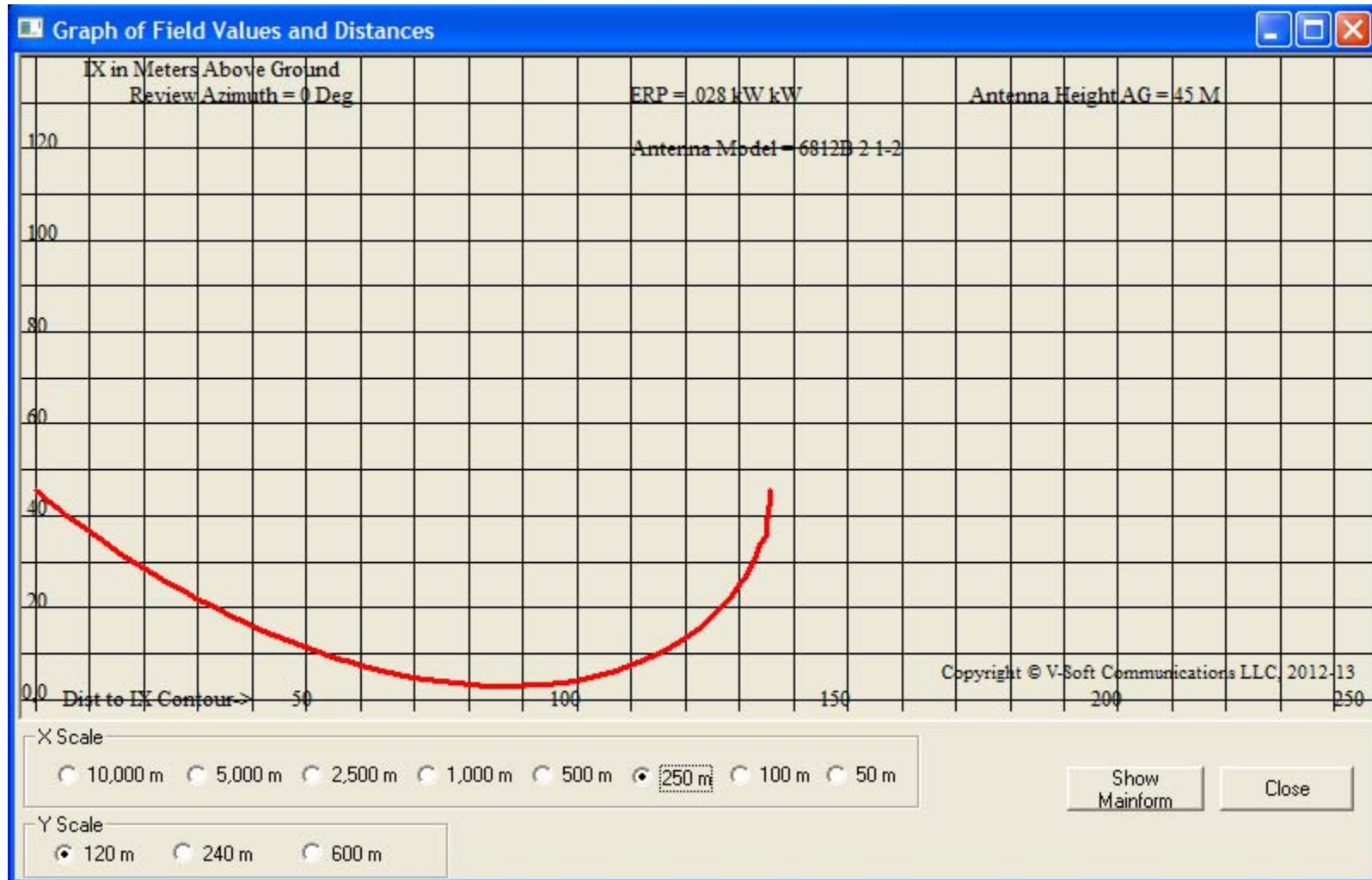


## Interference Exhibit for K221BT

The instant application seeks a waiver of the second adjacent minimum distance separation requirement of 47 C.F.R. Section 73.807. The proposed facility will not interfere with any authorized radio service, specifically, KZUS.

Below is a graphic and tabular output showing the interfering 108 dB F(50,10) contour of the proposed facility, with respect to KZUS, which does not reach ground level. There are no tall buildings within this contour.



