

Blue Earth 247

REFERENCE CH# 247D - 97.3 MHz, Pwr= 0.25 kW, HAAT= 63.7 M, COR= 393 M  
 43 40 01.2 N. Average Protected F(50-50)= 10.45 km  
 94 07 19.1 W. Omni-directional

DISPLAY DATES  
 DATA 03-27-13  
 SEARCH 03-27-13

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*OUT* (Overlap in km)
247D Blue Earth	633480	APP _C_ MN	0.0 343.9	0.00 BNPFT20030312AOR	43 40 01.0 94 07 19.0	0.250 69	38.4 398	11.2 1400 Inc.	-46.9*
300D Blue Earth	633488	APP _C_ MN	0.0 343.9	0.00 BNPFT20030312AOW	43 40 01.0 94 07 19.0	0.250 69	2.5 398	24.8 1400 Inc.	9.5R -9.5MI
244C3 North Mankato	KDOG	LIC _CN MN	0.3 180.3	61.73 BLH19930920KC	44 13 20.0 94 07 03.0	4.000 198	3.2 483	36.2 Minnesota Valley Broadcast	24.3
300D Algona	K300CF	LIC _C_ IA	188.4 8.3	52.83 BLFT20100825AAN	43 11 47.3 94 13 00.6	0.250 58	2.5 416	24.8 Minn-iowa Christian Broadc	9.5R 43.3M
245C1 Clarion	KIAQ	LIC _CN IA	181.3 1.3	110.69 BLH19870120KA	42 40 18.0 94 09 11.0	100.000 176	7.7 518	61.4 Three Eagles Of Fort Dodge	48.1
246D Spirit Lake	636113	APP _C_ IA	249.2 68.6	77.41 BNPFT20030317GBH	43 25 00.0 95 01 06.0	0.250 61	15.6 501	10.9 Kleven Broadcasting Co. Of	53.0
249D Spirit Lake	1546373	APP DC_ IA	265.4 84.8	67.94 BNPFT20130325AOP	43 36 54.0 94 57 48.0	0.250	0.7 525	11.3 Kleven Broadcasting Co. Of	55.5
248C Rochester	KNXR	LIC _C_ MN	73.1 254.4	148.77 BLH19990505KB	44 02 28.0 92 20 25.0	100.000 317	111.0 671	75.4 United Audio Corporation	59.4
246D Windom	K246BG	LIC _C_ MN	286.9 106.2	83.53 BLFT20070514ABP	43 52 51.0 95 07 10.0	0.180 47	12.8 482	9.1 Minnesota Public Radio	60.7
250D St. Peter	K250AC	LIC _CN MN	10.4 190.6	70.03 BLFT19951106TE	44 17 11.0 93 57 45.0	0.075 9	0.6 301	5.7 Minn-iowa Christian Broadc	61.7
250A Mason City	KCMR	LIC _CN IA	128.7 309.4	96.21 BLH19920121KB	43 07 18.0 93 11 50.0	6.000 96	2.7 448	27.8 Tlc Broadcasting Corporati	67.2
249A Humboldt	KHBT	LIC _CN IA	183.8 3.7	104.12 BMLH19950202KB	42 43 57.0 94 12 23.0	5.800 84	2.6 432	26.3 Nrg License Sub, Lic	76.5

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= West Zone, 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)  
 Incoming contour overlap is ignored.  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
 « = Station meets FCC minimum distance spacing for its class.

11 ! 6BD H&S\$ \$ %&5CK ! D&kYf ] g VY] b[ f YX WX hc \$ \$ - \_K hc Y ] a] bUhY df c\ ] V] hYX =": " f Y Uh] cbg\ ] d"

## HOW TO READ THE FM COMPUTER PRINT-OUT

### Translator Reference Station

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. 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.

All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90. The column labeled "\* OUT \*" shows the greatest distance in kilometers of overlap (or smallest distance 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. Since translators are able to receive interference there is no "In" or incoming column in this report.

Listed antenna heights and power are the specific antenna heights and power from the FCC database.

Under the "AZI" column, the first row of numbers indicate the True North azimuths 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. Bearings are calculated using spherical trigonometry.

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 the minimum spacings 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 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.

Blue Earth - LPFM Preclusion  
1400 Inc.

