

Doug Vernier - Telecommunications Consultants  
721 W. First St., Suite A, Cedar Falls, IA 50613

Contour to Contour Allocations Study

Spokane Public Radio, Inc.

REFERENCE CH# 220A - 91.9 MHz, Pwr= 0.55 kW, HAAT= 329.7 M, COR= 958.4 M DISPLAY DATES  
47 48 48.0 N. Average Protected F(50-50)= 28.44 km DATA 01-20-09  
117 30 23.0 W. Omni-directional SEARCH 01-20-09

CH CITY	CALL SIGN	TYPE STATE	ANT AZI ---	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	I NT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
220A KSFC Spokane		LIC CX WA	0.0 0.0	0.0 BLED20030320ABD	47 48 48.0 117 30 23.0	0.450 348	77.9 972	27.0 Spokane Public Radio, Inc.	-105.6*	-106.2*
06-2C KHQ-TV Spokane		LIC HY WA	148.6 328.8	30.3 BMLCT19860805KF	47 34 52.0 117 17 47.0	87.100 653	5.8 1373	132.9 Khq, Incorporated	153.5R	-108.5M
221C3 KXJ0« St. Maries 5/11/2005:		CP NHX ID	129.4 310.1	88.6 BNPH20041230ADB	47 18 15.0 116 36 01.0	25.000 100	64.6 1005	20.9 College Creek Media, LLC	88.5R	0.13M
Accepted on 221B1 by Canada in 4/28/05 letter, not short-spaced.										
221C3 KXJ0« St. Maries One Step Application		RSV ID	128.1 308.8	89.3	47 18 54.0 116 34 30.0	25.000 100	64.6 1035	20.9 College Creek Media, LLC	88.5R	0.8M
219C1 KRFA-FM Moscow		CP VX ID	162.0 342.4	132.2 BPED20080512AAG	46 40 54.0 116 58 13.0	28.000 282	88.2 1128	60.3 Washington State University	12.5	24.0
221A KCRK-FM« Colville		LIC C WA	340.4 160.1	90.0 BLH20050620ADF	48 34 30.0 117 55 00.0	5.400 105	64.6 881	20.9 North Country Broadcasting	71.5R	18.5M
219C1 KRFA-FM Moscow From Channel 219C3-Vertical		LIC VN ID	162.0 342.4	132.2 BLED19951103KE	46 40 54.0 116 58 13.0	14.500 282	79.4 1128	54.1 Washington State University	21.4	30.4
218A KUBS Newport		LIC HX WA	37.7 218.0	51.4 BLED20080319ABC	48 10 42.0 117 04 59.0	0.150 224	0.9 1032	20.7 Newport Consolidated School	22.7	29.0
220C2 NEW Brewster, Etc,		LIC WA	278.6 96.8	186.9	48 02 14.0 119 59 07.0	1.000 755	130.2 1539	55.5	25.2	44.7
220C2 NEW Brewster, Etc,		LIC WA	278.6 96.8	186.9	48 02 14.0 119 59 07.0	1.000 755	130.2 1539	55.5	25.2	44.7
220C2 1284747 Brewster		APP CX WA	278.6 96.8	186.9 BNPED20071019AEH	48 02 14.0 119 59 07.0	1.000 755	130.1 1539	55.5 Spokane Public Radio, Inc.	25.2	44.7
274C3 VA8885« Chewelah		VAC N WA	319.3 139.0	48.9	48 08 45.0 117 56 09.0	25.000 100	64.6 1023	20.9 Spokane Public Radio, Inc.	11.5R	37.4M
Reserved for Non-Commercial Educational Use										

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.  
«» = Station meets FCC minimum distance spacing for its class.  
Reference station has protected zone issue: Canada