K221BT Othello, WA  
74.1204(d) Showing  
Translator Maximum Licensed ERP = 0.028

Translator Antenna Height AG = 45 Meters  
 K221BT Antenna Model = 6812B 2 1-2

Protected Station's Contour = 68.56488 dBu  
 Translator's full Interference contour 108.56488

Review Azimuth = 0 Degrees True  
 Relative Field on the horizon at Review Azimuth = 1.000  
 Translator/LPFM ERP on the horizon at Review Azimuth = 0.028 kW  
 Distance between stations = 43.1 km  
 Protected Station= KZUS, 26 kW, 713 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw) Contour Along Dep. Angle(m)	Dist to IX Contour Along Tower Base(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0280	138.4634	138.4634	045.000
01.00	0.999	1.0	0.0279	138.3249	138.3039	042.586
02.00	0.998	1.0	0.0279	138.1865	138.1023	040.177
03.00	0.995	1.0	0.0277	137.7711	137.5823	037.790
04.00	0.995	1.0	0.0277	137.7711	137.4355	035.390
05.00	0.987	1.0	0.0273	136.6634	136.1433	033.089
06.00	0.981	1.0	0.0269	135.8326	135.0885	030.802
07.00	0.975	1.0	0.0266	135.0018	133.9955	028.547
08.00	0.967	1.0	0.0262	133.8941	132.5911	026.366
09.00	0.958	1.0	0.0257	132.6479	131.0148	024.249
10.00	0.949	1.0	0.0252	131.4018	129.4055	022.182
11.00	0.938	1.0	0.0246	129.8787	127.4924	020.218
12.00	0.927	1.0	0.0241	128.3556	125.5507	018.313
13.00	0.915	1.0	0.0234	126.6940	123.4469	016.500
14.00	0.902	1.0	0.0228	124.8940	121.1841	014.785
15.00	0.888	1.0	0.0221	122.9555	118.7659	013.177
16.00	0.874	1.0	0.0214	121.0170	116.3290	011.643
17.00	0.858	1.0	0.0206	118.8016	113.6105	010.266
18.00	0.843	1.0	0.0199	116.7247	111.0117	008.930
19.00	0.826	1.0	0.0191	114.3708	108.1397	007.765
20.00	0.809	1.0	0.0183	112.0169	105.2615	006.688
21.00	0.791	1.0	0.0175	109.5246	102.2500	005.750
22.00	0.773	1.0	0.0167	107.0322	099.2385	004.905

23.00	0.754	1.0	0.0159	104.4014	096.1020	004.207
24.00	0.735	1.0	0.0151	101.7706	092.9721	003.606
25.00	0.716	1.0	0.0144	099.1398	089.8512	003.102
26.00	0.696	1.0	0.0136	096.3705	086.6173	002.754
27.00	0.676	1.0	0.0128	093.6013	083.3993	002.506
28.00	0.656	1.0	0.0120	090.8320	080.1999	002.357
29.00	0.636	1.0	0.0113	088.0627	077.0214	002.306
30.00	0.615	1.0	0.0106	085.1550	073.7464	002.423
31.00	0.594	1.0	0.0099	082.2473	070.4997	002.640
32.00	0.574	1.0	0.0092	079.4780	067.4012	002.883
33.00	0.553	1.0	0.0086	076.5703	064.2172	003.297
34.00	0.532	1.0	0.0079	073.6625	061.0690	003.808
35.00	0.512	1.0	0.0073	070.8933	058.0724	004.337
36.00	0.491	1.0	0.0068	067.9855	055.0015	005.039
37.00	0.471	1.0	0.0062	065.2163	052.0840	005.752
38.00	0.451	1.0	0.0057	062.4470	049.2089	006.554
39.00	0.431	1.0	0.0052	059.6777	046.3783	007.444
40.00	0.411	1.0	0.0047	056.9085	043.5944	008.420
41.00	0.391	1.0	0.0043	054.1392	040.8594	009.481
42.00	0.372	1.0	0.0039	051.5084	038.2782	010.534
43.00	0.353	1.0	0.0035	048.8776	035.7468	011.666
44.00	0.335	1.0	0.0031	046.3852	033.3668	012.778
45.00	0.317	1.0	0.0028	043.8929	031.0370	013.963
46.00	0.3	1.0	0.0025	041.5390	028.8554	015.119
47.00	0.282	1.0	0.0022	039.0467	026.6298	016.443
48.00	0.266	1.0	0.0020	036.8313	024.6449	017.629
49.00	0.249	1.0	0.0017	034.4774	022.6192	018.980
50.00	0.234	1.0	0.0015	032.4004	020.8266	020.180
51.00	0.219	1.0	0.0013	030.3235	019.0832	021.434
52.00	0.204	1.0	0.0012	028.2465	017.3903	022.741
53.00	0.19	1.0	0.0010	026.3080	015.8326	023.989
54.00	0.176	1.0	0.0009	024.3696	014.3241	025.285
55.00	0.163	1.0	0.0007	022.5695	012.9454	026.512
56.00	0.151	1.0	0.0006	020.9080	011.6916	027.667
57.00	0.139	1.0	0.0005	019.2464	010.4823	028.859
58.00	0.127	1.0	0.0005	017.5849	009.3186	030.087
59.00	0.116	1.0	0.0004	016.0618	008.2724	031.232
60.00	0.106	1.0	0.0003	014.6771	007.3386	032.289
61.00	0.096	1.0	0.0003	013.2925	006.4443	033.374
62.00	0.087	1.0	0.0002	012.0463	005.6554	034.364

