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KPRE Contour-to-Contour Channel Study
Public Broadcasting Of Colorado, Inc.

REFERENCE CH# 210A - 89.9 MHz, Pwr= 0.5 kw, HAAT= -217.0 M, COR= 2732 M DISPLAY DATES
39 36 58.0 N. DATA 04-24-19
106 26 58.0 W. Average Protected F(50-50)= 8.5 km SEARCH 04-24-19
Omni-directional

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*
210A Vail	KPRE	LIC_CN CO	7.2 187.2	2.08 BLED19980129KD	39 38 05.0 106 26 47.0	1.500 90	3002	---Reference---		Public Broadcasting of Col
211C2 Hayden	KHCO	LIC_VX CO	344.6 164.4	96.33 BLED20091125AGK	40 27 04.0 106 45 06.0	1.800 522	66.8 3140	34.3	17.1	42.5 Educational Media Foundati
213C2 Carbondale	KVOV	LIC_DCX CO	254.8 74.2	81.89 BLED20040913AAA	39 25 08.0 107 22 10.0	0.450 775	1.4 3227	49.3	53.6	31.0 Public Broadcasting Of Col
263A El Jebel	KGHT«	LIC_NC_ CO	232.8 52.5	55.09 BMLH20100816AAX	39 18 56.0 106 57 32.0	6.000 90	2.0 2682	12.5	9.5R	45.6M Bs&t Wireless, Inc.
211C1 Denver	KCFR-FM	LIC_CX CO	82.5 263.3	104.68 BLED20180405ABS	39 43 58.0 105 14 08.0	52.000 238	46.0 2275	26.7	50.2	47.9 Public Broadcasting Of Col
210C1 Montrose	KTMH	LIC_VX CO	218.2 37.4	172.84 BLED20080606AAT	38 23 15.0 107 40 31.0	4.000 498	110.9 2876	45.8	48.9	96.8 Educational Communications
207C2 Steamboat Springs	KLBV	LIC_VX CO	344.6 164.4	96.33 BLED20091125AGM	40 27 04.0 106 45 06.0	2.600 528	3.2 3146	37.5	79.0	50.5 Educational Media Foundati
210C2 Pueblo	KFRY	LIC_CX CO	147.6 328.4	206.51 BMLD20130716AAY	38 02 29.0 105 11 05.0	0.870 647	112.7 3542	43.5	76.1	111.4 Family Stations, Inc.
212A Crested Butte	KBUT	LIC_CX CO	209.7 29.4	91.27 BLED20140917ACR	38 54 07.0 106 58 21.0	1.000 -208	1.6 2969	10.2	79.6	79.6 Crested Butte Mountain Edu

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= - Zone 2, 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.

HOW TO READ THE FM COMPUTER PRINT-OUT

Full Service Stations

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. 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 difference in kilometers between of the reference station's protected contour and the data file station's interference contour at the closest point between the contours. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, "IN" column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are those given in the FCC database. The column labeled "OUT " shows the greatest distance in kilometers of overlap or smallest of clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZI" 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, some channel-six TV relationships and relationships with commercial channel stations providing clearance the minimum spacings values the "IN" and "OUT" columns can 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** (or lack of it) in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. 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 under the rules will be flagged by the characters "<<" appended to the right-hand side of the call sign. The "^" character appended to the call sign means the station has been "max-classed" according to the provisions of section 73.525 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.