

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 810

WASHINGTON, DC 20036

ENGINEERING STATEMENT

1. This Engineering Statement has been prepared on behalf of Seiko Telecommunication Systems, Inc. (Seiko) to assist in the procurement of an experimental license in the FM broadcast band for the purpose of demonstrating a proprietary paging receiver in Dallas, Texas on August 30 through September 15, 1993.
2. Seiko has developed a specialized tunable subcarrier receiver that operates in the FM broadcast band and receives digitally coded information transmitted on the sub-carrier of an FM broadcast station. Considerable laboratory and "over the air" testing of this equipment has been conducted in Portland, Oregon where the Company has been operating under an experimental license granted by the Federal Communication Commission.
3. The operation of this equipment in Portland, Oregon on the assigned channels has not resulted in any interference to the stations being protected under that grant. Nor have these experimental transmissions been the source of any complaints by the general public in terms of receiver interference.
4. The applicant proposes herein to operate on FM channel 244 (96.7 MHz) with a maximum effective radiated power (ERP) of one watt from within the Loews Anatole Hotel in Dallas, Texas. Exhibit 1 is a topographic map which shows the location of the proposed transmitter.
5. Exhibit 2 is a sketch showing the equipment configuration. The transmitter is an FM exciter made by Continental Electronics (model 802A) and is FCC type accepted. The output power will be adjusted to a maximum of one watt. The antenna is a "whip" with unity power gain. Also shown in Exhibit 2 is a vertical plane sketch of the proposed transmitting antenna and supporting structure.

A frequency allocation study was conducted for channel 244 from the proposed transmitter site coordinates using the minimum separation criteria contained in Section 73.207 of the FCC rules and regulations with respect to licensed full service FM broadcast facilities. Also included in the study were licensed secondary service FM broadcast stations (i.e. FM translators, boosters, etc.). The result of this study is shown in Exhibit 3.

7. As listed in this exhibit, the proposed facility would not satisfy the minimum distance separation requirements, as contained in Section 73.207, with respect to stations KIKM-FM, KBOC, KSCS and KEGL. Stations KIKM-FM and KBOC are class A stations which operate on channel 244 and serve the communities of Sherman, Texas and Bridgeport, Texas, respectively. Stations KSCS and KEGL are class C facilities which serve Fort Worth, Texas on channels 242 and 246, respectively.
8. Utilizing the undesired to desired signal ratio listed in Section 73.215 of the Rules, the distance to the protected and interfering signal contours of the proposed facility as well as the two cochannel stations, KIKFM-FM and KBOC, were determined. These are listed in Exhibits 4(a) through 4(d). For this study both the licensed and authorized KBOC facilities were considered. Exhibit 4(g) is a map which shows the protected and interfering contours of KIKM-FM, KBOC and the proposed station. As evident from this

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ENGINEERING STATEMENT (continued)

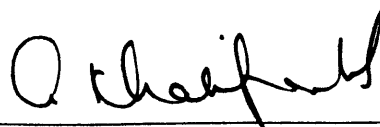
exhibit, the operation of the proposed facility would not result in the prohibited overlap of its protected and interfering contours with those of KIKM-FM and KBOC.

9. The proposed station is also short-spaced to second adjacent channel stations KSCS, channel 242C, and KEGL, channel 246C. Attached as exhibits 4(a), 4(e) and 4(f) are listings of the predicted distances to the protected and interfering contours, as defined in Section 73.215 of the Rules, for the proposed channel 244 facility, the licensed KEGL facility and KSCS, respectively. For the purposes of this application, the proposed KEGL facility (FCC file number : BPH-930409IB) was not considered. Exhibit 4(h) is a map which shows the protected and interfering contours of these stations. As evident from Exhibit 4(h), the protected 60 dBu, F(50,50) contour of the proposed facility would not overlap the interfering 100 dBu, F(50,10) contours of KSCS and KEGL.
10. As depicted in Exhibit 4(h), the proposed station is located within the protected 60 dBu, F(50,50) contour of KSCS and KEGL. However, as demonstrated in Exhibits 5(a) and 5(b), with respect to stations KSCS and KEGL, the predicted distance to the interfering contours of the proposed channel 244 facility, using the free-space propagation formula, would not extend beyond 2.6 meters and 2.9 meters from the transmitter site, respectively.
11. Using the interference criteria contained in Section 74.1204 of the rules concerning FM translators, the proposed operation would not result in a prohibited contour overlap to the existing operation of any licensed FM translator located in the vicinity of the proposed channel 244 transmitter site.

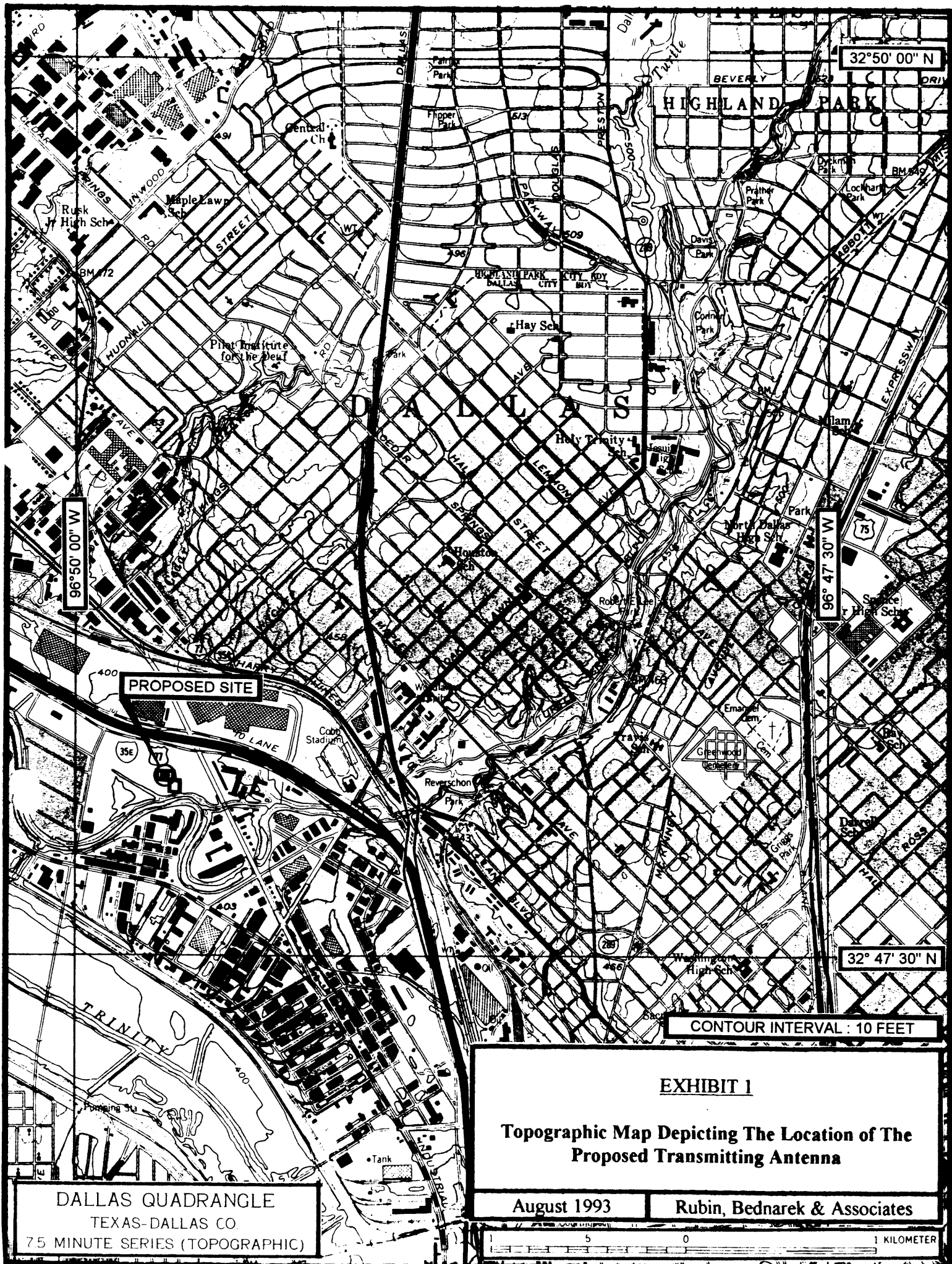
Operation of the proposed station would not expose the general public to excess levels of radiofrequency radiation. Utilizing the ANSI frequency guidelines contained in OST Bulletin #65, a computation was made to determine the level of radiofrequency radiation to which the general public would be exposed to. As demonstrated in the attached Exhibit 6, the maximum predicted power density level which would be generated by the proposed operation at 2 meters above ground level is .001028 mW/cm², which is well within the the maximum ANSI guideline level of 1.0 mW/cm². Further, as shown in Exhibit 6, a radiofrequency power density level of 1.0 mW/cm² would be limited to a distance of 18 cm from the transmitting antenna. During periods of maintenance, the applicant shall reduce power or terminate operation of the proposed facility in order to comply with ANSI guidelines regarding exposure of maintenance personnel to radiofrequency radiation.