63.00	0.079	1.0	0.0002	010.9386	004.9660	035.254
64.00	0.071	1.0	0.0001	009.8309	004.3096	036.164
65.00	0.063	1.0	0.0001	008.7232	003.6866	037.094
66.00	0.056	1.0	0.0001	007.7540	003.1538	037.916
67.00	0.05	1.0	0.0001	006.9232	002.7051	038.627
68.00	0.043	1.0	0.0001	005.9539	002.2304	039.480
69.00	0.038	1.0	0.0000	005.2616	001.8856	040.088
70.00	0.033	1.0	0.0000	004.5693	001.5628	040.706
71.00	0.028	1.0	0.0000	003.8770	001.2622	041.334
72.00	0.024	1.0	0.0000	003.3231	001.0269	041.840
73.00	0.02	1.0	0.0000	002.7693	000.8097	042.352
74.00	0.017	1.0	0.0000	002.3539	000.6488	042.737
75.00	0.014	1.0	0.0000	001.9385	000.5017	043.128
76.00	0.011	1.0	0.0000	001.5231	000.3685	043.522
77.00	0.009	1.0	0.0000	001.2462	000.2803	043.786
78.00	0.007	1.0	0.0000	000.9692	000.2015	044.052
79.00	0.005	1.0	0.0000	000.6923	000.1321	044.320
80.00	0.004	1.0	0.0000	000.5539	000.0962	044.455
81.00	0.003	1.0	0.0000	000.4154	000.0650	044.590
82.00	0.002	1.0	0.0000	000.2769	000.0385	044.726
83.00	0.001	1.0	0.0000	000.1385	000.0169	044.863
84.00	0.001	1.0	0.0000	000.1385	000.0145	044.862
85.00	0.0	1.0	0.0000	000.0138	000.0012	044.986
86.00	0.0	1.0	0.0000	000.0138	000.0010	044.986
87.00	0.0	1.0	0.0000	000.0138	000.0007	044.986
88.00	0.0	1.0	0.0000	000.0138	000.0005	044.986
89.00	0.0	1.0	0.0000	000.0138	000.0002	044.986
90.00	0.0	1.0	0.0000	000.0138	000.0000	044.986

