

DI SPLAY DATES  
DATA 01-06-10  
SEARCH 01-06-10

CH CI TY	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* (in km)
216D	K216DQ	LIC	DHN	161.8	23.4	36 59 33.0	0.250	85.0	28.6	-68.4*	-27.8*
Raton, Etc.		NM		341.8	BLFT19981203TH	104 28 24.0	243	2627	The Colorado College		
214A	KTDL	LIC	_CX	161.8	23.4	36 59 33.0	0.450	1.5	33.4	15.1	-10.3*
Tri nidad		CO		341.8	BLED20071115AAB	104 28 24.0	296	2610	Educational Communications		
219A	KCCS	LIC	_CX	161.8	23.4	36 59 33.0	0.370	1.3	31.9	15.2	-8.9*
Starkville		CO		341.8	BLED20080912AAL	104 28 24.0	303	2615	The Colorado College		
216A	KRWA	LIC	_CX	335.1	92.2	37 56 40.0	0.130	53.5	16.6	32.0	64.3
Rye		CO		154.8	BLED20090708AI O	104 59 56.0	35	2577	Way-fm Media Group, Inc.		
217C3	KWAS	CP	_CX	236.5	92.9	36 43 44.0	2.000	44.2	29.3	43.3	56.9
Red River		NM		56.0	BMPED20090820AAM	105 25 29.0	273	3308	Top 0 Texas Educational Br		
06NT	DK06BE	LI	___N	271.2	77.4	37 12 14.0	0.003	1.6	2.1	132.5R	73.6M
San Luis & Rural		CO		90.7	BLTTV19880830I F	105 25 37.0		479	Costilla County Tv Booster		
06Z2	616943	AP	_HN	127.9	77.4	36 45 48.0	0.000	2.3	0.0	132.5R	75.2M
Des Moines		NM		308.3	BPRM20011009AEH	103 52 12.0		0	Sierra Grande Broadcasting		
06 T	K06BN	CP	D_N	184.3	132.7	36 00 00.0	0.007	2.3	0.0	132.5R	0.21M
Wagon Mound		NM		4.2	BDFCDTT20060323AAF	104 40 00.0	307	2115	Lin Of New Mexi co, Lic		
213D	K213ET	LIC	_C_	218.8	91.0	36 33 11.0	0.010	0.2	15.5	87.6	75.3
Eagl e Nest		NM		38.4	BLFT20091112AKM	105 11 40.0		3433	Regents Of The University		
06NT	K06HW	LI	DHN	90.8	129.4	37 10 05.0	0.136	5.8	1.6	132.5R	122.0M
Southwest Baca Coun CO		CO		271.6	BLTTV4109	103 05 55.0	199	1661	Baca County		
06NT	K06EM	LI	DHN	167.8	139.5	35 57 50.0	0.013	1.6	0.4	132.5R	7.0M
Roy		NM		348.0	BLTTV3088	104 13 40.0	215	1851	Kob-tv, Lic		
06NT	K06BN	LI	DHN	184.3	132.7	36 00 00.0	0.028	1.6	0.4	132.5R	0.21M
Wagon Mound		NM		4.2	BLTTV5007	104 40 00.0	308	2115	Lin Of New Mexi co, Lic		
06ZT	K06LE	LI	DHN	225.1	124.7	36 23 51.0	0.056	1.6	0.4	132.5R	122.7M
Taos		NM		44.5	BLTTV19840625I F	105 32 34.0	210	2274	Kob-tv, Lic		

Terrain database is FCC 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)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

## HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed **"\*IN\*"** is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. The column labeled **"\*OUT\*"** shows the smallest distance in kilometers of overlap or clearance of the reference station's interference contour along the arc of database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Listed antenna heights and power are the FCC specific antenna heights and the ERPs. Under the **"AZIMUTH"** column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

The columns labeled **"INT"** and **"PRO"** contain the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships, 73.215 short-spaced stations and commercial stations where the minimum spacings are met, the **"IN"** and **"OUT"** columns change their significance. The letter **"R"** stands for the minimum **required** distance in kilometers, while the letter **"M"** in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended or from 73.215. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The call letters of stations meeting the minimum separation distances will be flagged by the characters **"<<"** appended to the end of the call letters. The **"^"** character appended to the call letters means the station has been **"max-classed"** according to the provisions of section 73.215 of the Rules.