Dated

8/10/93



Abdolmajid Khalilzadeh



32°50' 00" N

96°50' 00" W

96°47' 30" W

32°47' 30" N

PROPOSED SITE

CONTOUR INTERVAL : 10 FEET

EXHIBIT 1

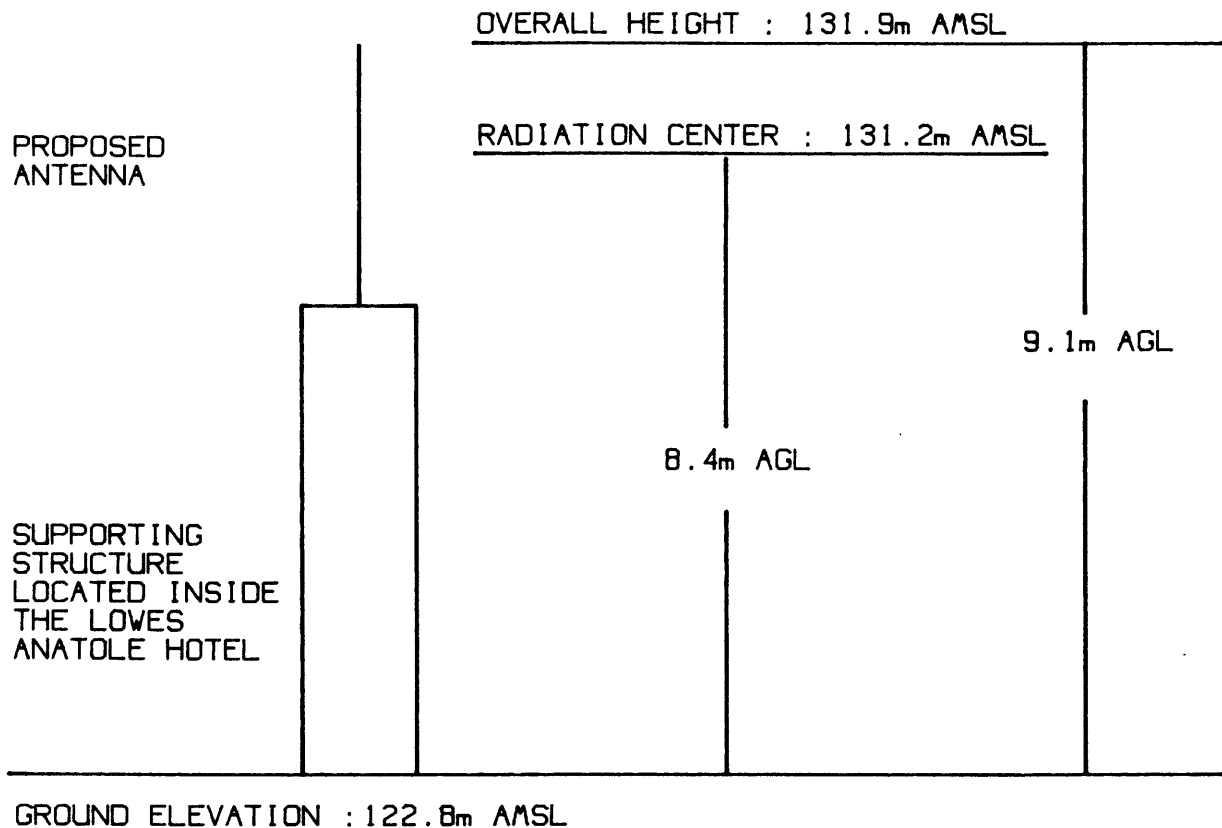
Topographic Map Depicting The Location of The
Proposed Transmitting Antenna

