2098.0M COR AMSL
Service Contour = 78 dBu. Population = 95,417

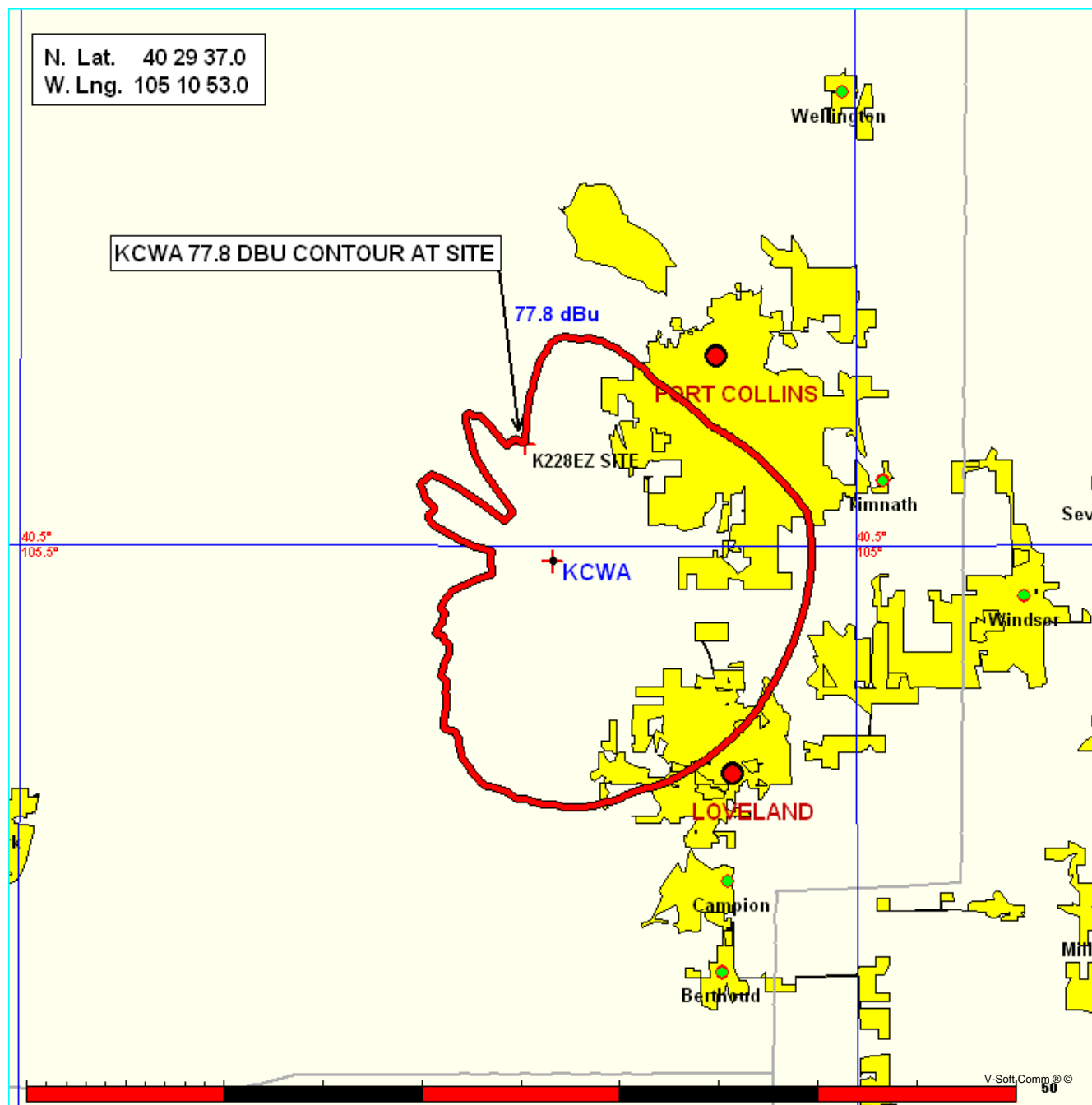


FIGURE 3, PREDICTED 100 DBU CONTOUR
K288EZ FORT COLLINS, CO, CHANNEL 228D

Coverage Study - USGS 03 SEC
02-06-2011

K228EZ CH228 D , 0.036 kW, 382.1M HAAT, 2198.0M COR AMSL
Interference Contour = 100 dBu. Population = 0