## 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.

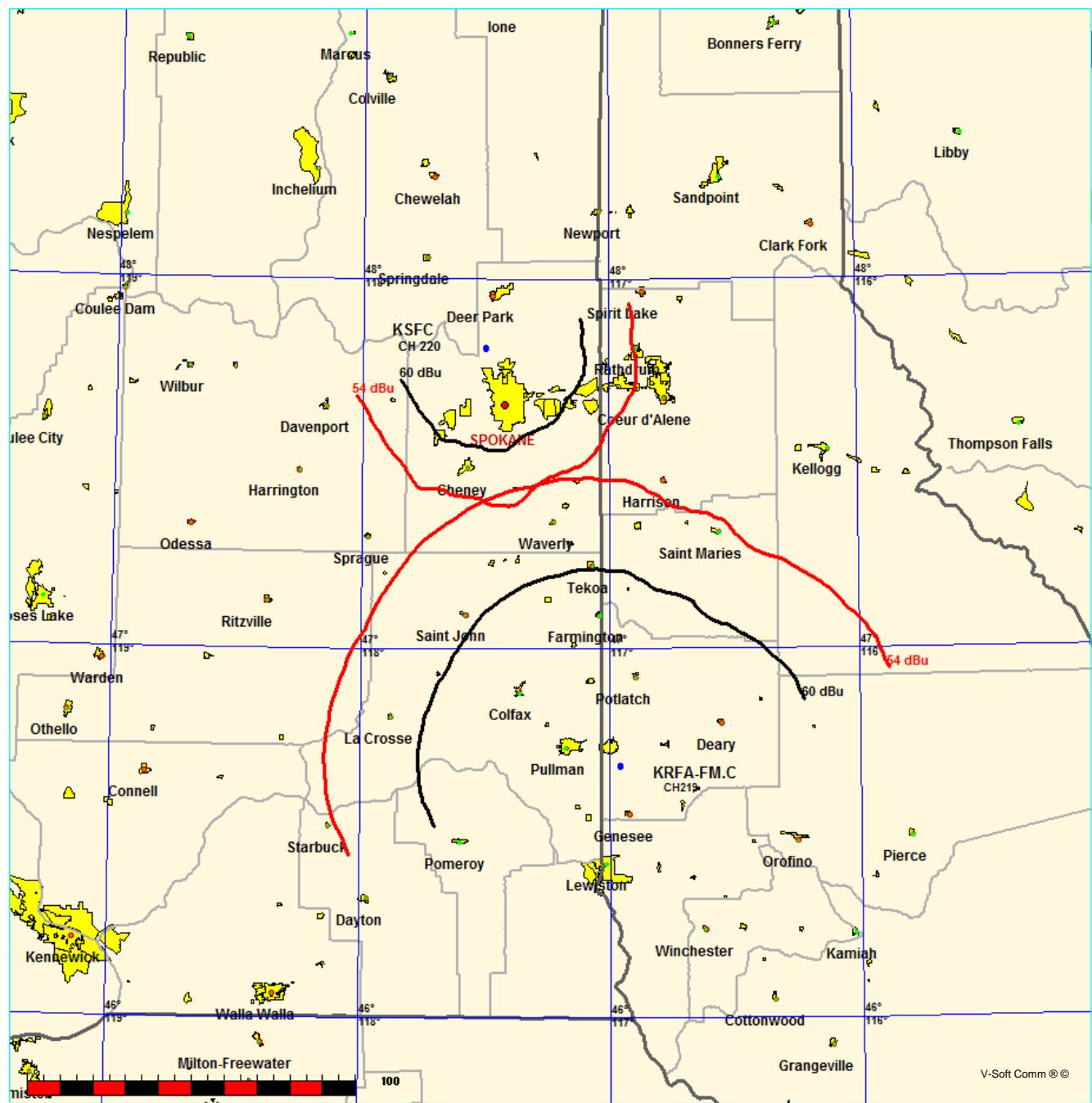
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will 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.

Contour to Contour Allocations Map  
Spokane Public Radio, Inc.

FMCommander Single Allocation Study - 01-20-2009 - FCC NGDC 30 Sec  
KSFC's Overlaps (In= 12.5 km, Out= 24.03 km)

KSFC CH 220 A  
Lat= 47 48 48.0, Lng= 117 30 23.0  
0.55 kW 329.7 M HAAT, 958.4 M COR  
Prot.= 60 dBu, Intef.= 54 dBu

KRFA-FM.C CH 219 C1 BPED20080512AAG  
Lat= 46 40 54.0, Lng= 116 58 13.0  
28.0 kW 282 M HAAT, 1128 M COR  
Prot.= 60 dBu, Intef.= 54 dBu