August 1993

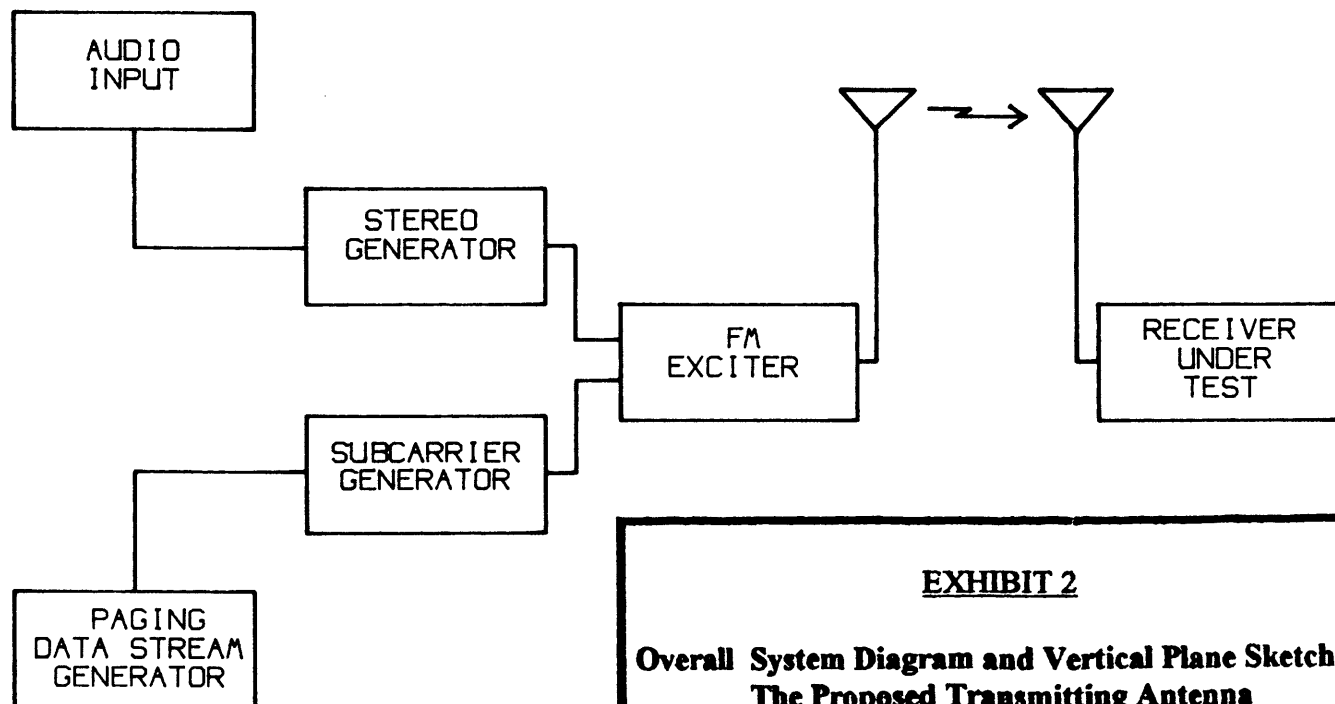
Rubin, Bednarek & Associates

DALLAS QUADRANGLE
TEXAS-DALLAS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

1 5 0 1 KILOMETER



NOTE : NOT DRAWN TO SCALE



August 1993

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Exhibit 3

FM Allocation Study

Study Name : Dallas, Texas
Channel : 244A
Study Coordinates : 32° 48' 00" N 96° 49' 42" W
Separations : FM Zone 2

Call y / State	File - Number	Channel Status	ERP HAAT	Ant Zone	Latitude Longitude	Dist Bear	Req'd (km)	Clear (km)
KSCS Fort Worth, TX	BLH 900518KD	242C LIC	100. 491		32 35 15 96 57 59	26.9 208.7	95.0	-68.1 SHORT
KMOOFM Mineola, TX	BLH 7526	244A LIC	3.00 91		32 45 4 95 33 18	119.4 92.3	115.0	4.4 CLOSE
KLIS Palestine, TX	BLH 820510AE	244A LIC	3.00 91		31 46 48 95 38 23	159.1 135.1	115.0	44.1
KIKMFM Sherman, TX	BLH 840831CK	244A LIC	3.00 91		33 42 10 96 34 5	103.0 13.5	115.0	-12.0 SHORT
KBOC Bridgeport, TX	BPH 891025IF	244A CP	3.0 69		33 13 28 97 47 51	102.1 297.8	115.0	-12.9 SHORT
KBOC Bridgeport, TX	BLH 820811AK	244A LIC	3.00 75		33 13 28 97 47 51	102.1 297.8	115.0	-12.9 SHORT
KEGL Fort Worth-Dallas, TX	BLH 9999	246C LIC	100. 445		32 34 43 96 57 12	27.2 205.5	95.0	-67.8 SHORT
KEGL Fort Worth-Dallas, TX	BPH 930409IB	246C APP	100. 487		32 35 5 96 57 46	27.0 207.8	95.0	-68.0 SHORT
KOAI Fort Worth, TX	BLH 880331KB	298C1 LIC	25.0 502		32 35 7 96 58 6	27.2 208.8	22.0	5.2 CLOSE

End of Study.

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EXHIBIT 4(a)

Tabulation of Distances to Protected and Interfering Contours

for Proposed Channel 244 Facility

Site Coordinates : N 32° 48' 00" W 96° 49' 42"

Maximum ERP : .001 kW

Antenna Type : Omini-Directional

Antenna Radiation Center Height : 131.2 meters AMSL

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
0.0	-43	.0010	1.8	5.7	.06
1.0	-44	.0010	1.8	5.7	.06
2.0	-44	.0010	1.8	5.7	.06
3.0	-45	.0010	1.8	5.7	.06
4.0	-45	.0010	1.8	5.7	.06
5.0	-45	.0010	1.8	5.7	.06
6.0	-45	.0010	1.8	5.7	.06
7.0	-46	.0010	1.8	5.7	.06
8.0	-46	.0010	1.8	5.7	.06
9.0	-47	.0010	1.8	5.7	.06
10.0	-47	.0010	1.8	5.7	.06
11.0	-46	.0010	1.8	5.7	.06
12.0	-46	.0010	1.8	5.7	.06
13.0	-46	.0010	1.8	5.7	.06
14.0	-46	.0010	1.8	5.7	.06
15.0	-46	.0010	1.8	5.7	.06
16.0	-45	.0010	1.8	5.7	.06
17.0	-45	.0010	1.8	5.7	.06
18.0	-45	.0010	1.8	5.7	.06
19.0	-45	.0010	1.8	5.7	.06
20.0	-44	.0010	1.8	5.7	.06
21.0	-44	.0010	1.8	5.7	.06
22.0	-43	.0010	1.8	5.7	.06
23.0	-42	.0010	1.8	5.7	.06
24.0	-42	.0010	1.8	5.7	.06
25.0	-42	.0010	1.8	5.7	.06
26.0	-41	.0010	1.8	5.7	.06
27.0	-41	.0010	1.8	5.7	.06
28.0	-40	.0010	1.8	5.7	.06
29.0	-40	.0010	1.8	5.7	.06
30.0	-39	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)

