

ENGINEERING EXHIBIT  
AMENDMENT TO APPLICATION FOR  
CONSTRUCTION PERMIT  
SCA LICENSE CORPORATION  
RADIO STATION WYLL  
CHICAGO, ILLINOIS

1160 KHZ

50 KW

DA-2

U

Engineering Statement

This Engineering Exhibit has been prepared on behalf of the SCA Corporation, licensee of AM broadcast station WYLL Chicago, Illinois. Station WYLL operates on 1160 kHz with power of 50 kilowatts daytime and 5 kilowatts nighttime, employing different directional antenna patterns during daytime and nighttime hours, Facility ID 28630. SCA Corporation filed an application to increase nighttime power to 50 kilowatts, employing a new transmitter location, File Number BP-20021023ABA, which was the subject of the Federal Communications Commission letter of January 28, 2003. In the FCC letter, an overlap of the proposed WYLL 0.25 mV/m 10 percent skywave contour with the WWVA Wheeling, West Virginia 0.5 mV/m nighttime groundwave contour was noted, in addition to an increase in interference to a Canadian allotment on 1160 kHz at Baie Comeau, Quebec. These two allocation situations will be discussed below.

WWVA Wheeling, WV

Station WWVA is a Class A station operating on 1170 kHz. The FCC rules prohibit overlap of the WWVA 0.5 mV/m nighttime groundwave contour by the proposed 0.25 mV/m 10 percent skywave contour of a station operating on a first-adjacent channel. However, the licensed WYLL 0.25 mV/m contour encompasses the WWVA 0.5 mV/m contour. While the proposed WYLL 0.25 mV/m contour would also encompass the WWVA 0.5 mV/m contour, the strength of the WYLL signal throughout the area of the WWVA contour would be reduced by this proposal, as shown on the attached Figure 7A (Sheet 12). Hence, this proposal complies with the FCC's longstanding interpretation of its AM rules with respect to "grandfathered" overlap.

Allotment of 1160 kHz at Baie Comeau, Ontario

The allotment of 1160 kHz at Baie Comeau was not adequately protected from interference by the WYLL proposal; therefore the proposed WYLL directional antenna pattern was redesigned to reduce the radiation toward the Canadian allotment. Because of this pattern modification, the following figures have been amended and are part of this exhibit:

- |           |  |
|-----------|--|
| Figure 3A | Specifications for Nighttime Directional Antenna System        |
| Figure 4A | Proposed Nighttime Horizontal Plane Standard Radiation Pattern |
| Figure 5A | Nighttime Radiation Pattern                                    |

Figure 6A            Proposed Nighttime Coverage Contours

Figure 7A            Nighttime Allocation Study

With the slight change in the directional antenna pattern, Sheet 11 of Figure 7A is provided to demonstrate that prohibited contour overlap will not occur with station KSL Salt Lake City, Utah and as previously mentioned, Sheet 12 of Figure 7A shows that the overlap with WWVA is being reduced by the WYLL proposal.

Those figures contained in BP-20021023ABA, which have not been amended, remain pertinent to the proposed WYLL proposal.



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201 Fletcher Avenue  
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941 329 6000

February 10, 2003

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1160 KHZ    50 KW    DA-2    U

Specifications for Nighttime  
Directional Antenna System

Frequency: 1160 kHz

Hours of Operation: Unlimited

Power: 50 kW

Number of Towers: 6

Type of Tower: Guyed, Uniform Cross-section,  
base-insulated

All Towers - height above  
base insulator 59.4 m (195 ft)

All Towers - overall height 60.7 m (199 ft)

Tower Arrangement:

Tower No.	Spacing (deg.) / (m)	Orientation (deg. True)
1 (NW)	0.0/0.0	0.0
2 (CW)	99.3/71.3	190.3
3 (SW)	187.7/134.8	192.0
4 (NE)	176.0/126.4	86.3
5 (CE)	214.1/153.8	119.6
6 (SE)	245.7/176.5	136.6

Element Field Parameters:

Nighttime:

<u>Tower No.</u>	<u>Field Ratio</u>	<u>Phase (degrees)</u>
1 (NW)	0.671	-128.8
2 (CW)	1.000	0.0
3 (SW)	0.500	+131.4
4 (NE)	0.425	-149.8
5 (CE)	0.887	-14.8
6 (SE)	0.617	+124.6

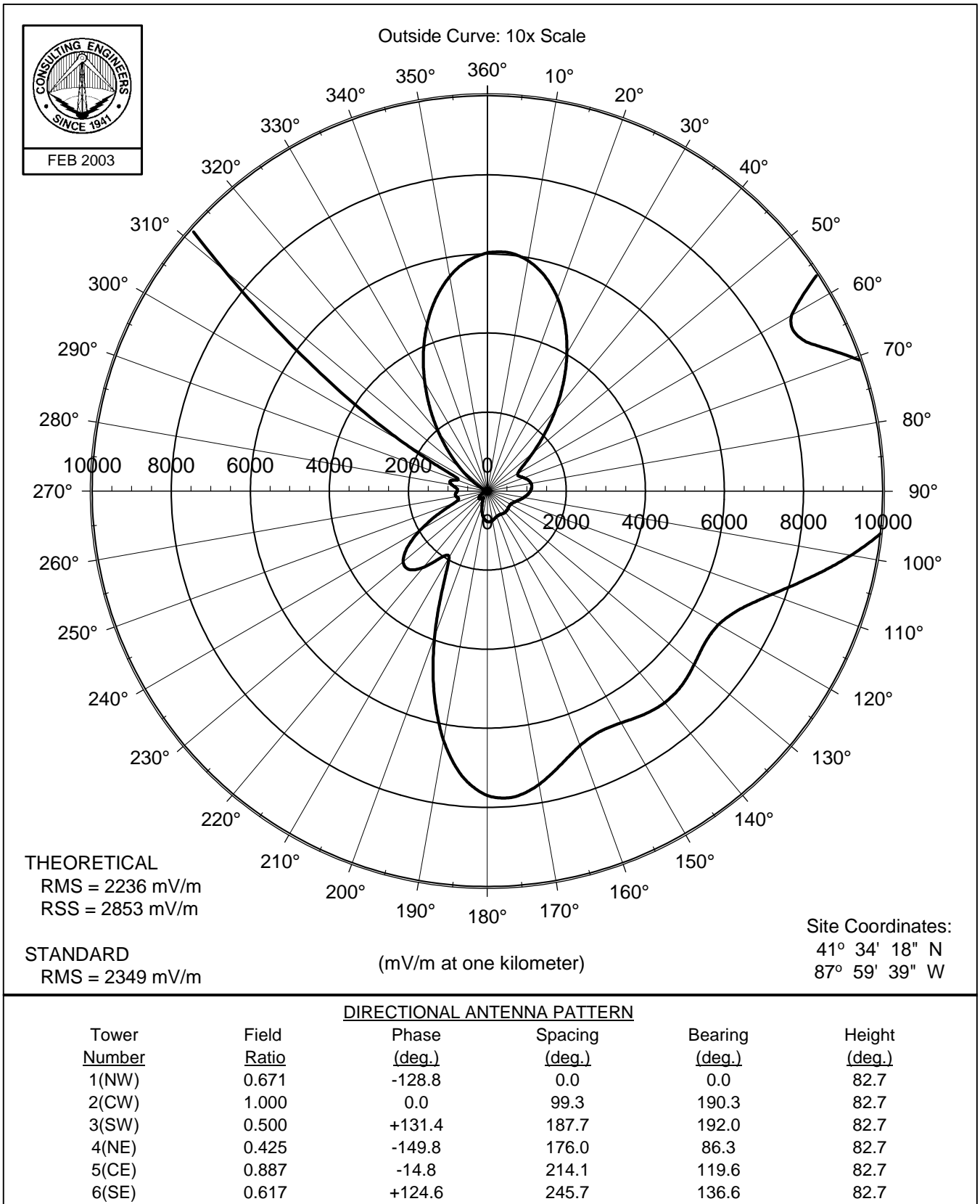
Ground System:

Installed about the base of each tower are 120 evenly spaced, buried copper wire radials (#10 AWG), extending 64.7 meters (212 ft) from all towers except where shortened and bonded to transverse copper strap between towers. In addition, copper strap runs from the transmitter and down the line of towers and is bonded to ground at the base of each tower.