REFERENCE		DISPLAY DATES
43 40 01.2 N.	Class L1 Preclusions	DATA 03-25-13
94 07 19.1 W.	Current Spacings to 2nd Adj.	SEARCH 03-26-13

Call	Channel	Location	Azi	Dist	FCC	Margin
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--- Channel 201 88.1 MHz. ---

\*\*\*\*\* Possible channel \*\*\*\*\*

--- Channel 202 88.3 MHz. ---						
KBDC	LIC	203C1	Mason City	IA	115.5	76.07 99.5 -23.4

--- Channel 203 88.5 MHz. ---						
KBDC	LIC	203C1	Mason City	IA	115.5	76.07 110.5 -34.4

--- Channel 204 88.7 MHz. ---						
KBDC	LIC	203C1	Mason City	IA	115.5	76.07 99.5 -23.4

--- Channel 205 88.9 MHz. ---						
NEW	CP -D	205C3	Owatonna	MN	54.3	72.75 77.5 -4.8
KSJM	LIC	206A	St. James	MN	308.2	54.31 55.5 -1.2

--- Channel 206 89.1 MHz. ---						
KSJM	LIC	206A	St. James	MN	308.2	54.31 66.5 -12.2

--- Channel 207 89.3 MHz. ---						
KSJM	LIC	206A	St. James	MN	308.2	54.31 55.5 -1.2

--- Channel 208 89.5 MHz. ---						
KMSU	LIC	209C2	Mankato	MN	10.3	53.64 79.5 -25.9

--- Channel 209 89.7 MHz. ---						
KMSU	LIC	209C2	Mankato	MN	10.3	53.64 90.5 -36.9

--- Channel 210 89.9 MHz. ---						
KMSU	LIC	209C2	Mankato	MN	10.3	53.64 79.5 -25.9

--- Channel 211 90.1 MHz. ---						
KNGA	LIC	213C1	St. Peter	MN	0.3	61.69 72.5 -10.8

--- Channel 212 90.3 MHz. ---						
KNGA	LIC	213C1	St. Peter	MN	0.3	61.69 99.5 -37.8

--- Channel 213 90.5 MHz. ---						
KNGA	LIC	213C1	St. Peter	MN	0.3	61.69 110.5 -48.8

Call	Channel	Location		Azi	Dist	FCC	Margin
-----							
--- Channel 214 90.7 MHz. ---							
<b>KNGA</b>	LIC	213C1 St. Peter	MN	0.3	61.69	99.5	-37.8
--- Channel 215 90.9 MHz. ---							
<b>KNSH</b>	LIC	216C Fort Dodge	IA	194.0	97.25	119.5	-22.3
<b>KNGA</b>	LIC	213C1 St. Peter	MN	0.3	61.69	72.5	-10.8
--- Channel 216 91.1 MHz. ---							
<b>KNSH</b>	LIC	216C Fort Dodge	IA	194.0	97.25	129.5	-32.3
--- Channel 217 91.3 MHz. ---							
<b>KNSH</b>	LIC	216C Fort Dodge	IA	194.0	97.25	119.5	-22.3
<b>KGAC</b>	LIC	218C2 St. Peter	MN	0.3	61.69	79.5	-17.8
--- Channel 218 91.5 MHz. ---							
<b>KGAC</b>	LIC	218C2 St. Peter	MN	0.3	61.69	90.5	-28.8
--- Channel 219 91.7 MHz. ---							
<b>KGAC</b>	LIC	218C2 St. Peter	MN	0.3	61.69	79.5	-17.8
--- Channel 220 91.9 MHz. ---							
<b>K222BA</b>	LIC	222D Blue Earth	MN	163.9	0.00	13.5	-13.5
<b>KZOW</b>	LIC	220A Forest City	IA	138.8	59.44	66.5	-7.1
--- Channel 221 92.1 MHz. ---							
<b>K222BA</b>	LIC	222D Blue Earth	MN	163.9	0.00	20.5	-20.5
<b>KKOR</b>	LIC	221C3 Waseca	MN	54.3	72.73	77.5	-4.8
--- Channel 222 92.3 MHz. ---							
<b>K222BA</b>	LIC	222D Blue Earth	MN	163.9	0.00	31.5	-31.5
--- Channel 223 92.5 MHz. ---							
<b>K222BA</b>	LIC	222D Blue Earth	MN	163.9	0.00	20.5	-20.5
--- Channel 224 92.7 MHz. ---							
<b>KATO-FM</b>	LIC	226C1 New Ulm	MN	354.2	51.58	72.5	-20.9
<b>K222BA</b>	LIC	222D Blue Earth	MN	163.9	0.00	13.5	-13.5
<b>KLGA-FM</b>	LIC	224C3 Algona	IA	185.6	66.85	77.5	-10.7
--- Channel 225 92.9 MHz. ---							
<b>KATO-FM</b>	LIC	226C1 New Ulm	MN	354.2	51.58	99.5	-47.9
--- Channel 226 93.1 MHz. ---							
<b>KATO-FM</b>	LIC	226C1 New Ulm	MN	354.2	51.58	110.5	-58.9
--- Channel 227 93.3 MHz. ---							
<b>KATO-FM</b>	LIC	226C1 New Ulm	MN	354.2	51.58	99.5	-47.9
--- Channel 228 93.5 MHz. ---							