Tabulation of Distances to Protected and Interfering Contours

for Proposed Channel 244 Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
31.0	-39	.0010	1.8	5.7	.06
32.0	-39	.0010	1.8	5.7	.06
33.0	-39	.0010	1.8	5.7	.06
34.0	-39	.0010	1.8	5.7	.06
35.0	-38	.0010	1.8	5.7	.06
36.0	-38	.0010	1.8	5.7	.06
37.0	-38	.0010	1.8	5.7	.06
38.0	-37	.0010	1.8	5.7	.06
39.0	-36	.0010	1.8	5.7	.06
40.0	-35	.0010	1.8	5.7	.06
41.0	-34	.0010	1.8	5.7	.06
42.0	-34	.0010	1.8	5.7	.06
43.0	-34	.0010	1.8	5.7	.06
44.0	-34	.0010	1.8	5.7	.06
45.0	-34	.0010	1.8	5.7	.06
46.0	-34	.0010	1.8	5.7	.06
47.0	-34	.0010	1.8	5.7	.06
48.0	-33	.0010	1.8	5.7	.06
49.0	-32	.0010	1.8	5.7	.06
50.0	-32	.0010	1.8	5.7	.06
51.0	-32	.0010	1.8	5.7	.06
52.0	-31	.0010	1.8	5.7	.06
53.0	-31	.0010	1.8	5.7	.06
54.0	-30	.0010	1.8	5.7	.06
55.0	-30	.0010	1.8	5.7	.06
56.0	-30	.0010	1.8	5.7	.06
57.0	-29	.0010	1.8	5.7	.06
58.0	-29	.0010	1.8	5.7	.06
59.0	-29	.0010	1.8	5.7	.06
60.0	-28	.0010	1.8	5.7	.06
61.0	-28	.0010	1.8	5.7	.06
62.0	-28	.0010	1.8	5.7	.06
63.0	-27	.0010	1.8	5.7	.06
64.0	-26	.0010	1.8	5.7	.06
65.0	-25	.0010	1.8	5.7	.06
66.0	-25	.0010	1.8	5.7	.06
67.0	-24	.0010	1.8	5.7	.06
68.0	-24	.0010	1.8	5.7	.06
69.0	-24	.0010	1.8	5.7	.06
70.0	-24	.0010	1.8	5.7	.06
71.0	-23	.0010	1.8	5.7	.06
72.0	-23	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)**Tabulation of Distances to Protected and Interfering Contours****for Proposed Channel 244 Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
73.0	-22	.0010	1.8	5.7	.06
74.0	-22	.0010	1.8	5.7	.06
75.0	-22	.0010	1.8	5.7	.06
76.0	-22	.0010	1.8	5.7	.06
77.0	-21	.0010	1.8	5.7	.06
78.0	-19	.0010	1.8	5.7	.06
79.0	-18	.0010	1.8	5.7	.06
80.0	-17	.0010	1.8	5.7	.06
81.0	-16	.0010	1.8	5.7	.06
82.0	-15	.0010	1.8	5.7	.06
83.0	-15	.0010	1.8	5.7	.06
84.0	-15	.0010	1.8	5.7	.06
85.0	-16	.0010	1.8	5.7	.06
86.0	-16	.0010	1.8	5.7	.06
87.0	-17	.0010	1.8	5.7	.06
88.0	-17	.0010	1.8	5.7	.06
89.0	-17	.0010	1.8	5.7	.06
90.0	-18	.0010	1.8	5.7	.06
91.0	-18	.0010	1.8	5.7	.06
92.0	-18	.0010	1.8	5.7	.06
93.0	-17	.0010	1.8	5.7	.06
94.0	-17	.0010	1.8	5.7	.06
95.0	-17	.0010	1.8	5.7	.06
96.0	-17	.0010	1.8	5.7	.06
97.0	-16	.0010	1.8	5.7	.06
98.0	-15	.0010	1.8	5.7	.06
99.0	-15	.0010	1.8	5.7	.06
100.0	-14	.0010	1.8	5.7	.06
101.0	-13	.0010	1.8	5.7	.06
102.0	-12	.0010	1.8	5.7	.06
103.0	-11	.0010	1.8	5.7	.06
104.0	-10	.0010	1.8	5.7	.06
105.0	-9	.0010	1.8	5.7	.06
106.0	-9	.0010	1.8	5.7	.06
107.0	-8	.0010	1.8	5.7	.06
108.0	-7	.0010	1.8	5.7	.06
109.0	-6	.0010	1.8	5.7	.06
110.0	-4	.0010	1.8	5.7	.06
111.0	-3	.0010	1.8	5.7	.06
112.0	-2	.0010	1.8	5.7	.06
113.0	-1	.0010	1.8	5.7	.06
114.0	-1	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)**Tabulation of Distances to Protected and Interfering Contours****for Proposed Channel 244 Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
115.0	-1	.0010	1.8	5.7	.06
116.0	-1	.0010	1.8	5.7	.06
117.0	0	.0010	1.8	5.7	.06
118.0	0	.0010	1.8	5.7	.06
119.0	0	.0010	1.8	5.7	.06
120.0	1	.0010	1.8	5.7	.06
121.0	2	.0010	1.8	5.7	.06
122.0	2	.0010	1.8	5.7	.06
123.0	2	.0010	1.8	5.7	.06
124.0	3	.0010	1.8	5.7	.06
125.0	3	.0010	1.8	5.7	.06
126.0	4	.0010	1.8	5.7	.06
127.0	4	.0010	1.8	5.7	.06
128.0	4	.0010	1.8	5.7	.06
129.0	4	.0010	1.8	5.7	.06
130.0	5	.0010	1.8	5.7	.06
131.0	5	.0010	1.8	5.7	.06
132.0	6	.0010	1.8	5.7	.06
133.0	7	.0010	1.8	5.7	.06
134.0	8	.0010	1.8	5.7	.06
135.0	9	.0010	1.8	5.7	.06
136.0	9	.0010	1.8	5.7	.06
137.0	9	.0010	1.8	5.7	.06
138.0	9	.0010	1.8	5.7	.06
139.0	9	.0010	1.8	5.7	.06
140.0	9	.0010	1.8	5.7	.06
141.0	9	.0010	1.8	5.7	.06
142.0	8	.0010	1.8	5.7	.06
143.0	8	.0010	1.8	5.7	.06
144.0	7	.0010	1.8	5.7	.06
145.0	7	.0010	1.8	5.7	.06
146.0	6	.0010	1.8	5.7	.06
147.0	6	.0010	1.8	5.7	.06
148.0	5	.0010	1.8	5.7	.06
149.0	4	.0010	1.8	5.7	.06
150.0	3	.0010	1.8	5.7	.06
151.0	1	.0010	1.8	5.7	.06
152.0	-1	.0010	1.8	5.7	.06
153.0	-3	.0010	1.8	5.7	.06
154.0	-5	.0010	1.8	5.7	.06
155.0	-7	.0010	1.8	5.7	.06
156.0	-9	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)