Geographic Coordinates of  
Center of Antenna Array:

41° 34' 18" North Latitude  
87° 59' 39" West Longitude

Figure 4A



## PROPOSED NIGHTTIME HORIZONTAL PLANE STANDARD RADIATION PATTERN

RADIO STATION WYLL  
CHICAGO, ILLINOIS  
1160 KHZ 50 KW DA-2 U

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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1160 KHZ      50 KW      DA-2      U

NIGHTTIME RADIATION PATTERN  
(Radiation Values at One Kilometer)

Tower Number	Field Ratio	Phase (deg.)	Spacing (deg.)	Bearing (deg.)	Height (deg.)
1 (NW)	0.671	-128.8	0.0	0.0	82.7
2 (CW)	1.000	0.0	99.3	190.3	82.7
3 (SW)	0.500	+131.4	187.7	192.0	82.7
4 (NE)	0.425	-149.8	176.0	86.3	82.7
5 (CE)	0.887	-14.8	214.1	119.6	82.7
6 (SE)	0.617	+124.6	245.7	136.6	82.7
Input Power (kW)	Loop Loss (ohms)	Theo. RMS (mV/m)	Theo. RSS (mV/m)	Q Factor (mV/m)	Standard RMS (mV/m)
50	1.0	2236	2853	71.3	2349

Standard Radiation Pattern  
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
0	6030	5984	5847	5624	5319	4943	4506
5	6056	6010	5873	5648	5343	4965	4526
10	5919	5875	5743	5527	5233	4869	4445
15	5626	5586	5465	5268	4997	4660	4266
20	5195	5160	5056	4884	4648	4351	4001
25	4652	4624	4540	4400	4205	3958	3662
30	4027	4007	3945	3841	3694	3503	3267
35	3358	3346	3307	3241	3143	3010	2839
40	2684	2679	2663	2632	2582	2505	2397
45	2047	2049	2052	2052	2042	2016	1965
50	1495	1501	1516	1537	1557	1569	1562
55	1087	1092	1107	1131	1161	1190	1211
60	889	887	883	883	891	909	931
65	891	881	851	811	772	747	738
70	985	969	922	852	771	695	637
75	1076	1057	1003	920	817	708	608
80	1125	1107	1052	966	857	735	613
85	1127	1110	1059	977	872	750	621
90	1088	1073	1027	954	858	745	621
95	1020	1006	968	905	822	722	610
100	934	923	892	840	771	687	591
105	844	836	812	772	717	650	571
110	764	758	741	711	671	619	558
115	705	701	689	669	640	602	555
120	675	672	664	651	630	602	564
125	671	669	663	653	637	614	582
130	682	681	676	666	652	630	601
135	695	693	688	678	664	643	615
140	698	696	690	680	666	645	618
145	690	687	681	669	654	634	609
150	677	673	664	650	632	611	587
155	671	666	652	632	607	582	557
160	685	677	656	624	588	553	523
165	717	706	675	630	578	529	489
170	753	740	701	643	575	509	457
175	776	761	716	648	568	489	425

Standard Radiation Pattern  
(at One Kilometer)

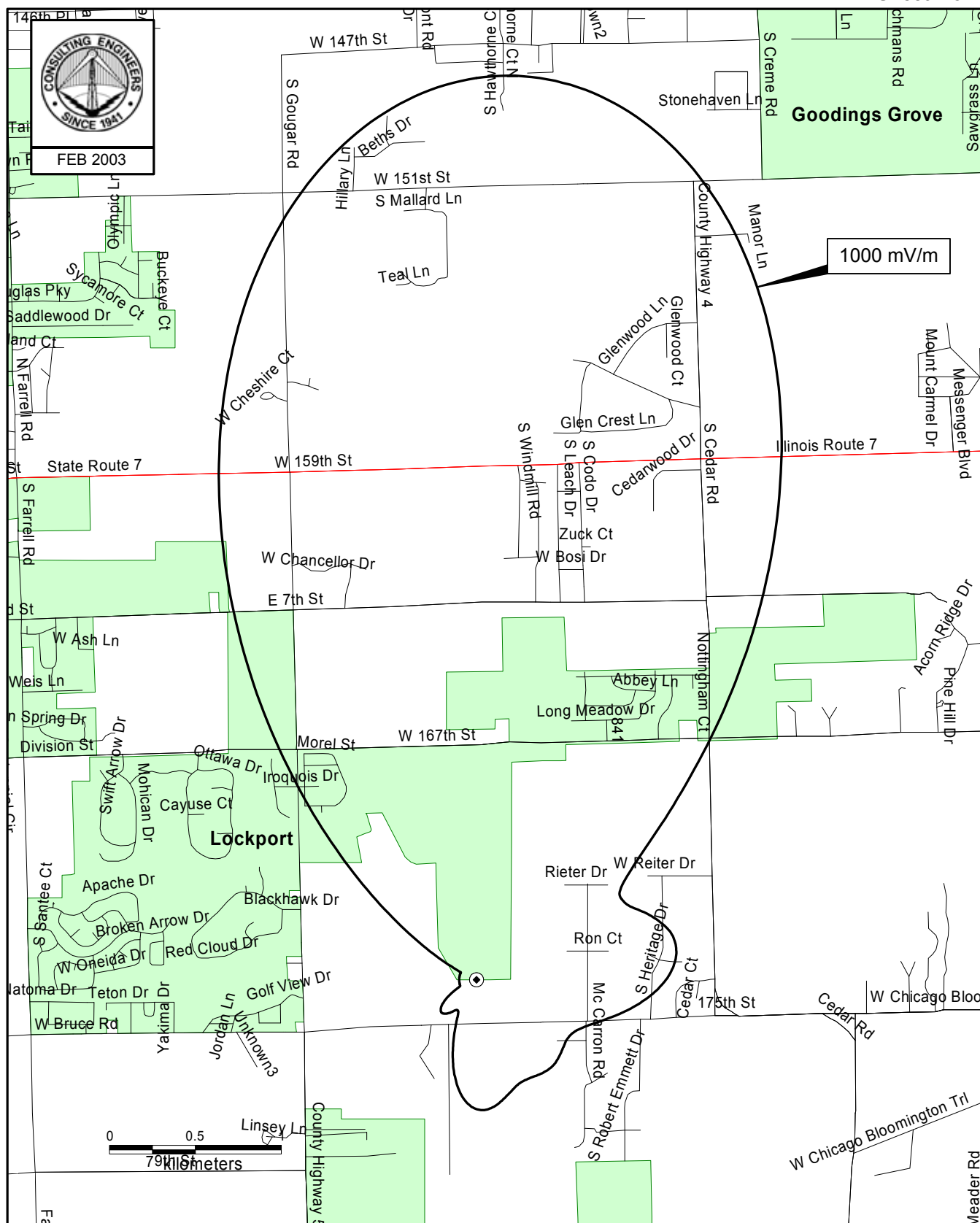
Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
0	4023	3509	2981	2457	1954	1488	1073
5	4041	3524	2994	2467	1961	1492	1075
10	3974	3472	2954	2437	1940	1479	1067
15	3826	3353	2862	2370	1893	1447	1047
20	3605	3175	2725	2268	1820	1398	1016
25	3322	2946	2546	2135	1725	1334	976
30	2991	2678	2336	1976	1612	1257	927
35	2629	2382	2102	1799	1484	1169	871
40	2253	2072	1856	1610	1345	1074	809
45	1881	1762	1606	1416	1201	973	743
50	1530	1463	1361	1223	1056	869	674
55	1214	1189	1130	1038	913	765	604
60	947	946	920	864	776	664	534
65	741	745	736	705	648	566	465
70	604	590	581	564	529	473	399
75	531	483	458	443	422	386	335
80	503	420	368	342	326	306	275
85	497	389	309	263	243	233	218
90	496	379	279	210	176	168	165
95	493	378	272	185	129	111	117
100	488	383	280	188	113	71.6	73.7
105	485	393	300	211	130	65.3	40.5
110	487	409	327	243	163	90.8	36.1
115	498	432	358	280	201	125	59.6
120	516	458	391	316	237	159	87.2
125	539	486	423	350	271	190	113
130	561	511	450	378	299	216	136
135	577	530	471	401	322	238	155
140	583	539	483	416	339	256	171
145	577	537	486	423	350	268	183
150	559	524	479	423	355	276	192
155	532	502	465	416	354	280	198
160	497	473	444	403	348	280	201
165	460	440	418	386	339	276	202
170	423	404	389	366	327	270	200
175	386	368	360	344	313	262	196