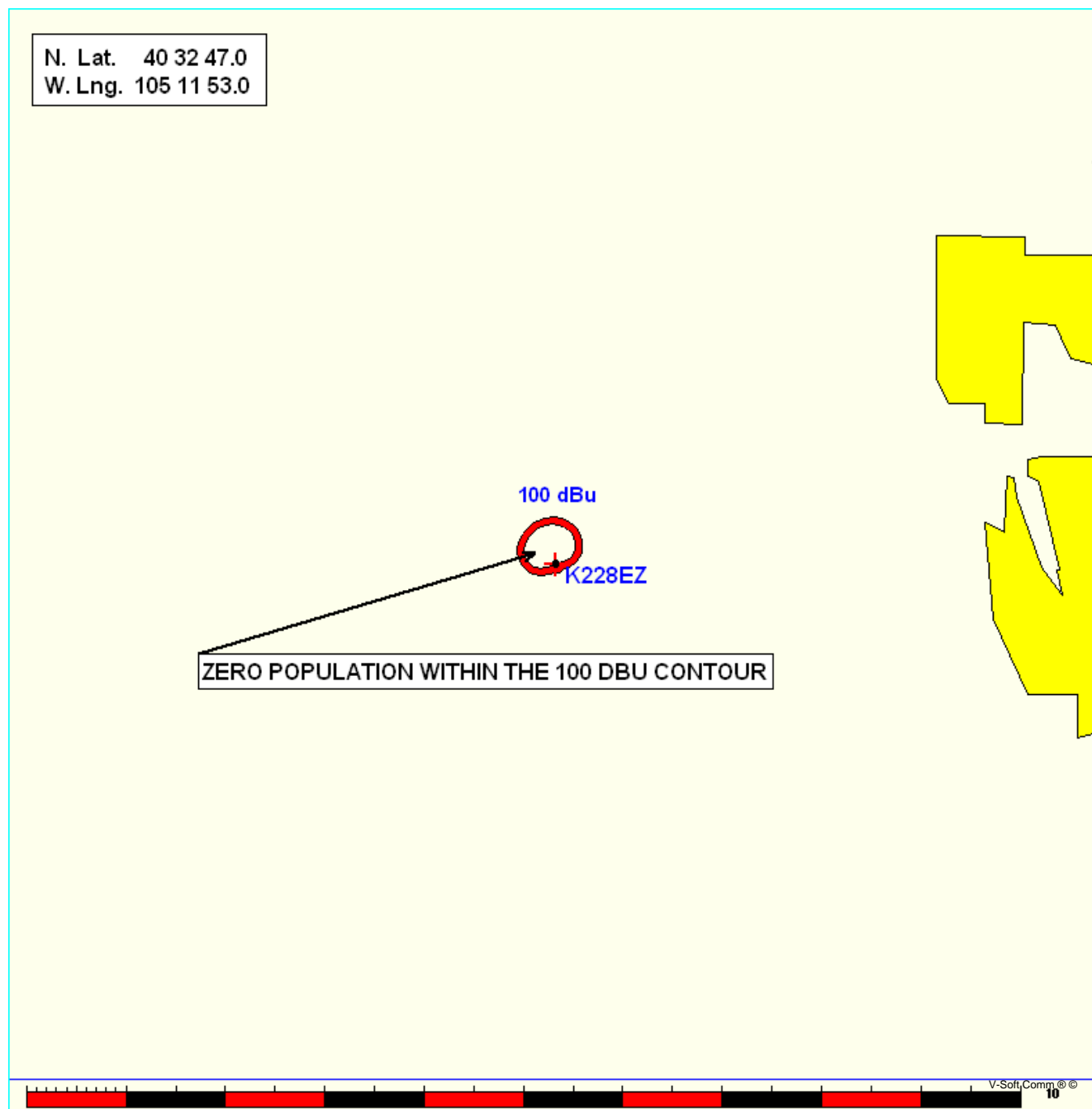


FIGURE 4 - DIRECTIONAL ANTENNA DATA

K228EZ FORT COLLINS, COLORADO, CH. 228D 02-06-2011

RMS(V) = .64

NICOM BKG-1/P DIRECTIONAL ANTENNA, VERTICAL POL.