Tabulation of Distances to Protected and Interfering Contours
for Proposed Channel 244 Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
157.0	-10	.0010	1.8	5.7	.06
158.0	-12	.0010	1.8	5.7	.06
159.0	-13	.0010	1.8	5.7	.06
160.0	-14	.0010	1.8	5.7	.06
161.0	-16	.0010	1.8	5.7	.06
162.0	-18	.0010	1.8	5.7	.06
163.0	-19	.0010	1.8	5.7	.06
164.0	-20	.0010	1.8	5.7	.06
165.0	-20	.0010	1.8	5.7	.06
166.0	-20	.0010	1.8	5.7	.06
167.0	-20	.0010	1.8	5.7	.06
168.0	-21	.0010	1.8	5.7	.06
169.0	-23	.0010	1.8	5.7	.06
170.0	-24	.0010	1.8	5.7	.06
171.0	-24	.0010	1.8	5.7	.06
172.0	-24	.0010	1.8	5.7	.06
173.0	-24	.0010	1.8	5.7	.06
174.0	-25	.0010	1.8	5.7	.06
175.0	-25	.0010	1.8	5.7	.06
176.0	-25	.0010	1.8	5.7	.06
177.0	-26	.0010	1.8	5.7	.06
178.0	-26	.0010	1.8	5.7	.06
179.0	-27	.0010	1.8	5.7	.06
180.0	-27	.0010	1.8	5.7	.06
181.0	-27	.0010	1.8	5.7	.06
182.0	-27	.0010	1.8	5.7	.06
183.0	-28	.0010	1.8	5.7	.06
184.0	-28	.0010	1.8	5.7	.06
185.0	-29	.0010	1.8	5.7	.06
186.0	-29	.0010	1.8	5.7	.06
187.0	-30	.0010	1.8	5.7	.06
188.0	-31	.0010	1.8	5.7	.06
189.0	-33	.0010	1.8	5.7	.06
190.0	-34	.0010	1.8	5.7	.06
191.0	-36	.0010	1.8	5.7	.06
192.0	-37	.0010	1.8	5.7	.06
193.0	-37	.0010	1.8	5.7	.06
194.0	-38	.0010	1.8	5.7	.06
195.0	-39	.0010	1.8	5.7	.06
196.0	-40	.0010	1.8	5.7	.06
197.0	-41	.0010	1.8	5.7	.06
198.0	-42	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)**Tabulation of Distances to Protected and Interfering Contours****for Proposed Channel 244 Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
199.0	-44	.0010	1.8	5.7	.06
200.0	-45	.0010	1.8	5.7	.06
201.0	-46	.0010	1.8	5.7	.06
202.0	-47	.0010	1.8	5.7	.06
203.0	-49	.0010	1.8	5.7	.06
204.0	-49	.0010	1.8	5.7	.06
205.0	-50	.0010	1.8	5.7	.06
206.0	-51	.0010	1.8	5.7	.06
207.0	-51	.0010	1.8	5.7	.06
208.0	-51	.0010	1.8	5.7	.06
209.0	-50	.0010	1.8	5.7	.06
210.0	-50	.0010	1.8	5.7	.06
211.0	-51	.0010	1.8	5.7	.06
212.0	-52	.0010	1.8	5.7	.06
213.0	-52	.0010	1.8	5.7	.06
214.0	-52	.0010	1.8	5.7	.06
215.0	-52	.0010	1.8	5.7	.06
216.0	-53	.0010	1.8	5.7	.06
217.0	-53	.0010	1.8	5.7	.06
218.0	-52	.0010	1.8	5.7	.06
219.0	-51	.0010	1.8	5.7	.06
220.0	-50	.0010	1.8	5.7	.06
221.0	-49	.0010	1.8	5.7	.06
222.0	-47	.0010	1.8	5.7	.06
223.0	-44	.0010	1.8	5.7	.06
224.0	-41	.0010	1.8	5.7	.06
225.0	-38	.0010	1.8	5.7	.06
226.0	-35	.0010	1.8	5.7	.06
227.0	-32	.0010	1.8	5.7	.06
228.0	-30	.0010	1.8	5.7	.06
229.0	-27	.0010	1.8	5.7	.06
230.0	-25	.0010	1.8	5.7	.06
231.0	-22	.0010	1.8	5.7	.06
232.0	-19	.0010	1.8	5.7	.06
233.0	-17	.0010	1.8	5.7	.06
234.0	-15	.0010	1.8	5.7	.06
235.0	-13	.0010	1.8	5.7	.06
236.0	-12	.0010	1.8	5.7	.06
237.0	-10	.0010	1.8	5.7	.06
238.0	-9	.0010	1.8	5.7	.06
239.0	-8	.0010	1.8	5.7	.06
240.0	-7	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)

Tabulation of Distances to Protected and Interfering Contours

for Proposed Channel 244 Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
241.0	-6	.0010	1.8	5.7	.06
242.0	-5	.0010	1.8	5.7	.06
243.0	-5	.0010	1.8	5.7	.06
244.0	-4	.0010	1.8	5.7	.06
245.0	-4	.0010	1.8	5.7	.06
246.0	-4	.0010	1.8	5.7	.06
247.0	-4	.0010	1.8	5.7	.06
248.0	-4	.0010	1.8	5.7	.06
249.0	-3	.0010	1.8	5.7	.06
250.0	-2	.0010	1.8	5.7	.06
251.0	-1	.0010	1.8	5.7	.06
252.0	0	.0010	1.8	5.7	.06
253.0	1	.0010	1.8	5.7	.06
254.0	3	.0010	1.8	5.7	.06
255.0	3	.0010	1.8	5.7	.06
256.0	4	.0010	1.8	5.7	.06
257.0	4	.0010	1.8	5.7	.06
258.0	4	.0010	1.8	5.7	.06
259.0	4	.0010	1.8	5.7	.06
260.0	4	.0010	1.8	5.7	.06
261.0	4	.0010	1.8	5.7	.06
262.0	4	.0010	1.8	5.7	.06
263.0	4	.0010	1.8	5.7	.06
264.0	3	.0010	1.8	5.7	.06
265.0	3	.0010	1.8	5.7	.06
266.0	2	.0010	1.8	5.7	.06
267.0	2	.0010	1.8	5.7	.06
268.0	1	.0010	1.8	5.7	.06
269.0	1	.0010	1.8	5.7	.06
270.0	0	.0010	1.8	5.7	.06
271.0	-1	.0010	1.8	5.7	.06
272.0	-2	.0010	1.8	5.7	.06
273.0	-3	.0010	1.8	5.7	.06
274.0	-4	.0010	1.8	5.7	.06
275.0	-4	.0010	1.8	5.7	.06
276.0	-5	.0010	1.8	5.7	.06
277.0	-5	.0010	1.8	5.7	.06
278.0	-6	.0010	1.8	5.7	.06
279.0	-8	.0010	1.8	5.7	.06
280.0	-9	.0010	1.8	5.7	.06
281.0	-9	.0010	1.8	5.7	.06
282.0	-10	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)