01-20-2009

FCC NGDC 30 Sec Terrain Data

FMOver Analysis

KSFC

Channel = 220A  
 Max ERP = 0.55 kW  
 RCAMSL = 958.4 M  
 N. Lat. 47 48 48.0  
 W. Lng. 117 30 23.0  
 Protected  
 60 dBu

KRFA-FM.C BPED20080512AAG  
 Channel = 219C1  
 Max ERP = 28 kW  
 RCAMSL = 1128 M  
 N. Lat. 46 40 54.0  
 W. Lng. 116 58 13.0  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
102.0	000.5500	0376.4	030.4	354.9	028.0000	0292.7	120.0	44.45	
103.0	000.5500	0378.3	030.5	354.8	028.0000	0293.0	119.4	44.57	
104.0	000.5500	0379.7	030.6	354.8	028.0000	0293.3	118.9	44.70	
105.0	000.5500	0379.7	030.6	354.7	028.0000	0293.7	118.4	44.82	
106.0	000.5500	0378.1	030.5	354.6	028.0000	0294.2	117.9	44.94	
107.0	000.5500	0375.4	030.4	354.4	028.0000	0294.9	117.5	45.06	
108.0	000.5500	0372.5	030.3	354.3	028.0000	0295.6	117.1	45.18	
109.0	000.5500	0370.1	030.2	354.1	028.0000	0296.3	116.6	45.30	
110.0	000.5500	0368.7	030.1	354.0	028.0000	0296.9	116.2	45.42	
111.0	000.5500	0368.0	030.1	353.9	028.0000	0297.4	115.7	45.54	
112.0	000.5500	0367.3	030.1	353.7	028.0000	0297.8	115.3	45.65	
113.0	000.5500	0366.3	030.0	353.6	028.0000	0298.3	114.8	45.77	
114.0	000.5500	0364.8	030.0	353.4	028.0000	0298.7	114.4	45.88	
115.0	000.5500	0362.6	029.9	353.3	028.0000	0299.0	114.0	45.99	
116.0	000.5500	0359.7	029.8	353.1	028.0000	0299.2	113.6	46.08	
117.0	000.5500	0356.1	029.6	352.9	028.0000	0299.2	113.3	46.17	
118.0	000.5500	0352.0	029.4	352.6	028.0000	0299.2	112.9	46.25	
119.0	000.5500	0348.4	029.3	352.4	028.0000	0299.2	112.6	46.33	
120.0	000.5500	0345.7	029.2	352.2	028.0000	0299.1	112.3	46.41	
121.0	000.5500	0344.3	029.1	352.0	028.0000	0299.1	111.9	46.51	
122.0	000.5500	0343.8	029.1	351.9	028.0000	0299.0	111.6	46.60	
123.0	000.5500	0343.7	029.1	351.7	028.0000	0299.0	111.2	46.70	
124.0	000.5500	0344.1	029.1	351.5	028.0000	0298.9	110.8	46.80	
125.0	000.5500	0345.1	029.1	351.4	028.0000	0299.0	110.4	46.91	
126.0	000.5500	0347.2	029.2	351.2	028.0000	0299.1	110.0	47.03	
127.0	000.5500	0350.0	029.3	351.1	028.0000	0299.4	109.5	47.16	
128.0	000.5500	0353.4	029.5	350.9	028.0000	0299.7	109.0	47.30	
129.0	000.5500	0356.5	029.6	350.8	028.0000	0300.2	108.6	47.44	
130.0	000.5500	0359.1	029.7	350.6	028.0000	0300.7	108.2	47.58	
131.0	000.5500	0361.3	029.8	350.4	028.0000	0301.3	107.8	47.71	
132.0	000.5500	0363.3	029.9	350.2	028.0000	0301.9	107.4	47.84	
133.0	000.5500	0365.1	030.0	350.0	028.0000	0302.6	107.0	47.97	
134.0	000.5500	0366.5	030.0	349.8	028.0000	0303.4	106.6	48.10	
135.0	000.5500	0367.8	030.1	349.6	028.0000	0304.1	106.3	48.22	
136.0	000.5500	0368.4	030.1	349.4	028.0000	0304.8	106.0	48.34	
137.0	000.5500	0368.6	030.1	349.2	028.0000	0305.4	105.7	48.44	
138.0	000.5500	0368.0	030.1	348.9	028.0000	0306.0	105.4	48.54	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
139.0	000.5500	0366.9	030.1	348.7	028.0000	0306.6	105.2	48.62
140.0	000.5500	0365.3	030.0	348.4	028.0000	0307.1	105.0	48.70
141.0	000.5500	0363.2	029.9	348.1	028.0000	0307.6	104.9	48.76