Graph is Relative Field

Azi	Field	dBk	kW
000	0.978	-14.6	0.034
010	0.956	-14.8	0.033
020	0.927	-15.1	0.031
030	0.882	-15.5	0.028
040	0.808	-16.3	0.024
050	0.733	-17.1	0.019
060	0.646	-18.2	0.015
070	0.543	-19.7	0.011
080	0.430	-21.8	0.007
090	0.324	-24.2	0.004
100	0.240	-26.8	0.002
110	0.183	-29.2	0.001
120	0.158	-30.5	0.001
130	0.163	-30.2	0.001
140	0.157	-30.5	0.001
150	0.165	-30.1	0.001
160	0.161	-30.3	0.001
170	0.165	-30.1	0.001
180	0.157	-30.5	0.001
190	0.163	-30.2	0.001
200	0.158	-30.5	0.001
210	0.183	-29.2	0.001
220	0.240	-26.8	0.002
230	0.324	-24.2	0.004
240	0.430	-21.8	0.007
250	0.543	-19.7	0.011
260	0.646	-18.2	0.015
270	0.733	-17.1	0.019
280	0.808	-16.3	0.024
290	0.882	-15.5	0.028
300	0.927	-15.1	0.031
310	0.956	-14.8	0.033
320	0.978	-14.6	0.034
330	0.990	-14.5	0.035
340	1.000	-14.4	0.036
350	0.990	-14.5	0.035