Tabulation of Distances to Protected and Interfering Contours

for Proposed Channel 244 Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
283.0	-10	.0010	1.8	5.7	.06
284.0	-10	.0010	1.8	5.7	.06
285.0	-11	.0010	1.8	5.7	.06
286.0	-11	.0010	1.8	5.7	.06
287.0	-12	.0010	1.8	5.7	.06
288.0	-14	.0010	1.8	5.7	.06
289.0	-15	.0010	1.8	5.7	.06
290.0	-16	.0010	1.8	5.7	.06
291.0	-17	.0010	1.8	5.7	.06
292.0	-17	.0010	1.8	5.7	.06
293.0	-16	.0010	1.8	5.7	.06
294.0	-16	.0010	1.8	5.7	.06
295.0	-15	.0010	1.8	5.7	.06
296.0	-15	.0010	1.8	5.7	.06
297.0	-15	.0010	1.8	5.7	.06
298.0	-14	.0010	1.8	5.7	.06
299.0	-12	.0010	1.8	5.7	.06
300.0	-11	.0010	1.8	5.7	.06
301.0	-9	.0010	1.8	5.7	.06
302.0	-7	.0010	1.8	5.7	.06
303.0	-5	.0010	1.8	5.7	.06
304.0	-3	.0010	1.8	5.7	.06
305.0	-1	.0010	1.8	5.7	.06
306.0	1	.0010	1.8	5.7	.06
307.0	2	.0010	1.8	5.7	.06
308.0	4	.0010	1.8	5.7	.06
309.0	5	.0010	1.8	5.7	.06
310.0	5	.0010	1.8	5.7	.06
311.0	5	.0010	1.8	5.7	.06
312.0	5	.0010	1.8	5.7	.06
313.0	4	.0010	1.8	5.7	.06
314.0	3	.0010	1.8	5.7	.06
315.0	3	.0010	1.8	5.7	.06
316.0	3	.0010	1.8	5.7	.06
317.0	3	.0010	1.8	5.7	.06
318.0	3	.0010	1.8	5.7	.06
319.0	2	.0010	1.8	5.7	.06
320.0	2	.0010	1.8	5.7	.06
321.0	2	.0010	1.8	5.7	.06
322.0	1	.0010	1.8	5.7	.06
323.0	1	.0010	1.8	5.7	.06
324.0	0	.0010	1.8	5.7	.06

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EXHIBIT 4(a) - (continued)**Tabulation of Distances to Protected and Interfering Contours****for Proposed Channel 244 Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>	<u>Distance to F(50,10) 100dBu Contour (km)</u>
325.0	-1	.0010	1.8	5.7	.06
326.0	-2	.0010	1.8	5.7	.06
327.0	-2	.0010	1.8	5.7	.06
328.0	-3	.0010	1.8	5.7	.06
329.0	-4	.0010	1.8	5.7	.06
330.0	-4	.0010	1.8	5.7	.06
331.0	-5	.0010	1.8	5.7	.06
332.0	-6	.0010	1.8	5.7	.06
333.0	-7	.0010	1.8	5.7	.06
334.0	-8	.0010	1.8	5.7	.06
335.0	-9	.0010	1.8	5.7	.06
336.0	-10	.0010	1.8	5.7	.06
337.0	-12	.0010	1.8	5.7	.06
338.0	-13	.0010	1.8	5.7	.06
339.0	-14	.0010	1.8	5.7	.06
340.0	-15	.0010	1.8	5.7	.06
341.0	-17	.0010	1.8	5.7	.06
342.0	-18	.0010	1.8	5.7	.06
343.0	-19	.0010	1.8	5.7	.06
344.0	-20	.0010	1.8	5.7	.06
345.0	-22	.0010	1.8	5.7	.06
346.0	-24	.0010	1.8	5.7	.06
347.0	-25	.0010	1.8	5.7	.06
348.0	-26	.0010	1.8	5.7	.06
349.0	-27	.0010	1.8	5.7	.06
350.0	-30	.0010	1.8	5.7	.06
351.0	-32	.0010	1.8	5.7	.06
352.0	-34	.0010	1.8	5.7	.06
353.0	-36	.0010	1.8	5.7	.06
354.0	-37	.0010	1.8	5.7	.06
355.0	-39	.0010	1.8	5.7	.06
356.0	-40	.0010	1.8	5.7	.06
357.0	-41	.0010	1.8	5.7	.06
358.0	-42	.0010	1.8	5.7	.06
359.0	-42	.0010	1.8	5.7	.06

Notes : 1) Terrain Source - USGS 30 Arc Second Point Database

2) Distance to 100 dBu contour calculated using free space propagation formula

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EXHIBIT 4(b)

**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

Site Coordinates : N 33° 42' 10" W 96° 34' 05"

Maximum ERP : 3.0 kW

Antenna Type : Omni-Directional

File Number : BLH-840831CK

Antenna Radiation : 301 meters AMSL
Center Height

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
0.0	105	3.0000	24.7	76.7
1.0	106	3.0000	24.9	77.0
2.0	107	3.0000	24.9	77.1
3.0	106	3.0000	24.9	77.0
4.0	106	3.0000	24.9	77.0
5.0	105	3.0000	24.8	76.8
6.0	105	3.0000	24.8	76.8
7.0	105	3.0000	24.7	76.7
8.0	104	3.0000	24.7	76.6
9.0	104	3.0000	24.7	76.6
10.0	105	3.0000	24.7	76.7
11.0	105	3.0000	24.8	76.9
12.0	106	3.0000	24.9	77.0
13.0	107	3.0000	25.0	77.1
14.0	108	3.0000	25.1	77.3
15.0	109	3.0000	25.2	77.5
16.0	110	3.0000	25.3	77.7
17.0	111	3.0000	25.4	77.8
18.0	111	3.0000	25.4	77.9
19.0	111	3.0000	25.4	77.8
20.0	111	3.0000	25.4	77.8
21.0	110	3.0000	25.4	77.7
22.0	110	3.0000	25.3	77.7
23.0	110	3.0000	25.3	77.7
24.0	109	3.0000	25.3	77.6
25.0	109	3.0000	25.2	77.5
26.0	109	3.0000	25.2	77.5
27.0	109	3.0000	25.2	77.5
28.0	109	3.0000	25.2	77.5

