

Channel Study

REFERENCE CH# 260D - 99.9 MHz, Pwr= 0.25 kW, HAAT= 0.0 M, COR= 504 M DISPLAY DATES
 44 58 36.0 N. Average Protected F(50-50)= 7.1 km DATA 05-13-13
 93 16 15.0 W. Omni-directional SEARCH 05-13-13

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
260D Coon Rapids	K260BA	APP	C MN	0.0	0.00	44 58 36.0	0.250	62.8	20.5	-83.3*	-83.3*
				0.0	BPFT20110711AGN	93 16 15.0		504	Educational Media Foundati		
260D Coon Rapids	K260BA	LIC	C MN	278.6	14.15	44 59 44.0	0.170	44.9	13.3	-50.7*	-60.5
				98.5	BLFT20070110ABF	93 26 56.0	109	392	Educational Media Foundati		
258C Minneapolis	KSJN	LIC	CN MN	51.7	14.67	45 03 30.0	100.000	10.4	73.9	-15.2*	-60.3*
				231.8	BLH19910814KH	93 07 27.0	315	593	Minnesota Public Radio		
262C1 Minneapolis	KFXN-FM	LIC	CY MN	51.7	14.67	45 03 30.0	100.000	9.9	71.3	-14.7*	-57.7*
				231.8	BLH19930923KA	93 07 27.0	281	559	Amfm Broadcasting Licenses		
260C1 Austin	KAUS-FM	LIC	CN MN	176.4	150.19	43 37 42.0	100.000	170.3	71.0	-40.8*	16.1
				356.5	BLH4037	93 09 12.0	283	660	Three Eagles Of Luverne, I		
260A St. Joseph	KCML	LIC	C MN	312.0	94.02	45 32 21.0	2.900	85.0	29.6	-11.0	3.0
				131.4	BLH19980626KA	94 10 05.0	145	464	Leighton Enterprises Inc		
207C1 Northfield	KCMP	LIC	CY MN	153.9	35.58	44 41 21.0	100.000	0.0	0.0	21.5R	14.1M
				334.0	BLED20060308AIB	93 04 21.0	234	517	Minnesota Public Radio		
260C3 Cornell	WDRK	LIC	NC WI	83.0	147.34	45 07 22.0	25.000	112.8	38.3	14.6	47.1
				264.3	BLH20010831AAY	91 24 23.0	100	422	Maverick Media Of Eau Clai		

Terrain database is 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)
 "*"affixed to 'IN' or 'OUT' values = site inside protected contour.
 < = Station meets FCC minimum distance spacing for its class.

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KSJN, channel 258C, Minneapolis, MN. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for K260BA:	250 watts
The proposed COR for K260BA:	17 meters*
KSJN F(50/50) contour at proposed site:	94 dBu
The F(50/10) contour of proposed K260BA	134 dBu

By taking into account the antenna vertical elevation pattern for the NIC BKG 77, it has been determined that the predicted interfering contour will not actually reach the ground or any regularly occupied floors of the building. (see Exhibit 13 A-1). The maximum distance to the interference contour is 22.1 meters.

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

* NOTE: The architectural specification sheet for this site states that this is a 57 floor building with floors 56 and 57 housing equipment only; each floor is approximately 4.14 meters tall. The roof of the building is topped by a 5 meter parapet. The proposed antenna will be mounted on a 4 meter pole atop the parapet placing the proposed antenna approximately 17 meters above the regularly occupied portion of the building.

EXHIBIT 13 - A1
 74.1204(d) Showing
 K260BA
 COON RAPIDS, MN

ERP (kw): 0.25
 Height of Antenna above Ground (m): 17
 Translator's IX Contour: 134
 Antenna Type: Nicom BKG77

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.2500	22.1294	17.000
5	0.999	0.2495	22.1073	15.073
10	0.982	0.2411	21.7311	13.226
15	0.954	0.2275	21.1115	11.536
20	0.918	0.2107	20.3148	10.052
25	0.872	0.1901	19.2969	8.845
30	0.818	0.1671	18.0908	7.955
35	0.758	0.1436	16.7741	7.379
40	0.691	0.1194	15.2914	7.171
45	0.616	0.0949	13.6317	7.361
50	0.538	0.0724	11.9056	7.880
55	0.465	0.0541	10.2902	8.571
60	0.391	0.0382	8.6526	9.507
65	0.313	0.0245	6.9265	10.722
70	0.239	0.0143	5.2889	12.030
75	0.176	0.0077	3.8948	13.238
80	0.129	0.0042	2.8547	14.189
85	0.103	0.0027	2.2793	14.729
90	0.001	0.0000	0.0221	16.978

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KFXN-FM, channel 262C1, Minneapolis, MN. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for K260BA:	250 watts
The proposed COR for K260BA:	17 meters*
KFXN-FM F(50/50) contour at proposed site:	93 dBu
The F(50/10) contour of proposed K260BA	133 dBu

By taking into account the antenna vertical elevation pattern for the NIC BKG 77, it has been determined that the predicted interfering contour will not actually reach the ground or any regularly occupied floors of the building. (see Exhibit 13 B - 1). The maximum distance to the interference contour is 24.8 meters.

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

* NOTE: The architectural specification sheet for this site states that this is a 57 floor building with floors 56 and 57 housing equipment only; each floor is approximately 4.14 meters tall. The roof of the building is topped by a 5 meter parapet. The proposed antenna will be mounted on a 4 meter pole atop the parapet placing the proposed antenna approximately 17 meters above the regularly occupied portion of the building.

EXHIBIT 13 - B1
 74.1204(d) Showing
 K260BA
 COON RAPIDS, MN

ERP (kw): 0.25
 Height of Antenna above Ground (m): 17
 Translator's IX Contour: 133
 Antenna Type: Nicom BKG77

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.2500	24.8296	17.000
5	0.999	0.2495	24.8048	14.838
10	0.982	0.2411	24.3827	12.766
15	0.954	0.2275	23.6875	10.869
20	0.918	0.2107	22.7936	9.204
25	0.872	0.1901	21.6514	7.850
30	0.818	0.1671	20.2982	6.851
35	0.758	0.1436	18.8208	6.205
40	0.691	0.1194	17.1573	5.972
45	0.616	0.0949	15.2950	6.185
50	0.538	0.0724	13.3583	6.767
55	0.465	0.0541	11.5458	7.542
60	0.391	0.0382	9.7084	8.592
65	0.313	0.0245	7.7717	9.956
70	0.239	0.0143	5.9343	11.424
75	0.176	0.0077	4.3700	12.779
80	0.129	0.0042	3.2030	13.846
85	0.103	0.0027	2.5575	14.452
90	0.001	0.0000	0.0248	16.975