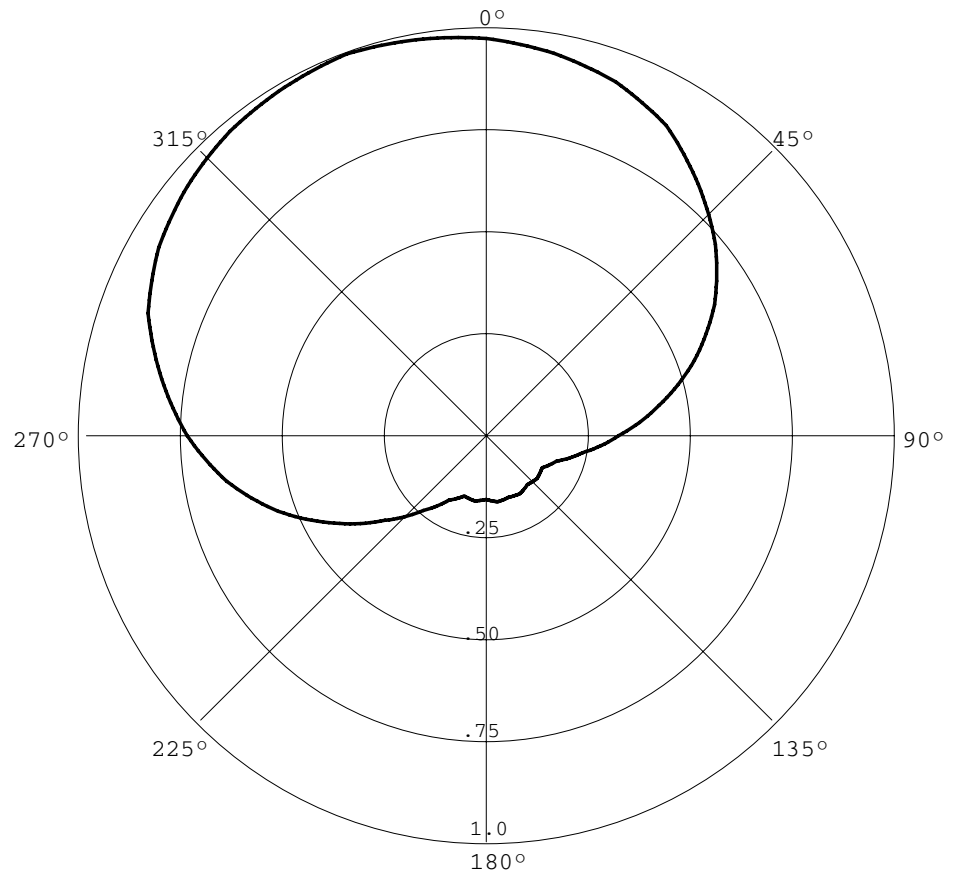


FIGURE 5, PRESENT AND PROPOSED 60 DBU CONTOURS
K228EZ FORT COLLINS, CO, CHANNEL 228D

Coverage Study - USGS 03 SEC
02-06-2011

K228EZ.C CH228 D , 0.25 kW, 0.0M HAAT, 2583.0M COR AMSL
Service Contour = 60 dBu. Population = 94,722

