

1400 INC, Hinkley - WSCD

REFERENCE CH# 226D - 93.1 MHz, Pwr= 0.027 kW, MAX HAAT=82.9 M, COR= 365 M DISPLAY DATES  
 45 58 36 N Average Protected F(50-50)= 6.74 km DATA 08-23-03  
 92 53 47 W Ave. F(50-10) 40 dBu= 22.5 54 dBu= 9.6 80 dBu= 2.1 100 dBu= .4 SEARCH 08-24-03

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*
226D Hinkley	AP226	APP MN	209.4 29.4	9.54 BNPFT20030312APM	45 54 07 92 57 25	0.250 68	367 20.4	10.7 1400 Inc.	-32.92<	-21.57*<
229C Minneapolis	KXXR	LIC MN	189.9 9.9	103.60 BLH19910814KF	45 03 30 93 07 27	100.000 319	593 0.4	73.8 Kqrs, Inc.	86.95	29.46
223C Golden Valley	KORSFM	LIC MN	189.9 9.9	103.60 BLH19910814KB	45 03 30 93 07 27	100.000 319	593 0.4	73.8 Kqrs, Inc.	86.95	29.46
225C1 Duluth	WSCDFM	LIC MN	33.2 213.2	108.35 BMLED19940823KA	46 47 20 92 07 04	70.000 295	492 7.7	68.4 Minnesota Public Radio	3.22	32.20
227C1 Nisswa	KBLB	LIC MN	294.9 114.9	125.81 BLH20020125AAX	46 26 34 94 22 55	100.000 189	554 6.6	62.8 Bl Broadcasting, Inc.	27.88	56.43
226A Ladysmith	WJBL	LIC WI	111.8 291.8	149.25 BLH19941118KD	45 27 59 91 07 23	4.900 118	459 22.5	29.1 Flambeau Broadcasting Co.,	56.03	97.65

\*\*\*Affixed to 'IN' or 'Out' values = site inside protected contour.  
 ERP and HAAT are on direct line to and from reference station. "<" = Contour Overlap

## 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 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".