

KHTB Proposed Booster  
Antenna Site Channel Study

REFERENCE 40 37 40 N 112 33 59 W	CH# 235C3 - 94.9 MHz, Pwr= 4.6 kw, HAAT=227.2 M, COR= 1782 M Average Protected F(50-50)= 38.7 km Ave. F(50-10) 40 dBu= 99.8 54 dBu= 57.4 80 dBu= 12.8 100 dBu= 3.5	DISPLAY DATES DATA 06-16-04 SEARCH 06-22-04
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CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
235C Provo	KHTB^	LIC UT	CY	125.5 305.5	65.75 BLH19801219AI	40 16 58 111 56 11	100.000 551	2106 194.4	89.7 3 Point Media - Salt Lake	-176.57 -142.53*
233D Tooele	AP233	APP UT	DV	84.5 264.5	30.94 BNPFT20030317MWR	40 39 14 112 12 08	0.002 1391	2718 0.1	9.1 Michael C. Cusinato	-22.58* 17.68
233D Riverton	AP233	APP UT	DC	93.9 273.9	34.24 BNPFT20030317IIE	40 36 22 112 09 46	0.000 973	2606 0.0	0.0 Your Christian Companion N	-18.38* 30.06
238C1 Ogden	KYFOFMA	LIC UT	CN	21.7 201.7	74.45 BLED19981125KD	41 14 59 112 14 11	100.000 313	1589 10.3	73.3 Bible Broadcasting Network	22.93 -1.25
289C Centerville	KCPX«	LIC UT	CX	83.4 263.4	31.08 BLH20021125AAS	40 39 34 112 12 05	25.000 1482	2803 121.1	97.1 Citicasters Licenses, L.p.	31.0R 0.1M
235D Park City	DKZHT-^	CP UT	DVN	74.2 254.2	95.21 BPFTB19960405TB	40 51 20 111 28 47	0.000 -79	2037 0.0	0.0 Citicasters Licenses, L.p.	41.53 -35.23
235C Pocatello	KPKYA	LIC ID	CN	1.0 181.0	249.51 BLH19871117KD	42 52 26 112 30 47	100.000 176	2102 158.9	61.6 Citicasters Licenses, L.p.	59.19 98.56
237D Orem, North	AP237	APP UT	C	112.5 292.5	57.82 BNPFT20030317MAF	40 25 38 111 56 12	0.018 -274	1555 0.3	3.6 Radio Assist Ministry Inc.	7.02 50.05
233D Salt Lake City	AP233	APP UT	DE	70.4 250.4	60.53 BNPFT20030314AII	40 48 29 111 53 25	0.032 524	1818 0.4	17.9 Mario Hieb	6.32 38.47
233D Salt Lake City	AP233	APP UT	DC	70.4 250.4	60.60 BNPFT20030313BKP	40 48 29 111 53 22	0.008 546	1840 0.2	12.2 Air-free wireless, Inc.	6.58 44.23
233D South Salt Lake	AP233	APP UT	DC	79.5 259.5	71.30 BNPFT20030317LYY	40 44 27 111 44 10	0.004 205	1680 0.1	6.5 Radio Assist Ministry Inc.	17.62 60.61
236D North Ogden	AP236	APP UT	C	30.3 210.3	92.05 BNPFT20030317LVN	41 20 29 112 00 36	0.025 283	1578 18.1	12.3 Radio Assist Ministry Inc.	28.74 10.89
234D North Ogden	AP234	APP UT	C	30.4 210.4	92.07 BNPFT20030317LJC	41 20 28 112 00 32	0.040 285	1580 20.7	13.8 Sun Valley Radio, Inc.	26.16 9.37
233D Provo	AP233	APP UT	C	119.9 299.9	87.00 BNPFT20030317BKJ	40 14 04 111 40 47	0.010 47	1415 0.2	4.0 Educational Media Foundati	37.53 78.95
233D Rural Utah County	AP233	APP UT	DC	133.3 313.3	87.12 BNPFT20030314ARP	40 05 19 111 49 17	0.000 701	2095 0.0	0.0 Air-free wireless, Inc.	40.96 83.24
237D Provo	AP237	APP UT	C	120.0 300.0	87.34 BNPFT20030317BMI	40 13 54 111 40 38	0.250 52	1420 1.1	9.5 Educational Media Foundati	36.98 73.80
237D Park City, Etc.	K237AL	LIC UT	HN	85.7 265.7	88.48 BLFT19840307MV	40 40 59 111 31 22	0.016 -381	2276 0.3	3.5 Citadel Broadcasting Compa	34.87 80.75
233D Pleasant View	KVFXF1^	LIC UT	DC	30.4 210.4	92.07 BLFTB20020326ABK	41 20 28 112 00 32	0.000 292	1587 0.0	0.0 Sun Valley Radio, Inc.	46.86 89.19
233C Logan	KVFX	LIC UT	CN	19.5 199.5	149.84 BLH19971113KA	41 53 50 111 57 39	70.000 334	1773 9.7	71.3 Sun Valley Radio, inc.	100.00 76.34
236D Corinne	AP236	APP UT	C	14.0 194.0	110.38 BNPFT20030310BJQ	41 35 30 112 14 45	0.230 300	1585 33.0	22.1 Utah State University Of A	39.57 30.28

ERP and HAAT are on direct line to and from reference station.  
 ".\*"Affixed to 'IN' or 'Out' values = site inside protected contour.  
 "«" = Station meets FCC minimum distance spacing for its class.  
 ^ = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

### **Spacings Study Key for Use**

The computer printout on the preceding page 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 spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined 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 interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "\* OUT \*" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap interference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station. The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station. For I.F. relationships 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.

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 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 omni. 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".

Bearing      Field Value

000	=	.3
010	=	.4
020	=	.5
030	=	.65
040	=	.8
050	=	.9
060	=	1
070	=	1.000
080	=	1.000
090	=	1.000
100	=	1.000
110	=	1.000
120	=	1.000
130	=	1.000
140	=	1.000
150	=	1.000
160	=	1.000
170	=	1.000
180	=	1.000
190	=	1.000
200	=	1.000
210	=	1.000
220	=	1.000
230	=	1.000
240	=	1.000
250	=	1.000
260	=	.75
270	=	.55
280	=	.4
290	=	.3
300	=	.3
310	=	.3
320	=	.3
330	=	.3
340	=	.3
350	=	.3