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EXHIBIT 4(b) - (continued)**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
29.0	109	3.0000	25.2	77.5
30.0	109	3.0000	25.2	77.5
31.0	109	3.0000	25.2	77.5
32.0	110	3.0000	25.3	77.6
33.0	110	3.0000	25.4	77.7
34.0	112	3.0000	25.5	77.9
35.0	113	3.0000	25.6	78.1
36.0	113	3.0000	25.7	78.3
37.0	114	3.0000	25.7	78.4
38.0	114	3.0000	25.7	78.4
39.0	114	3.0000	25.7	78.4
40.0	113	3.0000	25.7	78.3
41.0	113	3.0000	25.6	78.2
42.0	113	3.0000	25.6	78.1
43.0	112	3.0000	25.6	78.1
44.0	112	3.0000	25.6	78.1
45.0	112	3.0000	25.5	78.1
46.0	112	3.0000	25.6	78.1
47.0	112	3.0000	25.6	78.1
48.0	112	3.0000	25.5	78.1
49.0	112	3.0000	25.5	78.0
50.0	112	3.0000	25.5	77.9
51.0	111	3.0000	25.4	77.8
52.0	110	3.0000	25.4	77.7
53.0	110	3.0000	25.4	77.7
54.0	111	3.0000	25.4	77.8
55.0	111	3.0000	25.4	77.8
56.0	110	3.0000	25.3	77.7
57.0	111	3.0000	25.4	77.8
58.0	111	3.0000	25.4	77.8
59.0	112	3.0000	25.5	78.0
60.0	112	3.0000	25.5	78.1
61.0	113	3.0000	25.6	78.1
62.0	113	3.0000	25.6	78.2
63.0	113	3.0000	25.7	78.3
64.0	114	3.0000	25.7	78.3
65.0	115	3.0000	25.8	78.4
66.0	115	3.0000	25.8	78.6
67.0	116	3.0000	25.9	78.7
68.0	117	3.0000	26.0	78.8
69.0	117	3.0000	26.0	78.9
70.0	118	3.0000	26.1	79.0

RUBIN, BEDNAREK & ASSOCIATES, INC.

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EXHIBIT 4(b) - (continued)**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
71.0	118	3.0000	26.1	79.1
72.0	119	3.0000	26.2	79.1
73.0	119	3.0000	26.2	79.2
74.0	120	3.0000	26.3	79.3
75.0	121	3.0000	26.4	79.5
76.0	122	3.0000	26.5	79.7
77.0	124	3.0000	26.6	80.0
78.0	125	3.0000	26.7	80.2
79.0	126	3.0000	26.8	80.3
80.0	126	3.0000	26.8	80.3
81.0	126	3.0000	26.8	80.3
82.0	126	3.0000	26.8	80.3
83.0	125	3.0000	26.7	80.2
84.0	125	3.0000	26.7	80.1
85.0	124	3.0000	26.6	79.9
86.0	122	3.0000	26.5	79.7
87.0	121	3.0000	26.3	79.5
88.0	120	3.0000	26.3	79.3
89.0	119	3.0000	26.2	79.2
90.0	119	3.0000	26.2	79.1
91.0	118	3.0000	26.1	79.0
92.0	117	3.0000	26.0	78.9
93.0	117	3.0000	26.0	78.8
94.0	116	3.0000	25.9	78.6
95.0	114	3.0000	25.8	78.4
96.0	113	3.0000	25.6	78.2
97.0	112	3.0000	25.5	78.0
98.0	111	3.0000	25.4	77.8
99.0	110	3.0000	25.3	77.7
100.0	110	3.0000	25.3	77.6
101.0	110	3.0000	25.3	77.6
102.0	110	3.0000	25.3	77.7
103.0	110	3.0000	25.4	77.7
104.0	111	3.0000	25.4	77.8
105.0	111	3.0000	25.4	77.8
106.0	110	3.0000	25.3	77.7
107.0	110	3.0000	25.3	77.7
108.0	110	3.0000	25.3	77.7
109.0	110	3.0000	25.3	77.7
110.0	110	3.0000	25.3	77.7
111.0	111	3.0000	25.4	77.8
112.0	110	3.0000	25.3	77.7

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EXHIBIT 4(b) - (continued)**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
113.0	110	3.0000	25.3	77.6
114.0	109	3.0000	25.2	77.6
115.0	109	3.0000	25.2	77.5
116.0	109	3.0000	25.2	77.5
117.0	109	3.0000	25.2	77.5
118.0	109	3.0000	25.2	77.5
119.0	108	3.0000	25.1	77.4
120.0	108	3.0000	25.1	77.3
121.0	108	3.0000	25.1	77.3
122.0	108	3.0000	25.1	77.2
123.0	107	3.0000	25.0	77.2
124.0	107	3.0000	25.0	77.2
125.0	108	3.0000	25.1	77.2
126.0	108	3.0000	25.1	77.3
127.0	108	3.0000	25.1	77.3
128.0	108	3.0000	25.1	77.3
129.0	107	3.0000	25.0	77.2
130.0	107	3.0000	25.0	77.1
131.0	106	3.0000	24.9	77.0
132.0	105	3.0000	24.8	76.8
133.0	104	3.0000	24.7	76.6
134.0	103	3.0000	24.5	76.4
135.0	101	3.0000	24.3	76.1
136.0	99	3.0000	24.1	75.7
137.0	98	3.0000	24.0	75.5
138.0	97	3.0000	23.9	75.4
139.0	97	3.0000	23.8	75.2
140.0	96	3.0000	23.7	75.1
141.0	95	3.0000	23.6	75.0
142.0	95	3.0000	23.6	74.9
143.0	95	3.0000	23.6	74.9
144.0	94	3.0000	23.5	74.8
145.0	94	3.0000	23.4	74.7
146.0	93	3.0000	23.4	74.5
147.0	92	3.0000	23.3	74.4
148.0	92	3.0000	23.2	74.3
149.0	91	3.0000	23.2	74.2
150.0	91	3.0000	23.1	74.2
151.0	91	3.0000	23.1	74.1
152.0	91	3.0000	23.1	74.2
153.0	91	3.0000	23.2	74.2
154.0	91	3.0000	23.1	74.2

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EXHIBIT 4(b) - (continued)

**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
155.0	90	3.0000	23.0	74.0
156.0	89	3.0000	22.9	73.8
157.0	89	3.0000	22.9	73.7
158.0	89	3.0000	22.9	73.8
159.0	90	3.0000	23.1	74.0
160.0	91	3.0000	23.2	74.2
161.0	91	3.0000	23.2	74.2
162.0	90	3.0000	23.0	74.0
163.0	89	3.0000	22.9	73.8
164.0	89	3.0000	22.8	73.7
165.0	89	3.0000	22.9	73.7
166.0	89	3.0000	22.9	73.8
167.0	89	3.0000	22.9	73.8
168.0	89	3.0000	22.9	73.7
169.0	89	3.0000	22.9	73.8
170.0	90	3.0000	23.0	73.9
171.0	91	3.0000	23.1	74.1
172.0	92	3.0000	23.2	74.3
173.0	92	3.0000	23.3	74.5
174.0	92	3.0000	23.3	74.4
175.0	91	3.0000	23.1	74.1
176.0	90	3.0000	23.0	73.9
177.0	89	3.0000	22.9	73.7
178.0	88	3.0000	22.7	73.5
179.0	87	3.0000	22.6	73.3
180.0	87	3.0000	22.6	73.3
181.0	87	3.0000	22.7	73.4
182.0	88	3.0000	22.7	73.5
183.0	88	3.0000	22.8	73.6
184.0	87	3.0000	22.7	73.5
185.0	87	3.0000	22.6	73.3
186.0	86	3.0000	22.5	73.2
187.0	86	3.0000	22.5	73.2
188.0	86	3.0000	22.5	73.1
189.0	85	3.0000	22.4	73.0
190.0	84	3.0000	22.3	72.9
191.0	84	3.0000	22.2	72.7
192.0	83	3.0000	22.1	72.6
193.0	82	3.0000	22.0	72.4
194.0	82	3.0000	22.0	72.3
195.0	82	3.0000	21.9	72.2
196.0	81	3.0000	21.9	72.2

