

EXHIBIT E-1  
TECHNICAL STATEMENT  
K227BP BUFORD, WYOMING 228D  
MITCHELL A. BERANEK  
FCC FORM 349  
MARCH 2009

This Technical Statement is in support of FCC form 349 filed by Mitchell A. Beranek for a minor modification to its construction permit, BNPFT-20080620AEF, for K227BP Buford, Wyoming, facility ID #157751. Beranek wishes to change from channel 227 to 228. It proposes to operate from an existing tower site located at N.  $41^{\circ}-04'-42''$ , W.  $105^{\circ}-11'-59''$ , NAD 27 on channel 228D with an Effective Radiated Power of 34 Watts utilizing a Nicom, model BKG88, one bay, non-directional antenna. The antenna will be mounted at the 14 meter level on a 31 meter overall tower, with a Center of Radiation at 2389 meters Above Mean Sea Level.

Figure 1 shows a channel spacing study conducted from the proposed site. There is an apparent short spacing to 227D Buford, Wyoming, but this is the current CP application being modified by this new proposal and will be eliminated and replaced. Figure 1 also shows that in terms of interference, the only pertinent station that requires more study, is 3<sup>rd</sup> adjacent station KOLT Warren Air Force Base, Wyoming operating on channel 225C2. Another station of interest is 1<sup>st</sup> adjacent station KAZY Cheyenne, Wyoming on channel 229C3.

The proposed transmitter site for this application is located within the protected 60 dBμ contour of 3<sup>rd</sup> adjacent station KOLT Warren Air Force Base, Wyoming on channel 225C2. In fact, the two transmitter sites are only separated by 0.34 kilometers. Therefore, the predicted (F50,50) field strength of KOLT at the proposed transmitter site

is 131.6 dB $\mu$ . The interfering contour extends at a maximum of 0.1 meters from the proposed transmit antenna. Thus, with the transmitter 14 meters above the ground, the area of predicted interference does not reach the ground.

The applicant, Mitchell A. Beranek, respectfully requests a waiver of C.F.R. 74.1204(d) of the commission rules based on the fact that there is no population within the area of predicted interference. The interference contour does not even reach within 12 meters of the ground. The buildings on the site are uninhabited and without indoor plumbing. Figure 2 shows an aerial photo of the tower site. The site is located in a rural area and there are no homes next to the tower site.

Figure 3 is a predicted coverage map showing the 54 dB $\mu$  interference contour (F50,10) of the proposed facilities and the 60 dB $\mu$  protected contour (F50,50) of KAZY Cheyenne, Wyoming on channel 229C3. As can be seen, there is no prohibited overlap between these two contours.

Figure 4 shows the overlap between the 60 dB $\mu$  contours of the proposed facility, in red, and the current CP, in blue, for K227BP seeking to be modified by this application.

The terrain of the 12 radials was studied for HAAT and the maximum ERP with a non-directional antenna system is 34 Watts. The radials at 30, 60, 90, and 150 degrees azimuth are all limited to 34 Watts as they all have a rounded radial HAAT of from 261 meters to 285 meters.

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

Exhibit E-1, Figure 1, Channel Spacing Study

K227BP Buford, Wyoming 228D

REFERENCE  
41 04 42.0 N.  
105 11 59.0 W.

CH# 228D - 93.5 MHz, Pwr= 0.034 kW, HAAT= 168.7 M, COR= 2389 M  
Average Protected F(50-50)= 10.32 km  
Omni-directional