The first three letters of the **"TYPE"** column identify the current FCC status of the stations. The fourth letter will be a **"D"** if the facility is directional. **"Z"** indicates a 73.215 directional. An **"N"** indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will be an **E, H** or **V** depending on the type of antenna polarization. The sixth letter will be a **"Y"** if the antenna uses beam tilt or an **"X"** if the commission is not sure, otherwise it will be an **"N"** or left blank.

January 6, 2010

Allocation Statement  
K216DQ  
Raton, Colorado

The proposed facility, on channel 216, is located within the protected contours of KTDL, Trinidad and KCCS, Starkville. The following calculations were made to determine that there are no people within the contour overlap area.

**KCCS, Starkville, Channel 219, Class A, 0.37 kW.** This station's HAAT's toward the proposed translator is 499.7 meters. The K216DQ transmitter site is located at a distance of 23.28 kilometers; consequently the signal strength at K216DQ is 65.6 dBu. Since KCCS is a 3<sup>rd</sup> adjacent facility, the translator may have up to 40 dB above 65.6 dBu before interference is caused. Based on the free space formula, the 105.6 dBu interference contour travels 330.4 meters.

**KTDL, Trinidad, Channel 214, Class A, 0.45 kW.** This station's HAAT toward the K216DQ is 494.7 Meters. The K216DQ transmitter site is also located at a distance of 23.28 kilometers; consequently the signal strength at K216DQ of KTDL is 66.3 dBu. Since KTDL is a second adjacent facility, the translator may have up to 40 dB above 66.3 dBu before interference is caused. Based on the free space formula, the 106.3 dBu contour of K216DQ travels 303.5 meters.

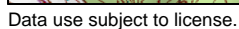
The map on the next page is from a U.S.G.S. topographic map. This map shows the largest distance of predicted interference (330.4 meters) as a "worst case" circle around the proposed translator's transmitter site. The area within the circle is atop a mountain ridge in the Trinidad State Recreation Area. There are no people or major roads within the defined area. There are no tall buildings nearby.

The pages that follow are a map showing a comparison of the new 60 dBu coverage and the old 60 dBu area. The contours cross as is required under the rules for a minor change translator proposal. The final page is a distance to contour table showing that the ERP along each of the 12 cardinal radials is below the maximum allowed under the rules.