142.0	000.5500	0360.5	029.8	347.8	028.0000	0308.0	104.7	48.82
143.0	000.5500	0357.4	029.7	347.6	028.0000	0308.5	104.6	48.86
144.0	000.5500	0354.1	029.5	347.3	028.0000	0309.0	104.5	48.90
145.0	000.5500	0351.0	029.4	347.0	028.0000	0309.5	104.5	48.94
146.0	000.5500	0348.5	029.3	346.7	028.0000	0309.9	104.4	48.98
147.0	000.5500	0346.4	029.2	346.4	028.0000	0310.1	104.3	49.01
148.0	000.5500	0344.5	029.1	346.1	028.0000	0310.1	104.2	49.04
149.0	000.5500	0342.6	029.0	345.9	028.0000	0310.1	104.2	49.06
150.0	000.5500	0340.4	028.9	345.6	028.0000	0309.9	104.1	49.07
151.0	000.5500	0338.8	028.8	345.3	028.0000	0309.8	104.0	49.08
152.0	000.5500	0337.6	028.8	345.0	028.0000	0309.6	104.0	49.10
153.0	000.5500	0336.5	028.7	344.8	028.0000	0309.4	103.9	49.11
154.0	000.5500	0335.2	028.7	344.5	028.0000	0309.1	103.9	49.11
155.0	000.5500	0334.5	028.7	344.2	028.0000	0308.9	103.8	49.12
156.0	000.5500	0334.9	028.7	343.9	028.0000	0308.6	103.7	49.14
157.0	000.5500	0336.2	028.7	343.7	028.0000	0308.5	103.6	49.17
158.0	000.5500	0338.6	028.8	343.4	028.0000	0308.4	103.5	49.22
159.0	000.5500	0342.2	029.0	343.1	028.0000	0308.3	103.3	49.28
160.0	000.5500	0346.5	029.2	342.9	028.0000	0308.4	103.0	49.35
161.0	000.5500	0351.0	029.4	342.6	028.0000	0308.5	102.8	49.42
162.0	000.5500	0356.4	029.6	342.3	028.0000	0308.8	102.6	49.51
163.0	000.5500	0363.0	029.9	342.0	028.0000	0309.1	102.3	49.60
164.0	000.5500	0369.6	030.2	341.7	028.0000	0309.6	102.0	49.70
165.0	000.5500	0375.9	030.4	341.4	028.0000	0310.2	101.8	49.78
166.0	000.5500	0382.3	030.7	341.1	028.0000	0310.9	101.6	49.87
167.0	000.5500	0388.5	030.9	340.8	028.0000	0311.7	101.5	49.95
168.0	000.5500	0393.4	031.1	340.5	028.0000	0312.6	101.4	50.01
169.0	000.5500	0397.2	031.2	340.2	028.0000	0313.5	101.3	50.06
170.0	000.5500	0399.2	031.3	339.9	028.0000	0314.4	101.3	50.08
171.0	000.5500	0400.2	031.3	339.6	028.0000	0315.2	101.4	50.09
172.0	000.5500	0398.9	031.3	339.3	028.0000	0316.0	101.5	50.06
173.0	000.5500	0396.7	031.2	339.0	028.0000	0316.6	101.8	50.02
174.0	000.5500	0394.4	031.1	338.7	028.0000	0317.2	102.0	49.97
175.0	000.5500	0393.8	031.1	338.4	028.0000	0317.7	102.1	49.93
176.0	000.5500	0393.0	031.0	338.1	028.0000	0318.2	102.3	49.89
177.0	000.5500	0392.1	031.0	337.9	028.0000	0318.7	102.5	49.84
178.0	000.5500	0390.0	030.9	337.6	028.0000	0319.1	102.8	49.77
179.0	000.5500	0383.7	030.7	337.4	028.0000	0319.4	103.2	49.66
180.0	000.5500	0377.4	030.5	337.1	028.0000	0319.8	103.6	49.55
181.0	000.5500	0371.7	030.3	336.9	028.0000	0320.2	104.0	49.43
182.0	000.5500	0366.4	030.0	336.7	028.0000	0320.6	104.4	49.32
183.0	000.5500	0361.6	029.8	336.5	028.0000	0321.0	104.8	49.21
184.0	000.5500	0358.7	029.7	336.3	028.0000	0321.3	105.2	49.12
185.0	000.5500	0358.4	029.7	336.1	028.0000	0321.8	105.4	49.05
186.0	000.5500	0357.9	029.7	335.8	028.0000	0322.1	105.7	48.98
187.0	000.5500	0357.4	029.7	335.6	028.0000	0322.5	106.0	48.91
188.0	000.5500	0358.4	029.7	335.3	028.0000	0322.9	106.2	48.85
189.0	000.5500	0359.5	029.8	335.1	028.0000	0323.2	106.5	48.79