Standard Radiation Pattern  
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
180	770	753	706	634	548	461	391
185	724	708	662	591	506	420	351
190	639	624	582	518	442	365	305
195	522	510	475	423	360	300	258
200	388	380	354	317	275	238	219
205	264	259	246	226	208	197	200
210	193	192	189	186	187	192	204
215	205	205	205	206	209	214	222
220	251	250	247	244	240	238	237
225	280	278	273	266	257	249	242
230	278	276	271	262	252	242	232
235	247	245	241	234	225	217	208
240	195	194	192	188	184	179	175
245	137	137	136	136	137	137	137
250	90.5	90.8	91.7	93.6	96.8	101	104
255	74.9	74.6	74.1	74.5	76.6	80.3	84.4
260	79.6	78.9	77.3	76.0	76.4	79.0	82.9
265	80.8	80.4	79.6	79.6	81.7	86.5	93.5
270	75.9	75.7	75.8	77.9	83.9	94.6	109
275	77.6	76.2	73.6	74.4	83.9	103	130
280	90.4	86.5	77.5	73.2	86.7	119	161
285	96.9	90.9	77.5	74.6	102	153	211
290	81.8	77.4	74.6	98.3	152	221	293
295	96.9	105	134	186	257	337	417
300	244	257	296	356	431	513	590
305	504	517	555	612	682	754	819
310	868	879	911	958	1012	1065	1105
315	1333	1340	1361	1389	1419	1440	1444
320	1886	1888	1893	1896	1892	1872	1829
325	2507	2503	2488	2460	2415	2345	2247
330	3167	3156	3120	3057	2965	2840	2681
335	3834	3814	3755	3656	3516	3334	3111
340	4470	4442	4361	4226	4039	3801	3517
345	5038	5004	4902	4735	4505	4217	3877
350	5505	5465	5347	5153	4888	4558	4172
355	5843	5799	5668	5455	5164	4805	4386

Standard Radiation Pattern  
(at One Kilometer)

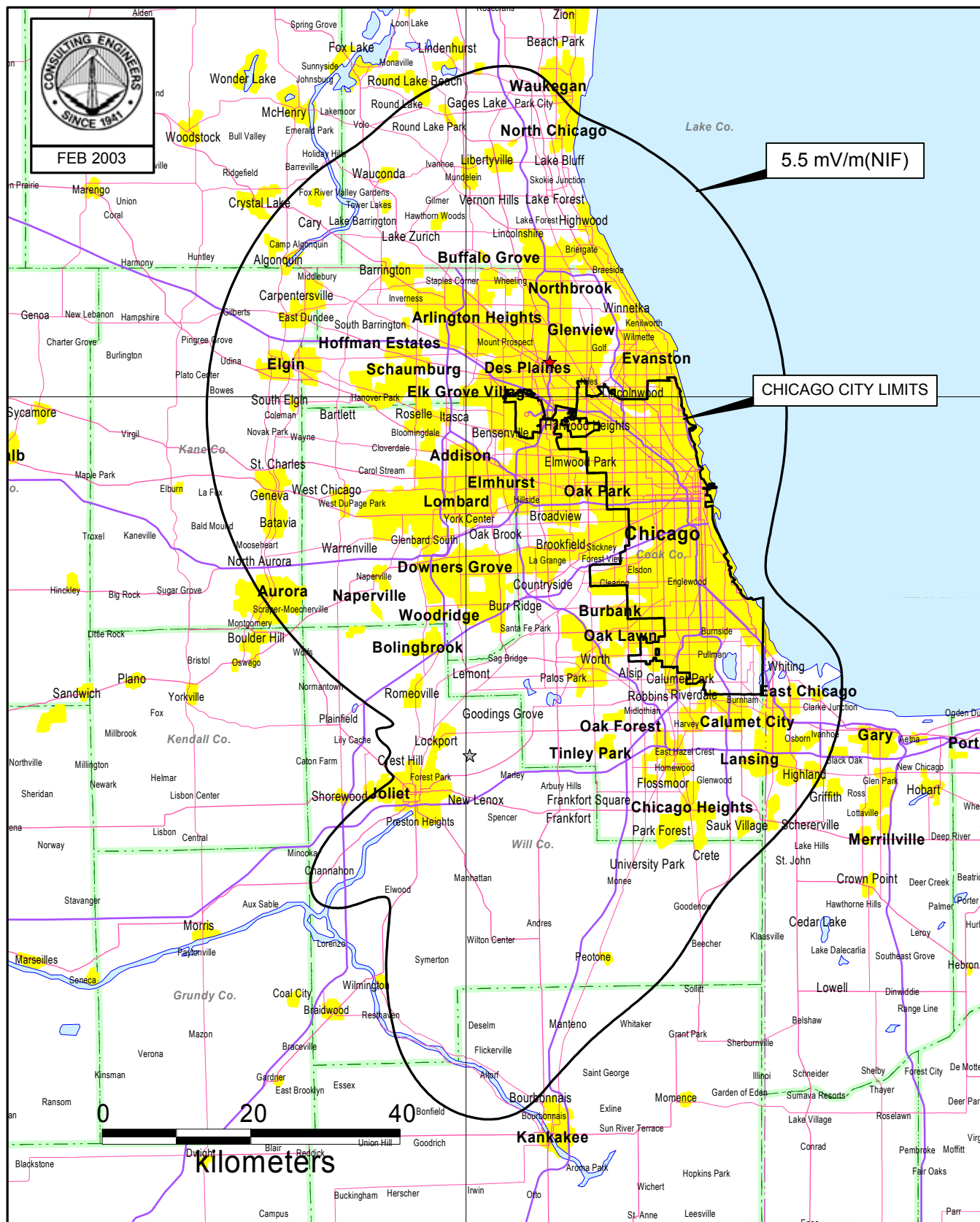
Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
180	348	334	331	323	298	253	191
185	311	301	305	303	283	242	184
190	275	273	283	285	269	231	176
195	243	252	266	270	255	220	167
200	222	238	254	257	242	208	157
205	214	233	246	246	229	195	146
210	220	234	241	236	217	182	134
215	230	236	235	225	203	167	121
220	237	234	227	212	187	151	106
225	235	227	215	196	169	133	90.3
230	222	211	197	176	149	114	73.5
235	199	188	173	153	126	92.7	56.4
240	169	160	146	127	102.0	71.9	41.7
245	135	129	118	101.5	79.3	54.8	36.7
250	105	102	93.9	80.6	64.4	50.9	48.3
255	86.8	86.1	81.6	74.6	68.4	67.0	71.3
260	86.6	89.0	90.1	90.9	93.0	96.7	100.2
265	102	110	118	125	131	134	133
270	126	143	158	170	177	177	170
275	159	186	209	225	231	226	210
280	204	242	272	290	293	281	254
285	268	316	350	367	364	341	302
290	360	413	447	458	445	409	353
295	486	538	565	565	537	482	408
300	654	695	708	689	639	563	466
305	866	886	875	830	753	650	528
310	1123	1112	1067	988	877	741	591
315	1422	1369	1281	1159	1009	837	656
320	1757	1652	1512	1341	1146	935	721
325	2116	1951	1753	1529	1285	1033	785
330	2486	2256	1997	1715	1422	1128	846
335	2850	2555	2233	1895	1552	1217	903
340	3192	2834	2453	2061	1671	1298	955
345	3495	3080	2646	2206	1775	1368	998
350	3742	3281	2803	2323	1859	1424	1033
355	3922	3426	2916	2408	1919	1464	1058



## PROPOSED NIGHTTIME COVERAGE CONTOURS

RADIO STATION WYLL  
CHICAGO, ILLINOIS  
1160 KHZ 50 KW DA-2 U

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



## PROPOSED NIGHTTIME COVERAGE CONTOURS

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Nighttime Allocation Study

RSS Calculation to WYLL Proposed

To Station (Call)	WYLLP	41-34-18	087-59-39				
From Station(Call)	KSL	WBOB	WKCM	WAMB	WCXI	WODY	WPIE
Frequency (kHz)	1160.000	1160.000	1160.000	1160.000	1160.000	1160.000	1160.000
G.C. Distance (km)	2012.600	403.200	421.100	611.300	377.100	877.600	937.000
Slant Distance (km)	2022.479	450.116	466.140	643.227	426.868	900.124	958.068
Bearing degrees	79.535	316.903	345.861	349.969	250.062	310.467	267.180
Mid-Pt Latitude(deg)	41.810	40.280	39.740	38.870	42.210	39.210	42.200
Geo. M.P. Lat.	51.310	51.150	50.530	49.670	53.100	50.250	53.310
Min-Angle(deg)	0.000	18.730	17.920	11.870	20.040	7.330	6.620
Max-Angle(deg)	2.230	29.740	28.620	19.970	31.500	13.250	12.190
Horiz. Rad (mV/m)	2822.210	32.610	65.700	119.090	26.000	115.330	147.030
Max Vert. Rad. (mV/m)	2822.205	69.499	71.275	110.071	50.993	113.673	142.031
Skywave Mult.	9.697	146.709	140.634	86.291	152.617	48.492	38.269
Night Limit (mV/m)	5.473	2.039	2.005	1.900	1.556	1.102	1.087