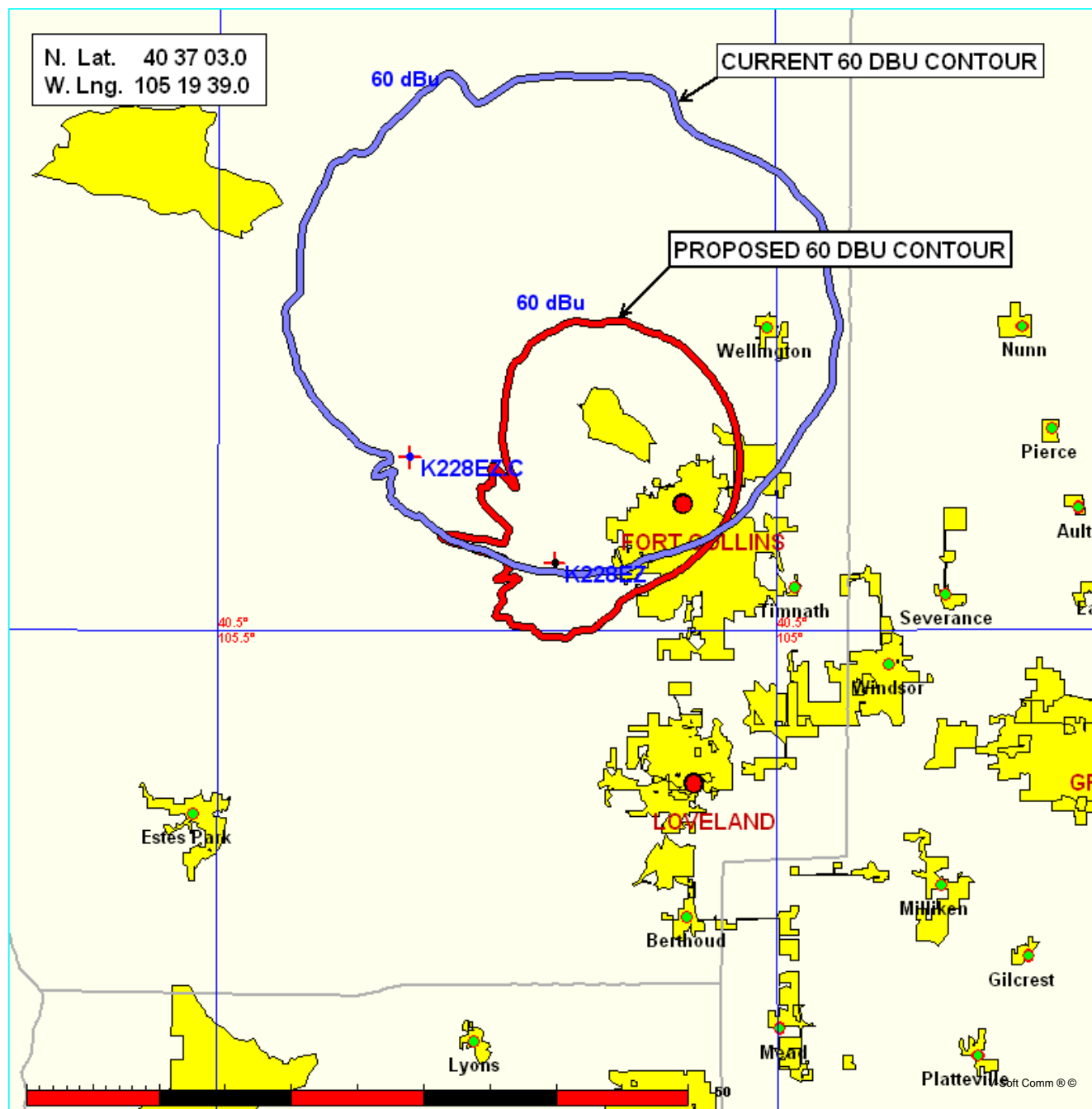
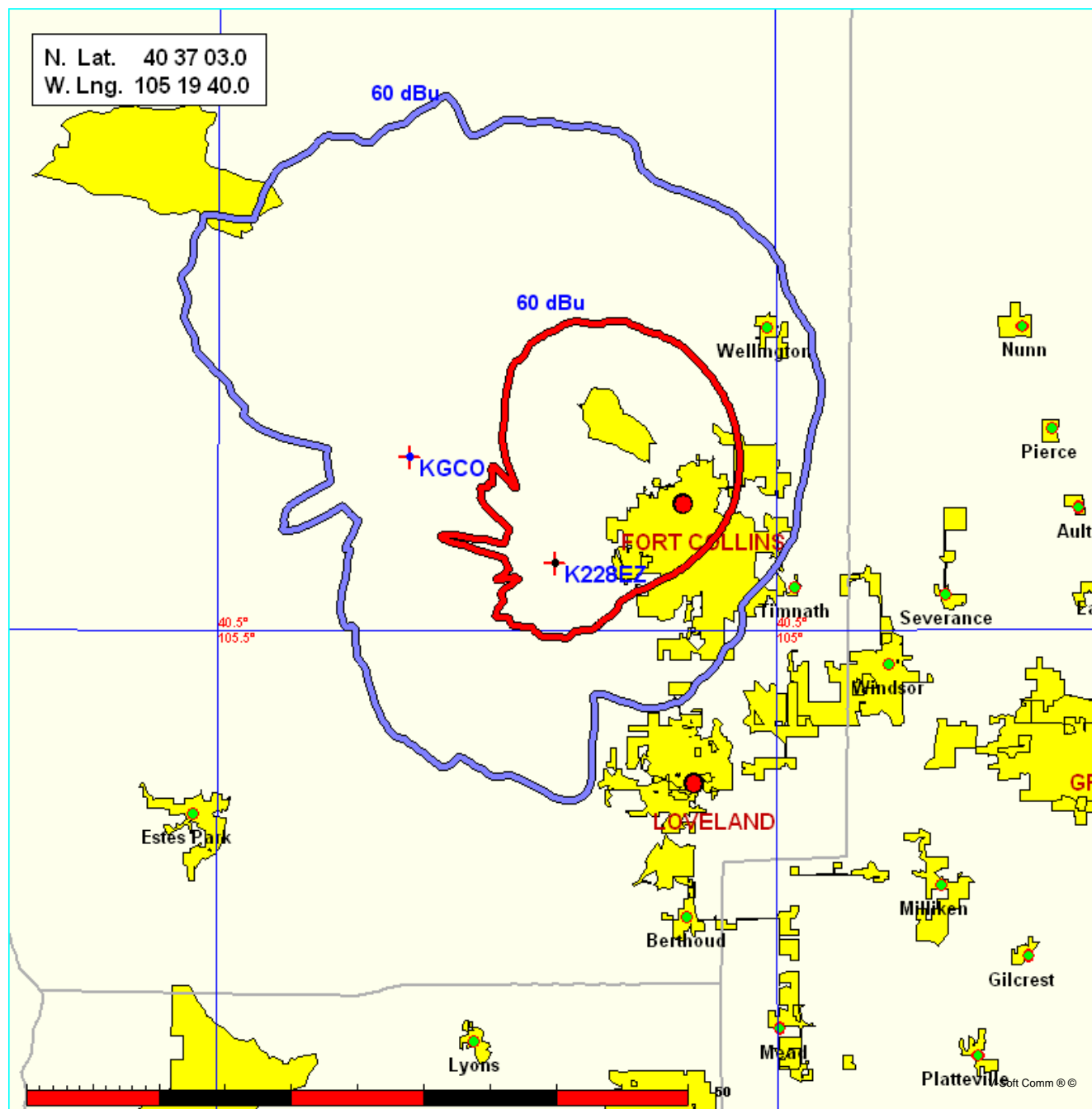