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
190.0	000.5500	0360.4	029.8	334.9	028.0000	0323.5	106.8	48.72
191.0	000.5500	0361.1	029.8	334.6	028.0000	0323.8	107.0	48.65
192.0	000.5500	0361.4	029.8	334.4	028.0000	0324.0	107.3	48.57
193.0	000.5500	0361.4	029.8	334.2	028.0000	0324.2	107.7	48.48
194.0	000.5500	0360.1	029.8	334.0	028.0000	0324.3	108.0	48.38
195.0	000.5500	0357.8	029.7	333.8	028.0000	0324.5	108.5	48.27
196.0	000.5500	0355.2	029.6	333.7	028.0000	0324.6	108.9	48.15
197.0	000.5500	0353.2	029.5	333.5	028.0000	0324.7	109.3	48.04
198.0	000.5500	0352.2	029.4	333.3	028.0000	0324.9	109.7	47.94
199.0	000.5500	0352.7	029.5	333.1	028.0000	0325.0	110.0	47.84
200.0	000.5500	0355.0	029.6	332.9	028.0000	0325.2	110.3	47.77
201.0	000.5500	0359.4	029.8	332.7	028.0000	0325.3	110.6	47.70
202.0	000.5500	0365.4	030.0	332.4	028.0000	0325.5	110.8	47.65
203.0	000.5500	0371.8	030.3	332.1	028.0000	0325.8	111.1	47.59
204.0	000.5500	0377.3	030.5	331.9	028.0000	0326.0	111.4	47.52
205.0	000.5500	0380.4	030.6	331.7	028.0000	0326.2	111.7	47.44
206.0	000.5500	0380.8	030.6	331.5	028.0000	0326.3	112.1	47.33
207.0	000.5500	0378.3	030.5	331.4	028.0000	0326.4	112.6	47.21
208.0	000.5500	0373.7	030.3	331.3	028.0000	0326.5	113.2	47.07
209.0	000.5500	0368.0	030.1	331.3	028.0000	0326.5	113.7	46.93
210.0	000.5500	0362.8	029.9	331.2	028.0000	0326.6	114.3	46.79
211.0	000.5500	0357.8	029.7	331.2	028.0000	0326.6	114.8	46.66
212.0	000.5500	0352.3	029.4	331.2	028.0000	0326.6	115.4	46.52
213.0	000.5500	0346.0	029.2	331.2	028.0000	0326.6	116.0	46.38
214.0	000.5500	0339.9	028.9	331.2	028.0000	0326.6	116.6	46.24
215.0	000.5500	0334.6	028.7	331.2	028.0000	0326.6	117.1	46.11
216.0	000.5500	0331.1	028.5	331.2	028.0000	0326.6	117.6	45.99
217.0	000.5500	0329.0	028.4	331.1	028.0000	0326.7	118.1	45.88
218.0	000.5500	0327.4	028.3	331.0	028.0000	0326.8	118.6	45.76
219.0	000.5500	0325.8	028.3	331.0	028.0000	0326.8	119.1	45.65
220.0	000.5500	0324.9	028.2	330.9	028.0000	0326.9	119.6	45.55
221.0	000.5500	0323.9	028.2	330.9	028.0000	0326.9	120.0	45.44
222.0	000.5500	0322.6	028.1	330.8	028.0000	0327.0	120.5	45.33