From Station(Call)	WJFJ	WMVI	WYRU	WOBM	RAD	HJEC	WYNS
Frequency (kHz)	1160.000	1160.000	1160.000	1160.000	1160.000	1160.000	1160.000
G.C. Distance (km)	864.100	1184.300	1073.000	1167.200	3690.200	4050.800	1031.700
Slant Distance (km)	886.985	1201.085	1091.513	1184.179	3695.651	4055.763	1050.944
Bearing degrees	326.320	267.593	316.841	282.329	323.001	340.293	278.700
Mid-Pt Latitude(deg)	38.440	42.470	38.290	41.060	29.960	24.900	41.360
Geo. M.P. Lat.	49.400	53.660	49.350	52.250	41.420	36.200	52.510
Min-Angle(deg)	7.510	4.260	5.220	4.400	0.000	0.000	5.620
Max-Angle(deg)	13.510	8.730	10.130	8.930	0.000	0.000	10.710
Horiz. Rad (mV/m)	102.930	215.620	141.000	181.420	1026.860	978.600	128.190
Max Vert. Rad. (mV/m)	102.585	214.915	140.337	178.815	1026.860	978.600	131.537
Skywave Mult.	51.040	24.351	35.605	27.100	4.438	4.648	33.513
Night Limit (mV/m)	1.047	1.047	0.999	0.969	0.911	0.910	0.882

RSS Night Limit to station

50 % Exclusion = 05.473 mV/m from KSL

25 % Exclusion = 06.461 mV/m from KSL

0 % Exclusion = 07.685

WBOB WKCM WAMB

\* - enters the 25% limit calculation  
 \*\* - enters the 50% limit calculation  
 # - see Engineering Exhibit  
 ## - allotment to be deleted

du Treil,Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station:WYLL PROPOSED

Coordinates: 41-34-18 N 087-59-39 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
WSPZ	1150	925.8	177.8	6.8	12.4	47.18	5.93	7.23	1.81	1914.6
KLRG	1150	841.	207.2	7.8	14.0	54.25	6.6	8.14	2.04	1876.8
KCKY	1150	2280.9	253.	0.0	0.8	9.36	9.43	10.67	2.67	14251.3
KXTA	1150	2748.5	262.1	0.0	0.0	6.17	5.33	6.08	1.52	12303.6
KCUV	1150	1436.7	266.8	2.5	6.2	19.7	14.72	16.	4.00	10148.6
WDEL	1150	1067.7	96.4	5.3	10.2	32.26	4.68	5.74	1.43	2222.9
WNDB	1150	1506.9	153.3	2.1	5.6	21.5	16.37	19.95	4.99	11603.1
WTMP	1150	1588.	160.	1.6	5.0	19.96	21.02	23.8	5.95	14905.8
KWKY	1150	473.6	270.3	15.8	25.7	116.84	9.58	9.93	2.48	1062.1
KSAL	1150	861.1	252.8	7.6	13.6	49.4	2.69	3.7	.92	935.9
WLOC	1150	510.5	158.9	14.6	23.9	109.87	7.33	9.26	2.32	1053.5
WJBO	1150	1269.4	194.4	3.6	7.8	28.95	3.03	4.5	1.12	1941.7
WAMG	1150	1387.7	80.5	2.8	6.6	17.97	4.73	5.63	1.41	3914.6
WMET	1150	949.8	102.6	6.5	12.0	40.36	6.74	7.37	1.84	2282.7
KSEN	1150	2017.8	300.5	0.0	2.2	6.97	4.69	6.2	1.55	11127.5
WGBR	1150	1106.1	125.1	4.9	9.7	33.38	19.98	24.14	6.04	9042.2
KDEF	1150	1764.5	252.4	0.7	3.7	14.77	12.31	14.09	3.52	11931.1
WRUN	1150	1052.6	76.	5.4	10.4	30.34	5.57	7.36	1.84	3032.5
WCUE	1150	541.2	92.2	13.7	22.6	95.99	12.11	12.61	3.15	1641.7
*WIMA	1150	340.1	105.7	22.2	34.3	176.5	5.81	7.63	3.81	1078
KNED	1150	999.5	224.9	5.9	11.2	40.98	17.54	18.42	4.61	5619.7
KAGO	1150	2780.2	282.9	0.0	0.0	4.44	5.65	7.49	1.87	21088.3
KIMM	1150	1264.6	287.8	3.6	7.8	22.2	13.1	14.9	3.73	8391.3
WGOW	1150	759.3	161.4	9.0	15.8	63.03	4.93	6.49	1.62	1287.7
WCRK	1150	718.2	144.2	9.7	16.8	67.53	4.97	6.29	1.57	1163.7
KZNE	1150	1427.6	214.3	2.5	6.3	23.63	34.12	36.13	9.03	19116.1
KCCT	1150	1756.9	212.4	0.7	3.8	16.95	18.67	20.8	5.20	15338.2
KSVE	1150	1965.9	242.2	0.0	2.5	12.89	14.99	16.18	4.05	15689.8
KKNW	1150	2764.8	295.7	0.0	0.0	3.39	3.16	4.47	1.12	16455.7
KKNW	1150	2764.8	295.7	0.0	0.0	3.39	3.16	4.47	1.12	16455.7
KKNW	1150	2764.9	295.7	0.0	0.0	3.39	3.15	4.46	1.12	16450.6
#WHBY	1150	289.	352.3	25.8	38.9	203.79	18.83	19.55	4.89	1199.3
RAD	1160	3690.2	129.7	0.0	0.0	.89	4.34	5.23	2.17	12243.2
PEACE	1160	2648.4	317.8	0.0	0.0	4.88	8.94	8.94	4.47	4584.1
##THUND	1160	762.	351.1	12.4	12.4	90.97	97.43	97.43	48.72	2677.6
*BAIE	1160	1758.4	54.4	2.3	2.3	15.69	7.22	10.71	3.52	1121.0
HJBL	1160	3647.4	155.6	0.0	0.0	.91	14.46	15.84	7.23	39686.7
HJVA	1160	4322.9	157.6	0.0	0.0	.63	13.25	16.23	6.63	52258.9
HJAU	1160	4616.	161.1	0.0	0.0	.55	14.44	15.69	7.22	65517.7