Call	Channel	Location		Azi	Dist	FCC	Margin
KATO-FM	LIC 226C1	New Ulm	MN	354.2	51.58	72.5	-20.9
--- Channel 229 93.7 MHz. ---							
***** Possible channel *****							
--- Channel 230 93.9 MHz. ---							
KIAI	LIC 230C1	Mason City	IA	123.6	99.54	110.5	-11.0
KXLP	LIC-N 231A	Eagle Lake	MN	10.3	53.65	55.5	-1.9
--- Channel 231 94.1 MHz. ---							
KXLP	LIC-N 231A	Eagle Lake	MN	10.3	53.65	66.5	-12.9
AL8441	RSV-A 231A	Eagle Lake	MN	15.2	62.33	66.5	-4.2
--- Channel 232 94.3 MHz. ---							
KXLP	LIC-N 231A	Eagle Lake	MN	10.3	53.65	55.5	-1.9
--- Channel 233 94.5 MHz. ---							
***** Possible channel *****							
--- Channel 234 94.7 MHz. ---							
***** Possible channel *****							
--- Channel 235 94.9 MHz. ---							
633495	APP 237D	Blue Earth	MN	163.9	0.00	13.5	-13.5
KCPI	LIC-N 235A	Albert Lea	MN	93.3	60.71	66.5	-5.8
--- Channel 236 95.1 MHz. ---							
633495	APP 237D	Blue Earth	MN	163.9	0.00	20.5	-20.5
--- Channel 237 95.3 MHz. ---							
633495	APP 237D	Blue Earth	MN	163.9	0.00	31.5	-31.5
--- Channel 238 95.5 MHz. ---							
633495	APP 237D	Blue Earth	MN	163.9	0.00	20.5	-20.5
KMKO-FM	LIC-Z 239A	Lake Crystal	MN	341.6	45.06	55.5	-10.4
--- Channel 239 95.7 MHz. ---							
KMKO-FM	LIC-Z 239A	Lake Crystal	MN	341.6	45.06	66.5	-21.4
633495	APP 237D	Blue Earth	MN	163.9	0.00	13.5	-13.5
KILR-FM	LIC 240C3	Estherville	IA	245.2	62.51	66.5	-4.0
--- Channel 240 95.9 MHz. ---							
KILR-FM	LIC 240C3	Estherville	IA	245.2	62.51	77.5	-15.0
KMKO-FM	LIC-Z 239A	Lake Crystal	MN	341.6	45.06	55.5	-10.4
--- Channel 241 96.1 MHz. ---							
KILR-FM	LIC 240C3	Estherville	IA	245.2	62.51	66.5	-4.0
KQPR	LIC-Z 241C3	Albert Lea	MN	94.1	73.55	77.5	-4.0
--- Channel 242 96.3 MHz. ---							