X-Field™ By V-Soft Communications®LLC

Channel Study K2211BT Minor Change										
REFERENCE		CH# 224D - 92.7 MHz, Pwr= 0.028 kW, HAAT= 236.9 M, COR= 556.7 M							DISPLAY DATES	
46 56 43.0 N.		Average Protected F(50-50)= 10.71 km							DATA 01-08-15	
119 23 12.0 W.		Omni-directional							SEARCH 01-20-15	
CH CITY	CALL	TYPE ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (in km)
222C2	KZUS Ephrata	LIC NCN WA	338.3 158.1	43.07 BLH19990108KA	47 18 18.0 119 35 53.0	26.000 205	7.1 713	61.2 Bustos Medi a Hol di ngs, LI c	24.5	-18.5*
221D	<del>K221BT</del> Othello, Etc.	LIC ?HN WA	0.0 0.0	0.00 BLFT19870423TC	46 56 43.0 119 23 12.0	0.046 209	0.5 527	12.0 Jerry E. I senhart	-11.9*	-12.4*
223C1	KZHR Dayton	LIC _CN WA	138.4 319.3	141.17 BLH19920731KC	45 59 19.0 118 10 28.0	54.000 379	133.1 1137	90.3 Ccr-tri Ci ties Iv, LI c	-4.5	32.1
225C2	KDBL Toppeni sh	LIC _CX WA	237.8 57.0	91.00 BMLH20120420AAV	46 30 15.0 120 23 33.0	17.000 257	61.4 629	40.9 Townsquare Medi a Yaki ma Li	17.6	32.7
225C	KZZU-FM Spokane	LIC _CY WA	64.6 246.1	173.32 BLH19781017AE	47 35 42.0 117 17 53.0	85.000 634	136.5 1335	92.1 Queenb Radi o, Inc.	25.7	64.9
226D	K226AK Ephrata	LIC DC_ WA	340.3 160.1	43.56 BLFT20040804AFX	47 18 50.0 119 34 55.0	0.041 140	0.3 647	11.5 Washi ngton State Universi t	31.8	30.8
225D	K225AR Wenatchee	LIC DV_ WA	305.7 125.1	83.55 BLFT20041020AAY	47 22 51.0 120 17 15.0	0.090 -66	16.4 627	8.2 Bustos Medi a Hol di ngs, LI c	58.6	50.2
227C1	KRKL Walla Wall a	LIC _CX WA	138.4 319.3	141.17 BMLED20020130ABT	45 59 19.0 118 10 28.0	42.000 420	11.1 1163	88.6 Educational Medi a Foundati	117.4	52.1
225L1	KHWK-LP Pasco	CP ____ WA	165.1 345.3	79.68 BNPL20131113ACZ	46 15 09.0 119 07 10.0	0.100 -18	141	58.5 Columbi a Basi n College		54.5
224C2	KNCW Omak	LIC NCN WA	355.8 175.7	153.26 BLH19951212KE	48 19 12.0 119 32 18.0	4.100 287	87.3 905	29.8 North Cascades Broadcastin	55.0	83.0
223D	K223BK Cashmere	LIC _C_ WA	308.6 127.8	105.12 BLFT20080307ACJ	47 31 50.0 120 28 50.0	0.250 -225	29.7 467	20.0 Growi ng Christi an Foundati	64.4	69.1
223C	KQMV Bellevue	LIC NC_ WA	288.6 106.8	204.55 BLH20060824AEA	47 30 17.3 121 58 03.4	60.000 698	124.2 932	83.0 Seattle Fcc Li cense Sub, L	69.9	103.4
225C1	AL6670 La Grande	RSV-A ____ OR	150.4 331.4	219.95 RM11242	45 12 59.0 118 00 00.0	100.000 299	136.6 1438	91.9 70.4		109.1
221D	K221BI East Wenatchee	LIC _C_ WA	305.8 125.1	83.59 BLFT20021105AAE	47 22 52.0 120 17 16.0	0.016 -70	0.3 621	5.6 Mcc Radi o, LI c	72.2	71.5
222D	K222BP Prosser	LIC _C_ WA	198.5 18.3	88.92 BLFT20110715ACD	46 11 11.0 119 45 15.0	0.023 242	0.3 581	11.9 Riverview Baptist Christia	75.8	76.4
223D	K223BC Naches	CP _C_ WA	251.5 70.6	108.68 BPFT20140708ABO	46 37 40.0 120 44 13.0	0.011	19.7 946	12.8 Cal vary Chapel Of Twin Fal	77.6	80.0
221D	K221BI Wenatchee	CP _C_ WA	308.4 127.7	93.18 BPFT20130523AAO	47 27 44.0 120 21 28.0	0.099 -210	0.7 399	11.6 Mcc Radi o, LI c	81.4	79.6
223D	K223BC Naches	LIC _C_ WA	251.5 70.6	108.68 BLFT20070723AAP	46 37 40.0 120 44 13.0	0.007 332	17.2 946	11.3 Cal vary Chapel Of Twin Fal	80.0	81.6
223D	K223AZ Chelan	LIC DC_ WA	330.2 149.6	116.83 BLFT20070719ACW	47 51 15.0 120 09 58.0	0.013 161	16.3 905	11.3 Dr. Mi ke I senhart	89.3	89.5
225D	KZZU-FM1 Coeur D' al ene	CP _HN ID	53.1 234.2	134.58 BPFTB19871027TB	47 39 45.0 117 56 55.0	0.046	32.3 1353	21.3 Loui s Deari as, Reci ever	90.9	96.7
221C3	KUMA-FM Pilot Rock	LIC _CX OR	168.7 348.9	153.69 BLH20060706ACT	45 35 21.0 118 59 54.0	6.900 193	4.5 735	49.5 Uma, LI c	136.0	103.8
226D	K226AW Leavenworth	LIC DV_ WA	307.9 127.0	122.62 BLFT20071001DRK	47 36 59.0 120 40 37.0	0.035 -178	0.4 762	15.8 Growi ng Christi an Foundati	111.2	106.0
224C3	KMSW The Dalles	LIC _CX OR	225.9 44.5	204.35 BMLH20120913AAH	45 38 58.0 121 16 25.0	3.400 271	82.5 613	27.7 Bi coastal Medi a Li censes I	109.6	122.4

Terrain database is NED 03 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. Call signs with strikeout need not be protected.  
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.