\* - enters the 25% limit calculation

\*\* - enters the 50% limit calculation

# - see Engineering Exhibit

## - allotment to be deleted

**Figure 7A**  
**Sheet 4 of 12**

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL PROPOSED  
Coordinates: 41-34-18 N 087-59-39 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
HJAZ	1160	3853.2	158.5	0.0	0.0	.81	15.58	16.8	7.79	48210.2
HJZV	1160	4650.5	164.4	0.0	0.0	.54	11.31	12.03	5.66	52085.5
HJEC	1160	4050.8	153.5	0.0	0.0	.73	15.02	16.45	7.51	51498.4
TILX	1160	3525.6	174.1	0.0	0.0	.98	5.42	6.74	2.71	13759.6
CMCU	1160	2160.	163.2	0.2	0.2	3.35	2.02	2.86	1.01	1506.1
HIBG	1160	2953.7	141.	0.0	0.0	1.48	7.15	9.31	3.57	12037.9
TGRI	1160	2899.8	181.8	0.0	0.0	1.55	4.31	4.75	2.16	6959.7
HRGF	1160	3085.2	177.	0.0	0.0	1.34	4.17	5.5	2.08	7751.1
HRYS	1160	3056.2	360.	0.0	0.0	1.37	3.8	4.7	1.90	6922.8
HREJ	1160	2928.3	180.1	0.0	0.0	1.52	4.51	5.27	2.25	7435.6
XENVA2	1160	1972.2	242.3	1.1	1.1	10.88	28.56	28.56	14.28	6563.8
XE	1160	2566.4	186.6	0.0	0.0	5.29	11.91	12.36	5.96	5635.2
XEVW1	1160	2679.5	210.6	0.0	0.0	4.74	5.64	6.45	2.82	2974.8
XEIW	1160	2795.1	212.4	0.0	0.0	4.26	4.76	5.42	2.38	2793.4
XEIW	1160	2795.1	212.4	0.0	0.0	4.26	4.76	5.42	2.38	2793.4
XEIU	1160	2849.8	199.6	0.0	0.0	4.07	6.33	6.64	3.17	3894.8
XEGI1	1160	2474.6	207.4	0.0	0.0	5.85	6.82	8.7	3.41	2911.7
XENVA2	1160	2446.2	251.8	0.0	0.0	6.06	34.56	34.56	17.28	14262.5
XEBE	1160	2598.	202.4	0.0	0.0	5.11	7.76	8.16	3.88	3797.3
XEBE1	1160	2598.	202.4	0.0	0.0	5.11	7.76	8.16	3.88	3797.3
HOMQ	1160	3704.5	170.	0.0	0.0	.88	9.19	9.79	4.60	26173.8
**SARA	1160	1193.3	180.5	4.2	8.6	31.92	9.84	12.26	4.81	752.2
*KISS	1160	1590.2	155.8	1.6	5.0	19.79	7.9	10.53	3.89	983.7
*WOYE	1160	1597.3	155.7	1.6	4.9	19.64	7.9	10.53	4.59	1169
*WMLB	1160	928.7	159.4	6.7	12.3	46.49	19.85	21.63	9.26	995.6
**WBOB	1160	403.2	134.8	18.7	29.7	146.71	24.62	27.07	28.03	954.7
**WKCM	1160	421.1	165.1	17.9	28.6	140.63	19.45	21.44	21.09	750.0
WMET	1160	949.8	102.6	6.5	12.0	40.36	24.86	31.77	7.94	984.1
*WSKW	1160	1522.1	70.5	2.0	5.5	13.53	8.48	10.38	3.08	1136.3
**WCXI	1160	377.1	67.2	20.0	31.5	152.62	24.1	25.82	29.89	980.1
CLEV	1160	647.7	242.4	11.1	18.8	77.43	10.88	10.88	2.72	175.6
WYRU	1160	1073.	131.4	5.2	10.1	35.61	14.63	19.99	5.00	701.9
*WJFJ	1160	864.1	142.7	7.5	13.5	51.04	16.49	21.1	10.52	1031
WOBM	1160	1167.2	93.3	4.4	8.9	27.1	20.54	24.04	6.01	1109.
*WVNJ	1160	1148.	88.3	4.6	9.2	27.29	15.84	20.3	6.87	1257
*WABY	1160	1184.3	78.	4.3	8.7	24.35	18.02	21.73	5.43	1205.6
*WPIE	1160	937.	79.6	6.6	12.2	38.27	27.42	31.35	7.84	1221
**WCCS	1160	747.6	95.6	9.2	16.0	58.9	21.17	23.03	5.76	1139

\* - enters the 25% limit calculation  
 \*\* - enters the 50% limit calculation  
 # - see Engineering Exhibit  
 ## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL PROPOSED  
Coordinates: 41-34-18 N 087-59-39 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
*WYNS	1160	1031.7	90.6	5.6	10.7	33.51	15.96	20.41	7.88	1176
WBQN	1160	3278.2	135.2	0.0	0.0	5.6	26.56	27.75	6.94	6197.5
**WAMB	1160	611.3	169.2	11.9	20.0	86.29	18.85	20.91	5.23	775.7
KENS	1160	1648.	219.1	1.3	4.5	18.58	11.12	11.12	2.78	747.7
VICT	1160	1638.2	212.9	1.3	4.6	18.97	22.93	24.45	6.11	1611.1
KSL	1160	2012.6	275.5	0.0	2.2	9.7	1.62	2.	.50	257.2
*WODY	1160	877.6	125.4	7.3	13.3	48.49	16.79	21.7	11.26	1161.9
YVRR	1160	4039.2	142.9	0.0	0.0	.73	11.32	13.33	5.66	38558.8
YVOK	1160	4024.2	151.	0.0	0.0	.74	14.99	17.47	7.49	50633.8
CMBV	1160	2126.9	164.2	0.4	0.4	3.49	2.17	2.69	1.09	1554.9
CMCU	1160	2160.	163.2	0.2	0.2	3.35	2.02	2.86	1.01	1506.1
KJNP	1170	4478.	325.4	0.0	0.0	.31	.85	.89	.22	36364.4
WACV	1170	1024.8	171.	5.7	10.8	40.29	3.63	4.92	1.23	1525.2
KCBQ	1170	2729.3	258.6	0.0	0.0	6.48	12.3	12.7	3.18	24500.9
KCBQ	1170	2718.9	258.7	0.0	0.0	6.52	12.4	12.4	3.10	23748.9
KLOK	1170	2923.2	271.9	0.0	0.0	4.83	9.51	10.63	2.66	27475.8
WAVS	1170	1864.3	155.1	0.2	3.1	15.27	9.34	11.3	2.82	9251.5
KENT	1170	6806.1	273.8	0.0	0.0	1.05	1.98	2.24	.56	26782.9
KENT	1170	6811.6	274.1	0.0	0.0	1.04	1.96	2.23	.56	26834.3
KJOC	1170	211.1	265.3	33.8	48.1	277.13	1.9	2.87	.72	129.6
KFAQ	1170	905.6	230.8	7.0	12.7	47.4	2.21	2.94	.74	776.4
NEW	1170	2710.1	287.2	0.0	0.0	4.32	7.45	7.99	2.00	23108.6
NEW	1170	2710.1	287.2	0.0	0.0	4.32	7.45	7.99	2.00	23108.6
WLEO	1170	3317.1	135.8	0.0	0.0	5.51	12.49	14.76	3.69	33498.3
KPUG	1170	2789.2	298.5	0.0	0.0	3.08	3.69	4.62	1.16	18750.6
WWVA	1170	621.1	102.9	11.6	19.6	79.53	5.9	6.08	1.52	956.2

\* - enters the 25% limit calculation  
\*\* - enters the 50% limit calculation  
# - see Engineering Exhibit  
## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL LICENSE  
Coordinates: 42-02-30 N 087-51-57 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
WSPZ	1150	977.7	178.6	6.2	11.5	42.87	5.93	7.23	1.81	2106.9
KLRG	1150	892.4	206.4	7.2	13.0	48.99	6.6	8.14	2.04	2078.
KCKY	1150	2306.8	252.	0.0	0.7	9.04	9.43	10.67	2.67	14757.3
KXTA	1150	2766.6	261.2	0.0	0.0	6.	5.33	6.17	1.54	12858.8
DKBAI	1150	2934.8	266.3	0.0	0.0	5.05	78.22	78.22	19.55	193647.3
KCUV	1150	1451.	264.9	2.4	6.1	19.09	14.72	16.	4.00	10473.4
KCUV	1150	1451.	264.9	2.4	6.1	19.09	14.72	16.	4.00	10473.4
WDEL	1150	1064.3	99.3	5.3	10.3	32.09	4.68	5.74	1.43	2234.6
WNDB	1150	1549.2	154.6	1.8	5.3	20.29	16.37	19.95	4.99	12295.2
WTMP	1150	1633.7	161.	1.4	4.6	18.82	21.02	23.8	5.95	15807.8
KWKY	1150	486.7	264.2	15.4	25.1	111.85	9.58	9.93	2.48	1109.5
KSAL	1150	887.8	249.9	7.2	13.1	46.56	2.69	3.73	.93	1001.9
WLOC	1150	556.2	161.9	13.3	22.0	97.03	7.33	9.26	2.32	1192.9
WJBO	1150	1322.7	194.4	3.2	7.3	26.76	3.03	4.5	1.12	2100.2
WAMG	1150	1369.6	82.7	2.9	6.8	18.15	4.73	5.63	1.41	3875.2
WMET	1150	952.4	105.9	6.5	11.9	39.78	6.74	7.37	1.84	2315.6
KSEN	1150	2001.	299.2	0.0	2.3	6.93	4.69	5.98	1.50	10785.7
WGBR	1150	1130.2	127.8	4.7	9.4	31.87	19.9	24.06	6.02	9440.1
WGBR	1150	1128.5	127.6	4.7	9.4	31.94	19.98	24.14	6.04	9450.5
KDEF	1150	1791.	251.	0.6	3.6	14.18	12.31	14.09	3.52	12421.6
WRUN	1150	1030.8	78.8	5.6	10.7	31.13	5.57	7.36	1.84	2956.
WCUE	1150	535.2	97.9	13.8	22.9	96.84	12.11	12.61	3.15	1627.3
*WIMA	1150	348.1	114.5	21.7	33.7	171.07	7.18	8.16	-2.04	-596.5
KNED	1150	1044.4	223.4	5.5	10.5	37.77	17.54	18.42	4.61	6096.1
KAGO	1150	2779.3	282.	0.0	0.0	4.35	5.65	7.26	1.81	20850.9
KIMM	1150	1259.9	285.5	3.7	7.9	22.04	13.1	14.9	3.73	8452.6
WGOW	1150	805.8	163.4	8.3	14.7	57.05	4.93	6.49	1.62	1422.5
WCRK	1150	755.3	147.2	9.1	15.9	62.03	4.97	6.29	1.57	1266.9
KZNE	1150	1476.9	213.6	2.2	5.9	22.07	34.12	36.13	9.03	20467.6
KCCT	1150	1806.8	211.9	0.5	3.5	15.98	18.67	20.8	5.20	16274.1
KSVE	1150	2000.1	241.2	0.0	2.3	12.34	14.99	16.18	4.05	16388.9
KKNW	1150	2752.2	294.7	0.0	0.0	3.34	3.16	4.27	1.07	15995.1
KKNW	1150	2752.2	294.7	0.0	0.0	3.34	3.16	4.27	1.07	15995.1
# WHBY	1150	239.3	348.2	30.5	44.4	242.96	6.48	7.5	1.87	385.8
RAD	1160	3715.8	130.5	0.0	0.0	.87	4.34	5.23	2.17	12439.8
PEACE	1160	2617.2	317.	0.0	0.0	5.02	8.94	8.94	4.47	4453.5
#THUND	1160	712.3	349.7	13.5	13.5	97.59	6.24	8.38	3.12	159.8
* BAIE	1160	1719.8	55.6	2.5	2.5	16.88	7.27	11.19	3.52	1084.0
HJBL	1160	3690.7	156.1	0.0	0.0	.89	14.46	15.84	7.23	40852.6
HJVA	1160	4367.2	158.1	0.0	0.0	.62	13.25	16.23	6.63	53352.8