FIGURE 6, FILL IN MAP FOR KGCO FT. COLLINS AND K228EZ
K288EZ FORT COLLINS, CO, CHANNEL 228D

Coverage Study - USGS 03 SEC
02-06-2011

KGCO CH202 A , 0.15 kW, 364.0M HAAT, 2552.0M COR AMSL
Service Contour = 60 dBu. Population = 94,722



Contour.out

N. Lat. = 403247.0 W. Lng. = 1051153.0
 HAAT and Distance to Contour,
 FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 7, TABULATION OF DISTANCE TO CONTOURS

Azi.	AV EL	HAAT	dBk	60-F5	100-F1	54-F1
000	1715.7	482.3	-14.63	17.35	0.41	26.27
010	1673.6	524.4	-14.83	18.02	0.40	27.08
020	1626.7	571.3	-15.10	18.68	0.39	28.03
030	1593.0	605.0	-15.53	18.81	0.37	28.36
040	1576.0	622.0	-16.29	18.20	0.34	27.57
050	1565.9	632.1	-17.13	17.35	0.31	26.46
060	1557.8	640.2	-18.23	16.17	0.27	24.94
070	1548.6	649.4	-19.74	14.55	0.23	22.89
080	1538.5	659.5	-21.77	12.52	0.18	20.22
090	1544.9	653.1	-24.23	10.20	0.14	16.82
100	1557.8	640.2	-26.83	8.04	0.10	13.30
110	1553.7	644.3	-29.19	6.50	0.08	11.07
120	1568.8	629.2	-30.46	5.76	0.07	9.88
130	1596.0	602.0	-30.19	5.87	0.07	9.96
140	1622.1	575.9	-30.52	5.66	0.07	9.55
150	1669.6	528.4	-30.09	5.78	0.07	9.60
160	1738.6	459.4	-30.30	5.48	0.07	9.12
170	1681.5	516.5	-30.09	5.74	0.07	9.54
180	1654.7	543.3	-30.52	5.59	0.07	9.36
190	1696.9	501.1	-30.19	5.64	0.07	9.40
200	1820.2	377.8	-30.46	5.13	0.07	8.37
210	1866.9	331.1	-29.19	5.49	0.08	8.66
220	1997.6	200.4	-26.83	5.36	0.10	7.81
230	2037.8	160.2	-24.23	5.73	0.14	8.15
240	2121.9	76.1	-21.77	4.57	0.18	6.43
250	2184.8	13.2	-19.74	3.20	0.23	4.50
260	2171.0	27.0	-18.23	3.48	0.27	4.94
270	2186.7	11.3	-17.13	3.71	0.31	5.27
280	2110.0	88.0	-16.29	6.73	0.34	9.54
290	2186.6	11.4	-15.53	4.06	0.37	5.79
300	2198.0	0.0	-15.10	4.17	0.39	5.93
310	2114.4	83.6	-14.83	7.10	0.40	10.11
320	2106.7	91.3	-14.63	7.51	0.41	10.66
330	2117.4	80.6	-14.52	7.09	0.42	10.11
340	2003.9	194.1	-14.44	11.21	0.42	16.18
350	1822.6	375.4	-14.52	15.40	0.42	23.11

Ave El = 1814.63 M HAAT= 383.37 M AMSL= 2198