Doug Vernier



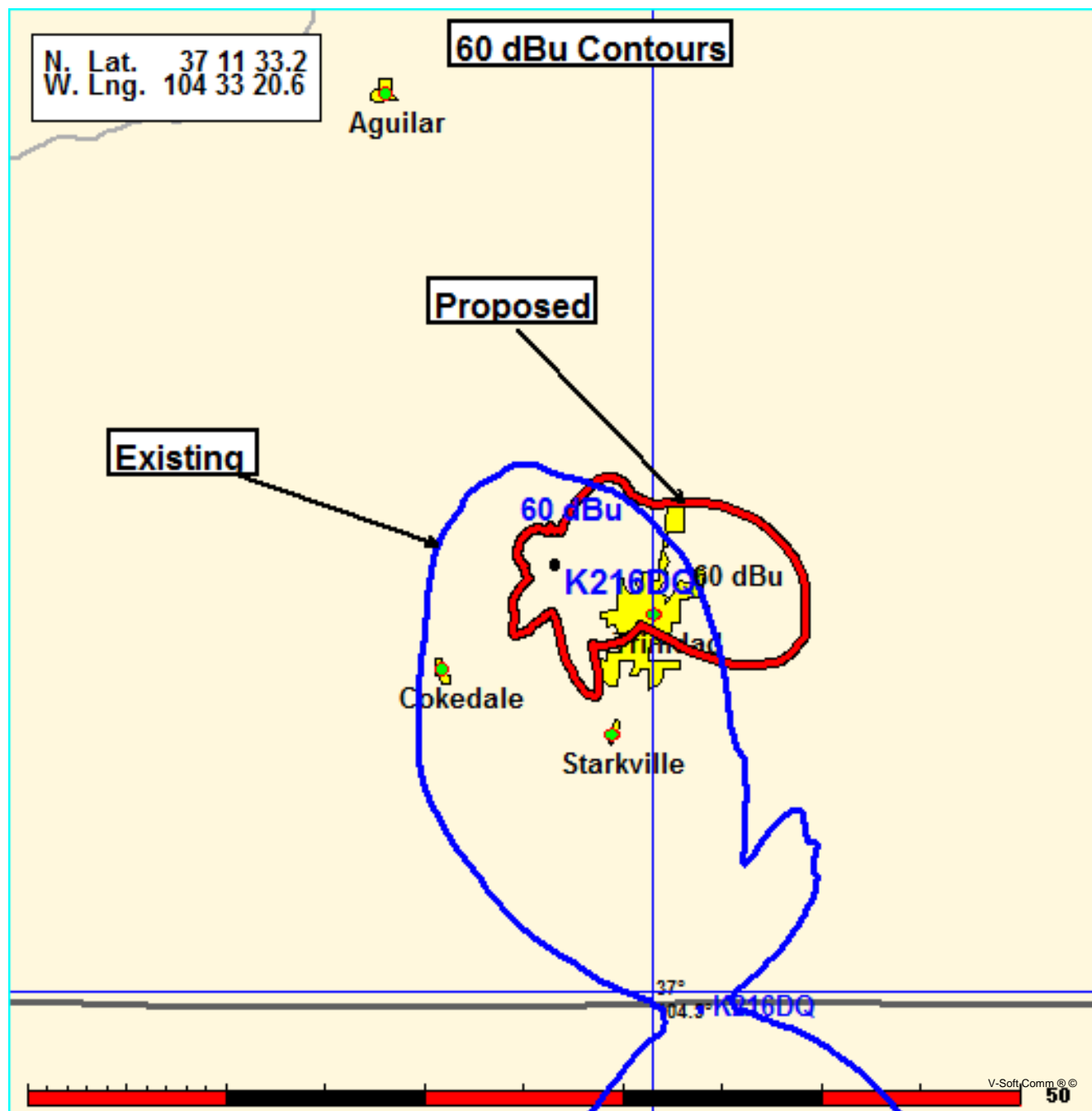




The Colorado College  
Old and New 60 dBu Coverage Comparison

Coverage Study - FCC NGDC 30 Sec  
08-07-2009

K216DQ CH216 D 0.25 kW 2627M COR  
Prot. = 60 dBu. Population = 18,855



N. Lat. = 371133.2 W. Lng. = 1043320.6  
 HAAT and Distance to Contour,  
 FCC, FM 2-10 Mi, 51 pts Method - FCC 30 SEC

K216DQ, Raton, CO

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	1981.5	102.5	0.0001	-41.43	0.030	1.61
030	1908.4	175.6	0.0018	-27.33	0.152	4.91
060	1820.8	263.2	0.0018	-27.45	0.150	5.77
090	1841.7	242.3	0.0331	-14.80	0.643	12.21
120	1978.4	105.6	0.0778	-11.09	0.986	9.96
150	2132.1	-48.1	0.0515	-12.89	0.802	4.75
180	2067.9	16.1	0.0062	-22.09	0.278	2.82
210	1961.1	122.9	0.0019	-27.28	0.153	4.14
240	2001.8	82.2	0.0001	-41.43	0.030	1.61
270	2116.9	-32.9	0.0008	-30.80	0.102	1.73
300	2225.4	-141.4	0.0017	-27.68	0.146	2.08
330	2129.2	-45.2	0.0013	-28.89	0.127	1.94

Ave EI = 2013.77 M HAAT= 70.23 M AMSL= 2084