\* - enters the 25% limit calculation  
\*\* - enters the 50% limit calculation  
# - see Engineering Exhibit  
## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL LICENSE  
Coordinates: 42-02-30 N 087-51-57 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
HJAU	1160	4662.1	161.5	0.0	0.0	.54	14.44	15.69	7.22	66852.3
HJAZ	1160	3898.	158.9	0.0	0.0	.79	15.58	16.8	7.79	49246.3
HJZV	1160	4698.	164.7	0.0	0.0	.53	11.31	12.03	5.66	53262.6
HJEC	1160	4093.	154.	0.0	0.0	.71	15.02	16.45	7.51	52654.1
TILX	1160	3576.5	174.4	0.0	0.0	.95	5.42	6.74	2.71	14192.2
CMCU	1160	2207.2	163.9	0.0	0.0	3.15	2.02	2.86	1.01	1599.3
HIBG	1160	2987.9	141.8	0.0	0.0	1.44	7.15	9.31	3.57	12371.4
TGRI	1160	2952.4	182.1	0.0	0.0	1.49	4.31	4.75	2.16	7259.4
HRGF	1160	3136.8	177.3	0.0	0.0	1.29	4.17	5.5	2.08	8063.1
HRYS	1160	3108.4	180.3	0.0	0.0	1.32	3.8	4.7	1.90	7195.3
HREJ	1160	2980.6	180.4	0.0	0.0	1.45	4.51	5.27	2.25	7752.9
XENVA2	1160	2006.3	241.2	0.9	0.9	10.31	28.56	28.56	14.28	6926.
XE	1160	2619.5	186.8	0.0	0.0	5.01	11.91	12.36	5.96	5948.
XEVW1	1160	2730.	210.3	0.0	0.0	4.52	5.64	6.45	2.82	3114.9
XEIW	1160	2845.	212.1	0.0	0.0	4.08	4.76	5.42	2.38	2917.2
XEIW	1160	2845.	212.1	0.0	0.0	4.08	4.76	5.42	2.38	2917.2
XEIU	1160	2902.6	199.6	0.0	0.0	3.89	6.33	6.64	3.17	4076.2
XEGI1	1160	2525.9	207.2	0.0	0.0	5.52	6.82	8.7	3.41	3087.3
XENVA2	1160	2473.	250.9	0.0	0.0	5.87	34.56	34.56	17.28	14731.9
XEBE1	1160	2650.4	202.3	0.0	0.0	4.87	7.76	8.16	3.88	3987.7
XEBE	1160	2650.4	202.3	0.0	0.0	4.87	7.76	8.16	3.88	3987.7
HOMQ	1160	3754.2	170.3	0.0	0.0	.85	9.19	9.79	4.60	26940.9
**SARA	1160	1245.7	181.	3.8	8.1	29.44	10.11	12.48	-3.39	-576.
**KISS	1160	1633.9	157.	1.4	4.6	18.69	8.18	10.73	-2.83	-755.7
**WMLB	1160	974.3	161.1	6.2	11.6	42.68	19.91	22.72	-5.81	-680.8
**WBOB	1160	434.8	140.7	17.3	27.8	132.77	31.15	35.62	8.90	335.3
**WKCM	1160	469.4	168.	16.0	25.9	121.7	23.43	26.7	-9.04	-371.2
* WMET	1160	952.4	105.9	6.5	11.9	39.78	24.86	33.46	-10.50	-1319.4
* WSKW	1160	1495.3	72.3	2.1	5.7	13.77	8.48	10.15	-3.08	-1117.7
**WCXI	1160	349.9	74.5	21.6	33.5	165.97	33.22	34.48	-9.26	-278.9
CLEV	1160	682.6	239.	10.4	17.8	71.02	10.88	10.88	2.72	191.5
**WYRU	1160	1100.6	133.8	5.0	9.8	33.79	15.46	20.15	-5.16	-763.1
**WJFJ	1160	900.2	145.4	7.1	12.8	47.41	20.21	22.47	-5.64	-595.2
* WOBM	1160	1160.8	96.	4.5	9.0	27.05	20.54	25.02	-6.91	-1276.7

\* - enters the 25% limit calculation  
 \*\* - enters the 50% limit calculation  
 # - see Engineering Exhibit  
 ## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL LICENSE  
Coordinates: 42-02-30 N 087-51-57 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
* WVNJ	1160	1137.	91.	4.7	9.3	27.43	15.84	20.55	5.14	936.7
* WMVI	1160	1164.1	80.4	4.4	9.0	24.8	18.02	21.82	-5.49	-1107.7
* WPIE	1160	918.4	82.8	6.8	12.5	39.17	27.42	31.56	-8.53	-1088.9
**WCCS	1160	744.1	99.8	9.3	16.1	58.82	20.99	24.17	-6.86	-583.
**WYNS	1160	1023.	93.6	5.7	10.8	33.65	16.26	20.88	-5.79	-860.7
WBQN	1160	3308.1	136.	0.0	0.0	5.45	26.56	27.75	6.94	6367.
**WAMB	1160	661.	171.	10.8	18.4	76.48	20.87	22.75	-9.06	-592.4
KENS	1160	1695.4	218.4	1.0	4.2	17.5	11.12	11.12	2.78	794.
VICT	1160	1687.9	212.3	1.1	4.3	17.82	22.93	24.45	6.11	1714.5
KSL	1160	2018.7	274.2	0.0	2.2	9.48	1.62	2.	.50	263.2
**WODY	1160	900.6	128.6	7.1	12.8	46.11	17.49	24.21	-6.49	-703.6
YVRR	1160	4074.7	143.5	0.0	0.0	.72	11.32	13.33	5.66	39308.5
YVOK	1160	4064.9	151.5	0.0	0.0	.72	14.99	17.47	7.49	51752.8
* CMBV	1160	2174.4	164.9	0.1	0.1	3.29	2.17	2.7	1.09	1651.5
CMCU	1160	2207.2	163.9	0.0	0.0	3.15	2.02	2.86	1.01	1599.3
KJNP	1170	4441.1	325.1	0.0	0.0	.32	.85	.89	.22	35213.7
WACV	1170	1074.9	172.1	5.2	10.1	36.94	3.63	4.92	1.23	1663.3
KCBQ	1170	2739.9	257.8	0.0	0.0	6.33	12.4	12.4	3.10	24465.1
KCBQ	1170	2750.4	257.8	0.0	0.0	6.29	12.3	12.7	3.18	25236.8
KLOK	1170	2932.5	271.1	0.0	0.0	4.72	9.51	10.63	2.66	28163.3
WAVS	1170	1907.5	156.1	0.0	2.8	14.51	9.34	11.3	2.82	9731.6
KENT	1170	6813.3	273.6	0.0	0.0	1.03	1.98	2.24	.56	27251.8
KENT	1170	6818.6	273.9	0.0	0.0	1.02	1.96	2.23	.56	27334.7
KJOC	1170	231.6	252.6	31.3	45.4	256.36	1.9	2.87	.72	140.
KFAQ	1170	947.4	228.8	6.5	12.0	43.67	2.21	2.94	.74	842.7
NEW	1170	2705.3	286.2	0.0	0.0	4.24	7.45	7.99	2.00	23555.5
NEW	1170	2705.3	286.2	0.0	0.0	4.24	7.45	7.99	2.00	23555.5
WZUR	1170	3347.4	136.6	0.0	0.0	5.36	12.49	14.76	3.69	34416.8
KPUG	1170	2774.	297.6	0.0	0.0	3.03	3.69	4.62	1.16	19066.3
* WWVA	1170	624.8	107.9	11.6	19.5	78.27	5.9	6.24	-2.04	-1303.1