01-20-2009 FCC NGDC 30 Sec Terrain Data

KRFA-FM.C BPED20080512AAG  
 Channel = 219C1  
 Max ERP = 28 kW  
 RCAMSL = 1128 M  
 N. Lat. 46 40 54.0  
 W. Lng. 116 58 13.0  
 Protected  
 60 dBu

KSFC  
 Channel = 220A  
 Max ERP = 0.55 kW  
 RCAMSL = 958.4 M  
 N. Lat. 47 48 48.0  
 W. Lng. 117 30 23.0  
 Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
282.0	028.0000	0326.4	061.5	189.9	000.5500	0360.3	114.7	31.04	
283.0	028.0000	0326.0	061.5	189.9	000.5500	0360.3	113.6	31.31	
284.0	028.0000	0325.2	061.4	189.8	000.5500	0360.3	112.6	31.58	
285.0	028.0000	0323.8	061.3	189.7	000.5500	0360.2	111.5	31.85	
286.0	028.0000	0321.9	061.2	189.6	000.5500	0360.1	110.5	32.12	
287.0	028.0000	0320.1	061.1	189.5	000.5500	0360.0	109.4	32.39	
288.0	028.0000	0318.6	061.0	189.3	000.5500	0359.8	108.4	32.65	
289.0	028.0000	0318.1	060.9	189.2	000.5500	0359.7	107.3	32.93	
290.0	028.0000	0318.4	061.0	189.1	000.5500	0359.7	106.3	33.21	
291.0	028.0000	0319.0	061.0	189.0	000.5500	0359.6	105.2	33.49	
292.0	028.0000	0319.2	061.0	188.9	000.5500	0359.4	104.2	33.76	
293.0	028.0000	0318.6	061.0	188.8	000.5500	0359.3	103.2	34.04	
294.0	028.0000	0317.1	060.9	188.6	000.5500	0359.1	102.2	34.31	
295.0	028.0000	0314.6	060.7	188.3	000.5500	0358.8	101.2	34.57	
296.0	028.0000	0311.7	060.5	188.0	000.5500	0358.4	100.3	34.83	
297.0	028.0000	0309.1	060.3	187.7	000.5500	0357.9	099.3	35.08	
298.0	028.0000	0308.0	060.2	187.5	000.5500	0357.6	098.4	35.34	
299.0	028.0000	0308.8	060.3	187.3	000.5500	0357.5	097.4	35.63	
300.0	028.0000	0310.7	060.4	187.1	000.5500	0357.4	096.3	35.93	
301.0	028.0000	0312.9	060.6	186.9	000.5500	0357.5	095.3	36.24	
302.0	028.0000	0314.5	060.7	186.7	000.5500	0357.6	094.3	36.54	
303.0	028.0000	0315.4	060.8	186.5	000.5500	0357.7	093.3	36.85	
304.0	028.0000	0316.1	060.8	186.2	000.5500	0357.8	092.3	37.15	
305.0	028.0000	0316.5	060.8	185.9	000.5500	0357.9	091.4	37.45	
306.0	028.0000	0316.8	060.9	185.6	000.5500	0358.0	090.5	37.75	
307.0	028.0000	0317.1	060.9	185.2	000.5500	0358.3	089.6	38.05	
308.0	028.0000	0317.8	060.9	184.9	000.5500	0358.4	088.6	38.35	
309.0	028.0000	0319.1	061.0	184.6	000.5500	0358.5	087.7	38.66	
310.0	028.0000	0320.3	061.1	184.2	000.5500	0358.6	086.8	38.96	
311.0	028.0000	0321.6	061.2	183.8	000.5500	0358.8	085.9	39.27	
312.0	028.0000	0322.8	061.3	183.4	000.5500	0359.8	085.0	39.60	
313.0	028.0000	0324.4	061.4	183.0	000.5500	0361.4	084.1	39.95	
314.0	028.0000	0326.4	061.5	182.6	000.5500	0363.2	083.2	40.31	
315.0	028.0000	0328.4	061.7	182.2	000.5500	0365.3	082.3	40.68	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
316.0	028.0000	0329.9	061.8	181.8	000.5500	0367.8	081.4	41.05
317.0	028.0000	0330.9	061.8	181.2	000.5500	0370.4	080.6	41.41
318.0	028.0000	0331.3	061.9	180.7	000.5500	0373.1	079.8	41.76
319.0	028.0000	0331.1	061.9	180.1	000.5500	0376.6	079.1	42.12
320.0	028.0000	0330.5	061.8	179.5	000.5500	0380.5	078.5	42.47