Call	Channel	Location		Azi	Dist	FCC	Margin
-----							
***** Possible channel *****							
--- Channel 243 96.5 MHz. ---							
KDOG	LIC-N 244C3	North Mankato	MN	0.3	61.69	66.5	-4.8
--- Channel 244 96.7 MHz. ---							
KDOG	LIC-N 244C3	North Mankato	MN	0.3	61.69	77.5	-15.8
--- Channel 245 96.9 MHz. ---							
633480	APP 247D	Blue Earth	MN	163.9	0.00	13.5	-13.5
KDOG	LIC-N 244C3	North Mankato	MN	0.3	61.69	66.5	-4.8
--- Channel 246 97.1 MHz. ---							
633480	APP 247D	Blue Earth	MN	163.9	0.00	20.5	-20.5
--- Channel 247 97.3 MHz. ---							
633480	APP 247D	Blue Earth	MN	163.9	0.00	31.5	-31.5
--- Channel 248 97.5 MHz. ---							
633480	APP 247D	Blue Earth	MN	163.9	0.00	20.5	-20.5
--- Channel 249 97.7 MHz. ---							
KBEW-FM	LIC 251C3	Blue Earth	MN	163.9	0.00	39.5	-39.5
633480	APP 247D	Blue Earth	MN	163.9	0.00	13.5	-13.5
--- Channel 250 97.9 MHz. ---							
KBEW-FM	LIC 251C3	Blue Earth	MN	163.9	0.00	66.5	-66.5
--- Channel 251 98.1 MHz. ---							
KBEW-FM	LIC 251C3	Blue Earth	MN	163.9	0.00	77.5	-77.5
--- Channel 252 98.3 MHz. ---							
KBEW-FM	LIC 251C3	Blue Earth	MN	163.9	0.00	66.5	-66.5
--- Channel 253 98.5 MHz. ---							
KBEW-FM	LIC 251C3	Blue Earth	MN	163.9	0.00	39.5	-39.5
--- Channel 254 98.7 MHz. ---							
KEEZ-FM	LIC 256C1	Mankato	MN	341.6	45.06	72.5	-27.4
--- Channel 255 98.9 MHz. ---							
KEEZ-FM	LIC 256C1	Mankato	MN	341.6	45.06	99.5	-54.4
--- Channel 256 99.1 MHz. ---							
KEEZ-FM	LIC 256C1	Mankato	MN	341.6	45.06	110.5	-65.4
--- Channel 257 99.3 MHz. ---							
KEEZ-FM	LIC 256C1	Mankato	MN	341.6	45.06	99.5	-54.4

Call	Channel	Location		Azi	Dist	FCC	Margin
--- Channel 258 99.5 MHz. --- KEEZ-FM LIC 256C1 Mankato			MN	341.6	45.06	72.5	-27.4
--- Channel 259 99.7 MHz. --- KAUS-FM LIC 260C1 Austin			MN	92.8	78.26	99.5	-21.2
--- Channel 260 99.9 MHz. --- KAUS-FM LIC 260C1 Austin			MN	92.8	78.26	110.5	-32.2
--- Channel 261 100.1 MHz. --- KAUS-FM LIC 260C1 Austin			MN	92.8	78.26	99.5	-21.2
KXAC LIC 263C2 St. James			MN	325.8	38.21	52.5	-14.3
--- Channel 262 100.3 MHz. --- KXAC LIC 263C2 St. James			MN	325.8	38.21	79.5	-41.3
--- Channel 263 100.5 MHz. --- KXAC LIC 263C2 St. James			MN	325.8	38.21	90.5	-52.3
--- Channel 264 100.7 MHz. --- KXAC LIC 263C2 St. James			MN	325.8	38.21	79.5	-41.3
KOWZ-FM LIC-N 265C1 Blooming Prairie			MN	54.3	72.73	99.5	-26.8
--- Channel 265 100.9 MHz. --- KOWZ-FM LIC-N 265C1 Blooming Prairie			MN	54.3	72.73	110.5	-37.8
KXAC LIC 263C2 St. James			MN	325.8	38.21	52.5	-14.3
--- Channel 266 101.1 MHz. --- KOWZ-FM LIC-N 265C1 Blooming Prairie			MN	54.3	72.73	99.5	-26.8
--- Channel 267 101.3 MHz. --- KRRW LIC 268C3 St. James			MN	301.1	44.84	66.5	-21.7
--- Channel 268 101.5 MHz. --- KRRW LIC 268C3 St. James			MN	301.1	44.84	77.5	-32.7
K270AQ LIC 270D Blue Earth			MN	163.9	0.00	13.5	-13.5
--- Channel 269 101.7 MHz. --- KRRW LIC 268C3 St. James			MN	301.1	44.84	66.5	-21.7
K270AQ LIC 270D Blue Earth			MN	163.9	0.00	20.5	-20.5
--- Channel 270 101.9 MHz. --- K270AQ LIC 270D Blue Earth			MN	163.9	0.00	31.5	-31.5
--- Channel 271 102.1 MHz. --- K270AQ LIC 270D Blue Earth			MN	163.9	0.00	20.5	-20.5
KUQQ LIC-Z 271C2 Milford			IA	249.8	82.97	90.5	-7.5
--- Channel 272 102.3 MHz. ---							