\* - enters the 25% limit calculation  
\*\* - enters the 50% limit calculation  
# - see Engineering Exhibit  
## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL PROPOSED  
Coordinates: 42-02-30 N 087-51-57 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg) Max (deg)		Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
KSL	1160	2023.5	299.1	0.0	2.2	7.06	.50	.50	.50	354.
KSL	1160	1953.6	299.4	0.0	2.6	7.68	.50	.50	.50	325.7
KSL	1160	1883.4	299.5	0.1	3.0	8.38	.50	.50	.50	298.5
KSL	1160	1813.	299.5	0.5	3.4	9.19	.50	.50	.50	272.1
KSL	1160	1742.7	299.4	0.8	3.9	10.12	.50	.50	.50	247.
KSL	1160	1672.9	299.0	1.2	4.4	11.18	.50	.50	.50	223.7
KSL	1160	1603.9	298.4	1.5	4.9	12.4	.50	.50	.50	201.7
KSL	1160	1536.4	297.6	1.9	5.4	13.76	.50	.50	.50	181.7
KSL	1160	1470.7	296.5	2.3	5.9	15.29	.50	.50	.50	163.5
KSL	1160	1407.6	295.1	2.7	6.5	16.99	.50	.50	.50	147.2
KSL	1160	1348.	293.4	3.1	7.0	18.84	.50	.50	.50	132.7
KSL	1160	1292.8	291.3	3.4	7.6	20.8	.50	.50	.50	120.2
KSL	1160	1243.	288.8	3.8	8.1	22.83	.50	.50	.50	109.5
KSL	1160	1200.	285.9	4.1	8.6	24.84	.50	.50	.50	100.7
KSL	1160	1164.9	282.6	4.4	9.0	26.72	.50	.50	.50	93.6
KSL	1160	1139.2	279.0	4.6	9.3	28.32	.50	.50	.50	88.3
KSL	1160	1123.9	275.1	4.8	9.5	29.5	.50	.50	.50	84.7
KSL	1160	1120.3	271.1	4.8	9.5	30.18	.50	.50	.50	82.8
KSL	1160	1128.6	267.0	4.7	9.4	30.26	.50	.50	.50	82.6
KSL	1160	1149.1	263.1	4.6	9.2	29.76	.50	.50	.50	84.
KSL	1160	1181.6	259.4	4.3	8.8	28.76	.50	.50	.50	86.9
KSL	1160	1225.2	256.0	3.9	8.3	27.36	.50	.50	.50	91.4
KSL	1160	1279.	253.1	3.5	7.7	25.69	.50	.50	.50	97.3
KSL	1160	1341.7	250.6	3.1	7.1	23.89	.50	.50	.50	104.6
KSL	1160	1412.	248.5	2.6	6.4	22.07	.50	.50	.50	113.3
KSL	1160	1488.5	246.9	2.2	5.8	20.3	.50	.50	.50	123.1
KSL	1160	1570.2	245.7	1.7	5.1	18.62	.50	.50	.50	134.3
KSL	1160	1655.6	244.9	1.2	4.5	17.07	.50	.50	.50	146.4
KSL	1160	1743.8	244.4	0.8	3.9	15.66	.50	.50	.50	159.7
KSL	1160	1833.6	244.3	0.4	3.3	14.38	.50	.50	.50	173.9
KSL	1160	1924.3	244.4	0.0	2.7	13.23	.50	.50	.50	188.9
KSL	1160	2014.9	244.7	0.0	2.2	12.21	.50	.50	.50	204.8
KSL	1160	2104.6	245.3	0.0	1.7	11.29	.50	.50	.50	221.4
KSL	1160	2192.8	246.0	0.0	1.3	10.48	.50	.50	.50	238.5
KSL	1160	2278.8	247.0	0.0	0.8	9.76	.50	.50	.50	256.3
KSL	1160	2362.	248.0	0.0	0.5	9.11	.50	.50	.50	274.5
KSL	1160	2441.8	249.2	0.0	0.1	8.53	.50	.50	.50	293.1

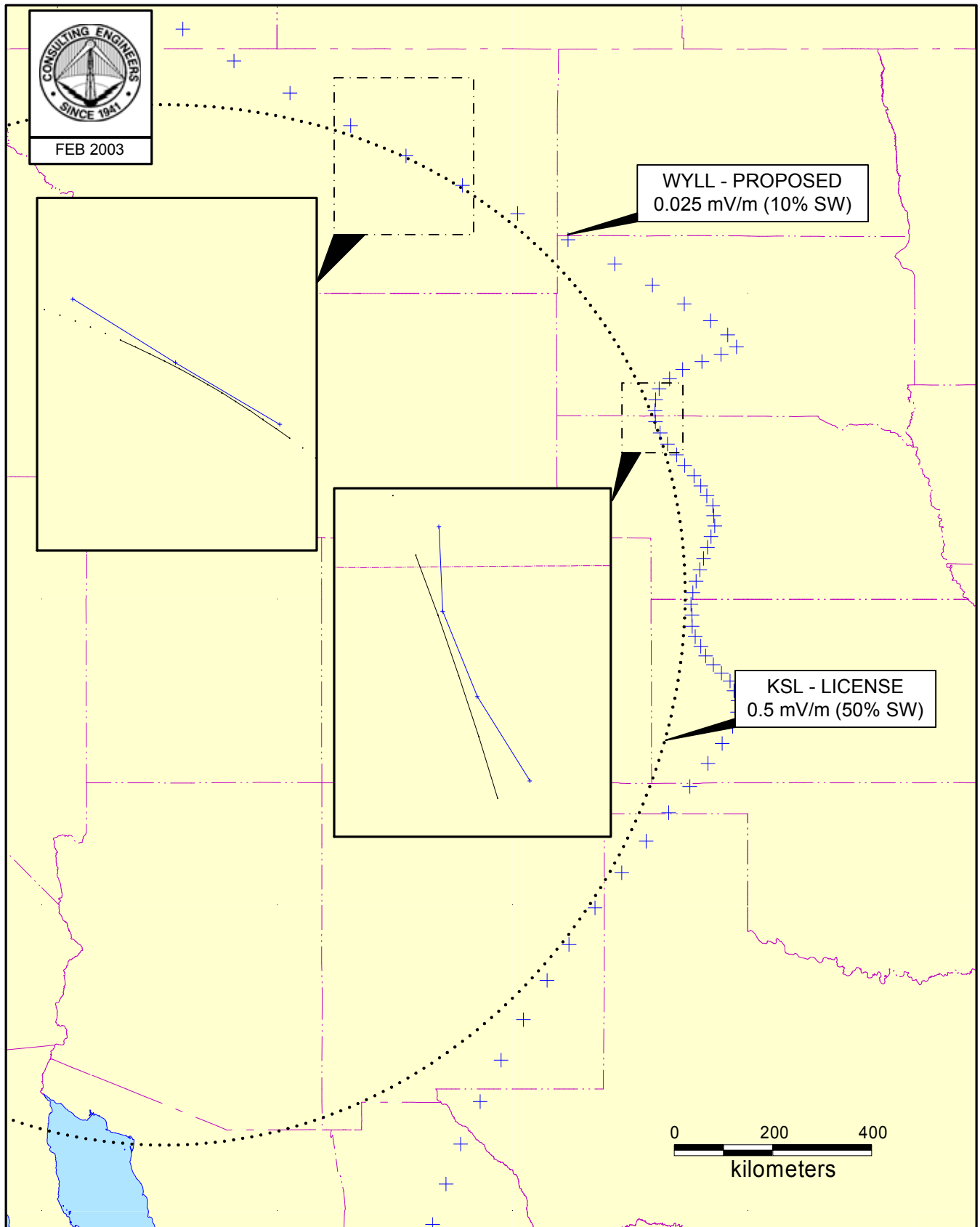
\* - enters the 25% limit calculation  
 \*\* - enters the 50% limit calculation  
 # - see Engineering Exhibit  
 ## - allotment to be deleted

du Treil, Lundin, and Rackley  
Sarasota, FL

Night Permissible Vertical Radiation From Station: WYLL PROPOSED  
Coordinates: 442-02-30 N 087-51-57 W