321.0	028.0000	0330.2	061.8	178.9	000.5500	0384.5	077.8	42.82
322.0	028.0000	0329.8	061.8	178.2	000.5500	0388.6	077.2	43.17
323.0	028.0000	0328.9	061.7	177.5	000.5500	0391.4	076.6	43.45
324.0	028.0000	0327.5	061.6	176.8	000.5500	0392.3	076.1	43.65
325.0	028.0000	0326.6	061.5	176.1	000.5500	0392.9	075.6	43.85
326.0	028.0000	0326.6	061.5	175.4	000.5500	0393.5	075.0	44.05
327.0	028.0000	0327.0	061.6	174.7	000.5500	0394.0	074.5	44.25
328.0	028.0000	0327.7	061.6	174.0	000.5500	0394.4	074.0	44.44
329.0	028.0000	0328.1	061.6	173.2	000.5500	0396.0	073.5	44.65
330.0	028.0000	0327.8	061.6	172.4	000.5500	0398.0	073.1	44.85
331.0	028.0000	0326.8	061.6	171.6	000.5500	0399.6	072.7	45.01
332.0	028.0000	0325.9	061.5	170.8	000.5500	0400.1	072.4	45.13
333.0	028.0000	0325.1	061.4	170.0	000.5500	0399.2	072.2	45.20
334.0	028.0000	0324.4	061.4	169.2	000.5500	0397.6	071.9	45.23
335.0	028.0000	0323.3	061.3	168.3	000.5500	0394.7	071.7	45.22
336.0	028.0000	0321.9	061.2	167.5	000.5500	0390.9	071.6	45.15
337.0	028.0000	0320.1	061.1	166.6	000.5500	0386.2	071.5	45.04
338.0	028.0000	0318.4	061.0	165.7	000.5500	0380.6	071.5	44.90
339.0	028.0000	0316.6	060.8	164.9	000.5500	0375.1	071.5	44.73
340.0	028.0000	0314.0	060.7	164.0	000.5500	0369.7	071.5	44.54
341.0	028.0000	0311.1	060.5	163.2	000.5500	0364.1	071.7	44.31
342.0	028.0000	0309.1	060.3	162.3	000.5500	0358.4	071.8	44.08
343.0	028.0000	0308.4	060.3	161.5	000.5500	0353.4	071.9	43.89
344.0	028.0000	0308.7	060.3	160.6	000.5500	0349.3	071.9	43.75
345.0	028.0000	0309.6	060.4	159.8	000.5500	0345.6	071.9	43.62
346.0	028.0000	0310.1	060.4	159.0	000.5500	0342.0	072.0	43.47
347.0	028.0000	0309.5	060.3	158.1	000.5500	0339.0	072.2	43.30
348.0	028.0000	0307.8	060.2	157.3	000.5500	0336.9	072.4	43.12
349.0	028.0000	0305.8	060.1	156.5	000.5500	0335.5	072.8	42.96
350.0	028.0000	0302.8	059.9	155.8	000.5500	0334.7	073.2	42.77
351.0	028.0000	0299.6	059.7	155.0	000.5500	0334.5	073.7	42.59
352.0	028.0000	0299.1	059.6	154.2	000.5500	0335.0	074.0	42.49
353.0	028.0000	0299.2	059.6	153.5	000.5500	0335.9	074.4	42.41
354.0	028.0000	0296.9	059.5	152.8	000.5500	0336.7	074.9	42.26
355.0	028.0000	0292.2	059.1	152.1	000.5500	0337.5	075.6	42.05
356.0	028.0000	0287.7	058.8	151.5	000.5500	0338.1	076.3	41.83
357.0	028.0000	0285.8	058.7	150.9	000.5500	0339.0	076.8	41.66
358.0	028.0000	0284.6	058.6	150.2	000.5500	0340.0	077.4	41.51
359.0	028.0000	0283.7	058.5	149.6	000.5500	0341.3	077.9	41.37
000.0	028.0000	0283.9	058.5	148.9	000.5500	0342.8	078.4	41.25
001.0	028.0000	0284.2	058.6	148.3	000.5500	0344.0	078.9	41.11
002.0	028.0000	0279.8	058.3	147.8	000.5500	0344.9	079.7	40.87
003.0	028.0000	0274.8	057.9	147.3	000.5500	0345.7	080.6	40.60
004.0	028.0000	0269.0	057.5	146.9	000.5500	0346.5	081.5	40.31
005.0	028.0000	0260.7	056.9	146.6	000.5500	0347.1	082.6	39.97
006.0	028.0000	0254.0	056.4	146.3	000.5500	0347.8	083.6	39.66