Call	Channel	Location		Azi	Dist	FCC	Margin
K270AQ	LIC 270D	Blue Earth	MN	163.9	0.00	13.5	-13.5
--- Channel 273 102.5 MHz. ---							
***** Possible channel *****							
--- Channel 274 102.7 MHz. ---							
KYTC	LIC-N 274C3	Northwood	IA	105.3	74.23	77.5	-3.3
--- Channel 275 102.9 MHz. ---							
***** Possible channel *****							
--- Channel 276 103.1 MHz. ---							
KYSM-FM	LIC 278C1	Mankato	MN	6.7	56.52	72.5	-16.0
--- Channel 277 103.3 MHz. ---							
KYSM-FM	LIC 278C1	Mankato	MN	6.7	56.52	99.5	-43.0
--- Channel 278 103.5 MHz. ---							
KYSM-FM	LIC 278C1	Mankato	MN	6.7	56.52	110.5	-54.0
--- Channel 279 103.7 MHz. ---							
KYSM-FM	LIC 278C1	Mankato	MN	6.7	56.52	99.5	-43.0
--- Channel 280 103.9 MHz. ---							
KYSM-FM	LIC 278C1	Mankato	MN	6.7	56.52	72.5	-16.0
KUOO	LIC 280C2	Spirit Lake	IA	249.8	82.97	90.5	-7.5
--- Channel 281 104.1 MHz. ---							
KJLY	LIC 283C2	Blue Earth	MN	11.6	27.63	52.5	-24.9
--- Channel 282 104.3 MHz. ---							
KJLY	LIC 283C2	Blue Earth	MN	11.6	27.63	79.5	-51.9
--- Channel 283 104.5 MHz. ---							
KJLY	LIC 283C2	Blue Earth	MN	11.6	27.63	90.5	-62.9
--- Channel 284 104.7 MHz. ---							
KJLY	LIC 283C2	Blue Earth	MN	11.6	27.63	79.5	-51.9
--- Channel 285 104.9 MHz. ---							
KJLY	LIC 283C2	Blue Earth	MN	11.6	27.63	52.5	-24.9
--- Channel 286 105.1 MHz. ---							
***** Possible channel *****							
--- Channel 287 105.3 MHz. ---							
KRBI-FM	LIC-N 288C3	St. Peter	MN	6.7	56.52	66.5	-10.0



Call	Channel	Location		Azi	Dist	FCC	Margin
-----							
--- Channel 288 105.5 MHz. ---							
KRBI-FM	LIC-N 288C3	St. Peter	MN	6.7	56.52	77.5	-21.0
--- Channel 289 105.7 MHz. ---							
KRBI-FM	LIC-N 288C3	St. Peter	MN	6.7	56.52	66.5	-10.0
KRAQ	LIC 289C3	Jackson	MN	265.4	68.13	77.5	-9.4
--- Channel 290 105.9 MHz. ---							
***** Possible channel *****							
--- Channel 291 106.1 MHz. ---							
KFMC-FM	LIC 293C1	Fairmont	MN	261.9	29.45	72.5	-43.1
KLSS-FM	LIC 291C1	Mason City	IA	125.2	100.53	110.5	-10.0
--- Channel 292 106.3 MHz. ---							
KFMC-FM	LIC 293C1	Fairmont	MN	261.9	29.45	99.5	-70.1
--- Channel 293 106.5 MHz. ---							
KFMC-FM	LIC 293C1	Fairmont	MN	261.9	29.45	110.5	-81.1
--- Channel 294 106.7 MHz. ---							
KFMC-FM	LIC 293C1	Fairmont	MN	261.9	29.45	99.5	-70.1
--- Channel 295 106.9 MHz. ---							
KFMC-FM	LIC 293C1	Fairmont	MN	261.9	29.45	72.5	-43.1
--- Channel 296 107.1 MHz. ---							
KIOW	LIC-Z 297C3	Forest City	IA	136.9	58.24	66.5	-8.3
--- Channel 297 107.3 MHz. ---							
KIOW	LIC-Z 297C3	Forest City	IA	136.9	58.24	77.5	-19.3
--- Channel 298 107.5 MHz. ---							
633488	APP 300D	Blue Earth	MN	163.9	0.00	13.5	-13.5
KIOW	LIC-Z 297C3	Forest City	IA	136.9	58.24	66.5	-8.3
KBGY	LIC-N 298C2	Faribault	MN	45.7	87.29	90.5	-3.2
--- Channel 299 107.7 MHz. ---							
633488	APP 300D	Blue Earth	MN	163.9	0.00	20.5	-20.5
KICD-FM	LIC 299C1	Spencer	IA	236.4	99.90	110.5	-10.6
--- Channel 300 107.9 MHz. ---							
633488	APP 300D	Blue Earth	MN	163.9	0.00	31.5	-31.5

All separation margins include rounding