DISPLAY DATES  
DATA 02-28-09  
SEARCH 02-28-09

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR (kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
225C2 Warren Afb	KOLT-FM	LIC _CX WY		229.8 49.8	0.3 BLH20070131ABW	41 04 35.0 105 12 10.0	33.000 185	7.6 2404	62.8 Tracy Broadcasting Corpora	-62.9*
227D Buford	K227BP	CP DC_ WY		0.0 0.0	0.0 BNPFT20080620AEF	41 04 42.0 105 11 59.0	0.070	18.2 2388	12.3 Mitchell A. Beranek	-27.5*
229C3 Cheyenne	KAZY	LIC _CX WY		81.5 261.8	43.1 BLH20060615AAH	41 08 04.0 104 41 32.0	25.000 35	35.6 1859	22.7 White Park Broadcasting, I	1.4
228L1 Laramie	KOCA-LP	LIC _ WY		309.3 129.0	41.4 BLL20021223AAQ	41 18 48.0 105 35 00.0	0.100	12.7 2218	4.0 La Radio Montanesa: Voz De	22.2
231D Laramie	K231BL	LIC DC_ WY		308.9 128.7	28.3 BLFT20050916AAA	41 14 16.0 105 27 48.0	0.089	0.0 2679	0.7 Laramie Plains Antenna Tv	27.3
227C1 Wheat Ridge	KTCL	LIC DCX CO		181.2 1.2	149.4 BLH20070621AQR	39 43 59.0 105 14 10.0	71.000 346	111.0 2256	75.2 Jacor Broadcasting Of Colo	52.5
229D Fort Collins	637466	APP _C_ CO		179.8 359.8	59.1 BNPFT20030317CVW	40 32 46.8 105 11 50.0	0.010	18.8 2188	12.4 Radio Assist Ministry, Inc	27.6
227C0 Gering	KMOR	LIC NCX NE		53.0 234.0	142.5 BLH20070827AED	41 50 23.0 103 49 36.0	100.000 311	98.7 1598	67.1 Legacy Communications, Llc	54.1
230A Laramie	KUSZ	LIC NCX WY		311.6 131.3	43.8 BLH20080305AEH	41 20 20.0 105 35 31.0	0.800 -26	1.6 2236	9.6 Laramie Mountain Broadcast	33.8
225D Fort Collins	636571	APP _C_ CO		165.1 345.2	49.1 BNPFT20030317CVR	40 39 03.1 105 02 59.1	0.092	0.7 1668	6.7 Radio Assist Ministry, Inc	42.0
230D Timnath	650170	APP _C_ CO		163.4 343.5	57.1 BNPFT20030317IUB	40 35 08.0 105 00 23.0	0.250	1.1 1520	7.1 Educational Media Foundati	49.6
230A Loveland	KUSZ	RSV _ CO		173.1 353.1	76.4	40 23 44.0 105 05 27.0	6.000 100	3.0 1675	31.1 Laramie Mountain Broadcast	44.9
230D Fort Collins	644477	APP _C_ CO		179.8 359.8	59.1 BNPFT20030317GEQ	40 32 46.8 105 11 50.0	0.010	0.2 2188	12.4 Radio Assist Ministry, Inc	46.3
225D Windsor	631551	APP DE_ CO		178.6 358.6	65.0 BNPFT20030312AEB	40 29 36.0 105 10 52.0	0.010	0.2 2078	10.2 Educational Communications	54.4
230D Windsor	631544	APP DE_ CO		178.6 358.6	65.0 BNPFT20030312ADM	40 29 36.0 105 10 52.0	0.010	0.0 2078	2.4 Educational Communications	62.2
230A Loveland	KUSZ	APP NCX CO		176.1 356.2	73.5 BPH20080312ADR	40 25 04.0 105 08 28.0	6.000 6	1.6 1652	15.8 Laramie Mountain Broadcast	57.4
229D Berthoud	631534	APP DE_ CO		172.6 352.7	93.9 BNPFT20030312ADC	40 14 24.0 105 03 23.0	0.100	14.4 1637	10.3 Educational Communications	63.8
226C3 Walden	1170083	APP _HX CO		249.0 68.2	122.2 BNPH20070125ACD	40 40 42.0 106 33 00.0	25.000 14	6.1 2727	53.9 Laramie Mountain Broadcast	67.9
225D Kersey	631576	APP DE_ CO		152.7 333.0	86.2 BNPFT20030312AWS	40 23 19.0 104 43 56.0	0.050	0.1 1528	3.6 Educational Communications	82.1
230D Greeley	631577	APP DE_ CO		152.7 333.0	86.2 BNPFT20030312AWW	40 23 19.0 104 43 56.0	0.050	0.1 1528	2.9 Educational Communications	82.8
231C3 Walden	KEZZ	CP NHX CO		240.4 59.8	91.7 BMPH20070119AGT	40 40 03.0 106 08 38.0	6.500 10	1.6 2619	16.1 Youngers Colorado Broadcas	75.2
225D Longmont	631529	APP DE_ CO		172.6 352.7	93.9 BNPFT20030312ACQ	40 14 24.0 105 03 23.0	0.100	0.1 1637	4.5 Educational Communications	89.0
229C1 Deer Trail	KAZY	RSV _ CO		145.3 326.2	200.9	39 35 05.0 103 51 58.0	100.000 299	105.1 1882	72.4 White Park Broadcasting, I	109.0
228C1 Casper	KWYX	CP _CX WY		334.0 153.2	206.3 BMPH20071119AJM	42 44 28.0 106 18 31.0	15.000 530	113.6 2497	43.9 Cochise Broadcasting Llc	126.1

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 = 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)  
Incoming contour overlap is ignored.  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

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**41.0777°N 105.2°W**

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## Latitude

41.077737693494065°N  
41° 4.664261609643887' N  
41° 4' 40" N

## Longitude:

-105.19995510578155°W  
105° 11.99730634689331' W  
105° 11' 60" W

## UTM

13T 483203.2383537907 4547406.000282835

## Local Coordinates

Unknown

## Google Maps Zoom Level

18



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## Elevation

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Exhibit E-1, Figure 3, 228D vs KAZY  
K227BP Buford, Wyoming 228D