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
007.0	028.0000	0249.7	056.1	145.9	000.5500	0348.7	084.5	39.40
008.0	028.0000	0245.4	055.7	145.6	000.5500	0349.5	085.4	39.13
009.0	028.0000	0238.1	055.2	145.3	000.5500	0350.1	086.4	38.81
010.0	028.0000	0230.0	054.6	145.2	000.5500	0350.6	087.6	38.46
011.0	028.0000	0224.7	054.2	144.9	000.5500	0351.3	088.5	38.16
012.0	028.0000	0223.2	054.0	144.5	000.5500	0352.3	089.3	37.95
013.0	028.0000	0224.2	054.1	144.1	000.5500	0353.8	089.9	37.79
014.0	028.0000	0224.7	054.2	143.7	000.5500	0355.1	090.6	37.61
015.0	028.0000	0224.3	054.1	143.3	000.5500	0356.3	091.4	37.41
016.0	028.0000	0223.9	054.1	143.0	000.5500	0357.4	092.1	37.20
017.0	028.0000	0225.6	054.2	142.6	000.5500	0358.8	092.8	37.03
018.0	028.0000	0228.4	054.4	142.1	000.5500	0360.2	093.5	36.88
019.0	028.0000	0230.2	054.6	141.7	000.5500	0361.3	094.2	36.69
020.0	028.0000	0229.6	054.5	141.4	000.5500	0362.1	095.0	36.47
021.0	028.0000	0227.9	054.4	141.2	000.5500	0362.7	095.9	36.22
022.0	028.0000	0228.4	054.4	140.9	000.5500	0363.4	096.7	36.01
023.0	028.0000	0228.5	054.5	140.6	000.5500	0364.0	097.5	35.79
024.0	028.0000	0225.1	054.2	140.5	000.5500	0364.3	098.5	35.52
025.0	028.0000	0219.0	053.7	140.5	000.5500	0364.3	099.6	35.22
026.0	028.0000	0211.9	053.1	140.6	000.5500	0364.1	100.6	34.91
027.0	028.0000	0207.4	052.7	140.5	000.5500	0364.2	101.6	34.63
028.0	028.0000	0205.3	052.6	140.4	000.5500	0364.5	102.6	34.39
029.0	028.0000	0202.6	052.3	140.3	000.5500	0364.6	103.5	34.14
030.0	028.0000	0200.7	052.2	140.2	000.5500	0364.9	104.4	33.91
031.0	028.0000	0199.7	052.1	140.1	000.5500	0365.1	105.3	33.68
032.0	028.0000	0199.6	052.1	140.0	000.5500	0365.4	106.1	33.46
033.0	028.0000	0200.8	052.2	139.7	000.5500	0365.8	107.0	33.25
034.0	028.0000	0203.3	052.4	139.5	000.5500	0366.3	107.8	33.06
035.0	028.0000	0207.3	052.7	139.2	000.5500	0366.7	108.6	32.86
036.0	028.0000	0211.3	053.1	138.9	000.5500	0367.1	109.4	32.67
037.0	028.0000	0215.4	053.4	138.6	000.5500	0367.5	110.2	32.46
038.0	028.0000	0219.0	053.7	138.4	000.5500	0367.7	111.1	32.25
039.0	028.0000	0221.8	053.9	138.2	000.5500	0367.9	112.0	32.03
040.0	028.0000	0223.5	054.1	138.0	000.5500	0368.0	112.9	31.80
041.0	028.0000	0224.8	054.2	137.9	000.5500	0368.1	113.8	31.57
042.0	028.0000	0227.1	054.3	137.8	000.5500	0368.2	114.7	31.34