Toward Station	Freq. (kHz)	GC Dist. (km)	Bear (degT)	Angles Min (deg)	Angles Max (deg)	Skywav Mult. (mV/m)	50% Ex-RSS (mV/m)	25% Ex-RSS (mV/m)	Req. Prot. (mV/m)	Perm. Vert-Rad mV/m@1km
KSL	1160	2517.7	250.5	0.0	0.0	8.01	.50	.50	.50	312.1
KSL	1160	2589.4	251.9	0.0	0.0	7.55	.50	.50	.50	331.3
KSL	1160	2656.4	253.4	0.0	0.0	7.13	.50	.50	.50	350.6
KSL	1160	2718.3	254.9	0.0	0.0	6.76	.50	.50	.50	370.
KSL	1160	2774.7	256.5	0.0	0.0	6.42	.50	.50	.50	389.5
KSL	1160	2825.9	258.2	0.0	0.0	6.11	.50	.50	.50	408.9
KSL	1160	2871.1	259.9	0.0	0.0	5.84	.50	.50	.50	428.2
KSL	1160	2910.2	261.6	0.0	0.0	5.59	.50	.50	.50	447.3
KSL	1160	2943.3	263.4	0.0	0.0	5.36	.50	.50	.50	466.2
KSL	1160	2970.2	265.1	0.0	0.0	5.16	.50	.50	.50	484.7
KSL	1160	2990.7	266.9	0.0	0.0	4.97	.50	.50	.50	502.6
KSL	1160	3005.2	268.7	0.0	0.0	4.81	.50	.50	.50	520.
KSL	1160	3013.9	270.4	0.0	0.0	4.66	.50	.50	.50	536.4
KSL	1160	3016.2	272.2	0.0	0.0	4.53	.50	.50	.50	552.4
KSL	1160	3012.7	273.9	0.0	0.0	4.41	.50	.50	.50	567.
KSL	1160	3003.4	275.7	0.0	0.0	4.31	.50	.50	.50	580.
KSL	1160	2989.	277.3	0.0	0.0	4.22	.50	.50	.50	592.1
KSL	1160	2969.1	279.0	0.0	0.0	4.15	.50	.50	.50	602.
KSL	1160	2944.2	280.6	0.0	0.0	4.1	.50	.50	.50	610.1
KSL	1160	2914.7	282.2	0.0	0.0	4.06	.50	.50	.50	615.9
KSL	1160	2880.7	283.7	0.0	0.0	4.04	.50	.50	.50	619.3
KSL	1160	2842.5	285.2	0.0	0.0	4.03	.50	.50	.50	619.7
KSL	1160	2800.6	286.7	0.0	0.0	4.05	.50	.50	.50	617.1
KSL	1160	2755.	288.0	0.0	0.0	4.09	.50	.50	.50	612.
KSL	1160	2706.2	289.4	0.0	0.0	4.14	.50	.50	.50	603.9
KSL	1160	2654.4	290.6	0.0	0.0	4.22	.50	.50	.50	592.3
KSL	1160	2599.8	291.8	0.0	0.0	4.33	.50	.50	.50	577.1
KSL	1160	2542.9	293.0	0.0	0.0	4.46	.50	.50	.50	560.2
KSL	1160	2483.6	294.0	0.0	0.0	4.63	.50	.50	.50	539.7
KSL	1160	2422.3	295.0	0.0	0.2	4.83	.50	.50	.50	517.2
KSL	1160	2359.2	295.9	0.0	0.5	5.07	.50	.50	.50	493.
KSL	1160	2294.6	296.7	0.0	0.8	5.36	.50	.50	.50	466.5
KSL	1160	2228.4	297.5	0.0	1.1	5.69	.50	.50	.50	439.1
KSL	1160	2161.1	298.1	0.0	1.4	6.08	.50	.50	.50	411.3
KSL	1160	2092.7	298.7	0.0	1.8	6.54	.50	.50	.50	382.5

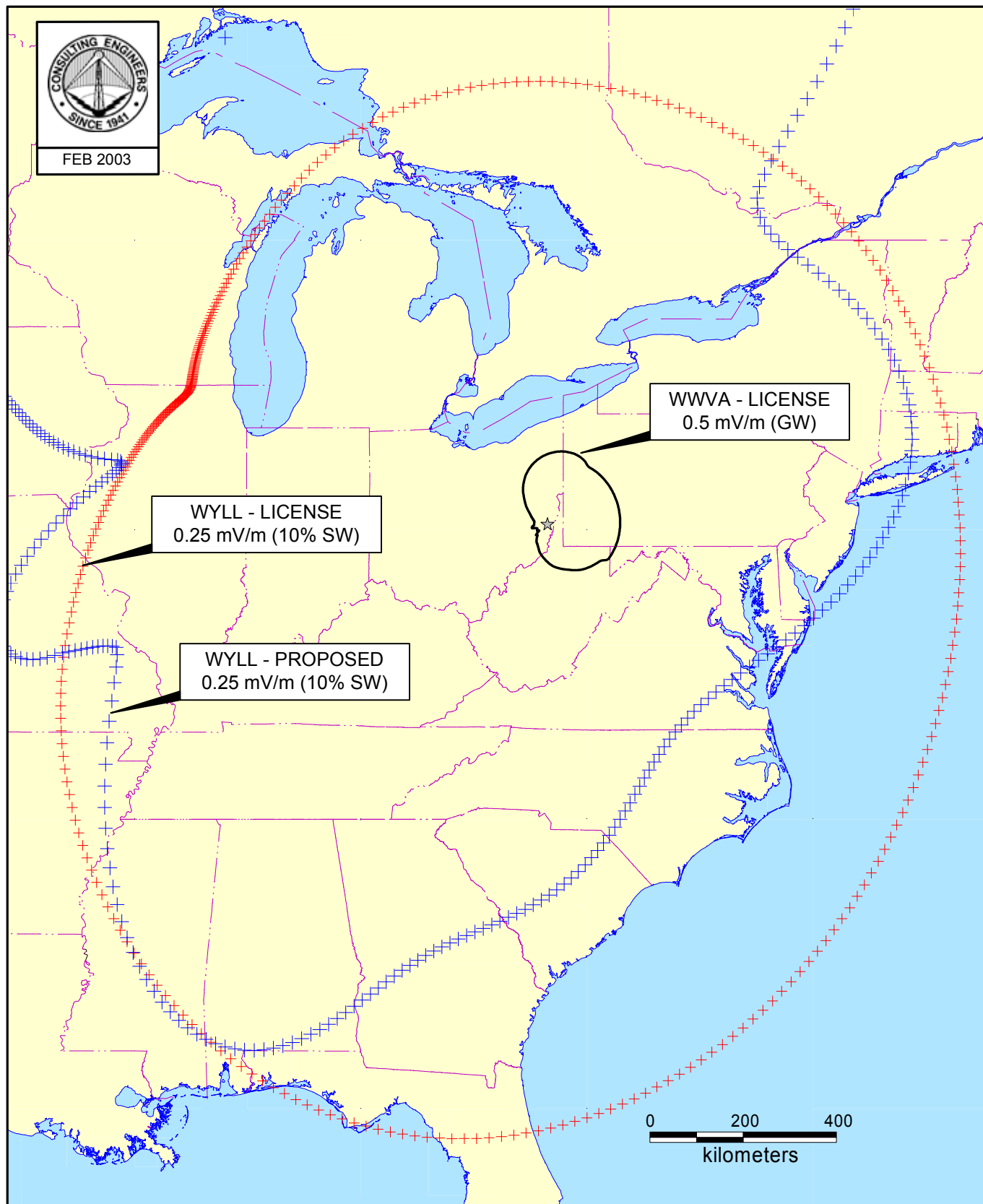
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## NIGHTTIME ALLOCATION STUDY

RADIO STATION WYLL  
CHICAGO, ILLINOIS  
1160 KHZ 50 KW DA-2 U

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



## NIGHTTIME ALLOCATION STUDY

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du Treil, Lundin & Rackley, Inc. Sarasota, Florida