FMCommander Single Allocation Study - 02-28-2009 - NGDC 30 SEC  
228D's Overlaps (In= -5.36 km, Out= 1.37 km)

228D CH 228 D

Lat= 41 04 42.0, Lng= 105 11 59.0  
0.034 kW 168.7 M HAAT, 2389 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

KAZY CH 229 C3 BLH20060615AAH

Lat= 41 08 04.0, Lng= 104 41 32.0  
25.0 kW 35 M HAAT, 1859 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

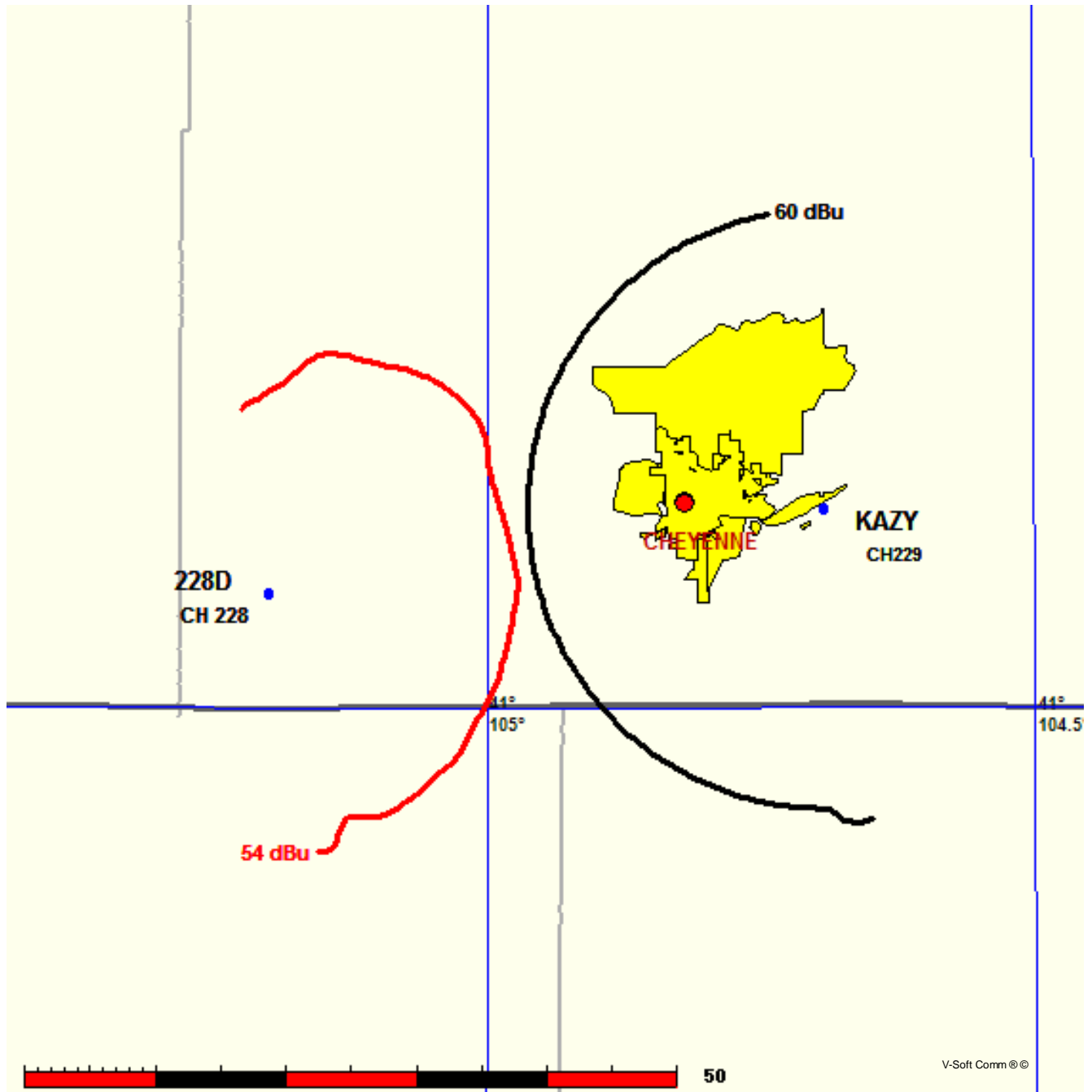


Exhibit E-1, Figure 4, Proposed vs Licensed  
K227BP Buford, Wyoming 228D

Coverage Study - NGDC 30 SEC  
02-28-2009

K227BP.C CH227 D 0.07 kW 2388M COR  
Prot. = 60 dBu.