RUBIN, BEDNAREK & ASSOCIATES, INC.
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EXHIBIT 4(b) - (continued)

**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
197.0	81	3.0000	21.9	72.1
198.0	80	3.0000	21.8	72.0
199.0	80	3.0000	21.7	71.8
200.0	79	3.0000	21.5	71.6
201.0	78	3.0000	21.4	71.4
202.0	77	3.0000	21.3	71.2
203.0	75	3.0000	21.1	70.8
204.0	74	3.0000	20.9	70.5
205.0	73	3.0000	20.8	70.3
206.0	73	3.0000	20.7	70.2
207.0	72	3.0000	20.7	70.2
208.0	72	3.0000	20.7	70.2
209.0	72	3.0000	20.7	70.2
210.0	72	3.0000	20.7	70.2
211.0	72	3.0000	20.7	70.2
212.0	72	3.0000	20.7	70.2
213.0	72	3.0000	20.6	70.0
214.0	71	3.0000	20.5	69.8
215.0	70	3.0000	20.3	69.6
216.0	69	3.0000	20.2	69.3
217.0	68	3.0000	20.1	69.1
218.0	67	3.0000	20.0	69.0
219.0	66	3.0000	19.9	68.7
220.0	65	3.0000	19.7	68.5
221.0	65	3.0000	19.6	68.3
222.0	64	3.0000	19.5	68.1
223.0	64	3.0000	19.5	68.1
224.0	64	3.0000	19.5	68.1
225.0	64	3.0000	19.6	68.2
226.0	65	3.0000	19.6	68.3
227.0	65	3.0000	19.7	68.3
228.0	65	3.0000	19.7	68.4
229.0	65	3.0000	19.6	68.3
230.0	64	3.0000	19.5	68.1
231.0	63	3.0000	19.4	67.9
232.0	63	3.0000	19.3	67.7
233.0	62	3.0000	19.2	67.5
234.0	61	3.0000	19.1	67.4
235.0	61	3.0000	19.1	67.3
236.0	61	3.0000	19.1	67.3
237.0	61	3.0000	19.1	67.3
238.0	61	3.0000	19.0	67.2

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 610

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EXHIBIT 4(b) - (continued)

Tabulation of Distances to Protected and Interfering Contours For Licensed KIKM-FM Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
239.0	60	3.0000	19.0	67.1
240.0	60	3.0000	18.9	67.0
241.0	59	3.0000	18.9	66.9
242.0	59	3.0000	18.8	66.8
243.0	59	3.0000	18.8	66.7
244.0	59	3.0000	18.8	66.7
245.0	59	3.0000	18.8	66.7
246.0	59	3.0000	18.8	66.7
247.0	60	3.0000	18.9	66.9
248.0	60	3.0000	19.0	67.1
249.0	61	3.0000	19.1	67.3
250.0	61	3.0000	19.1	67.3
251.0	61	3.0000	19.1	67.3
252.0	61	3.0000	19.1	67.3
253.0	61	3.0000	19.0	67.2
254.0	61	3.0000	19.0	67.2
255.0	61	3.0000	19.1	67.3
256.0	61	3.0000	19.2	67.4
257.0	62	3.0000	19.2	67.6
258.0	63	3.0000	19.3	67.8
259.0	63	3.0000	19.5	68.0
260.0	64	3.0000	19.6	68.2
261.0	65	3.0000	19.7	68.4
262.0	66	3.0000	19.8	68.6
263.0	67	3.0000	19.9	68.8
264.0	67	3.0000	20.0	69.0
265.0	68	3.0000	20.1	69.1
266.0	69	3.0000	20.2	69.3
267.0	70	3.0000	20.3	69.5
268.0	71	3.0000	20.4	69.7
269.0	71	3.0000	20.5	69.9
270.0	71	3.0000	20.5	69.8
271.0	71	3.0000	20.5	69.8
272.0	71	3.0000	20.5	69.8
273.0	71	3.0000	20.4	69.7
274.0	71	3.0000	20.5	69.8
275.0	71	3.0000	20.6	69.9
276.0	72	3.0000	20.7	70.2
277.0	73	3.0000	20.8	70.4
278.0	74	3.0000	21.0	70.7
279.0	76	3.0000	21.2	71.0
280.0	77	3.0000	21.3	71.2

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 610

WASHINGTON, DC 20036

EXHIBIT 4(b) - (continued)**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
281.0	77	3.0000	21.4	71.3
282.0	78	3.0000	21.4	71.4
283.0	78	3.0000	21.5	71.5
284.0	80	3.0000	21.7	71.8
285.0	82	3.0000	21.9	72.3
286.0	84	3.0000	22.3	72.8
287.0	86	3.0000	22.5	73.2
288.0	88	3.0000	22.7	73.5
289.0	89	3.0000	22.8	73.7
290.0	89	3.0000	22.9	73.7
291.0	88	3.0000	22.8	73.7
292.0	88	3.0000	22.8	73.6
293.0	87	3.0000	22.7	73.4
294.0	87	3.0000	22.6	73.3
295.0	86	3.0000	22.5	73.2
296.0	85	3.0000	22.4	73.1
297.0	84	3.0000	22.3	72.9
298.0	83	3.0000	22.1	72.6
299.0	82	3.0000	21.9	72.3
300.0	80	3.0000	21.8	72.0
301.0	79	3.0000	21.6	71.7
302.0	78	3.0000	21.5	71.5
303.0	77	3.0000	21.3	71.2
304.0	76	3.0000	21.2	71.0
305.0	75	3.0000	21.1	70.9
306.0	75	3.0000	21.1	70.8
307.0	75	3.0000	21.1	70.8
308.0	75	3.0000	21.1	70.8
309.0	75	3.0000	21.1	70.8
310.0	75	3.0000	21.1	70.8
311.0	75	3.0000	21.1	70.8
312.0	75	3.0000	21.0	70.7
313.0	74	3.0000	21.0	70.6
314.0	74	3.0000	20.9	70.6
315.0	74	3.0000	20.9	70.6
316.0	74	3.0000	20.9	70.6
317.0	74	3.0000	21.0	70.6
318.0	74	3.0000	21.0	70.7
319.0	75	3.0000	21.0	70.7
320.0	75	3.0000	21.1	70.8
321.0	76	3.0000	21.2	71.0
322.0	77	3.0000	21.3	71.3

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 610

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EXHIBIT 4(b) - (continued)**Tabulation of Distances to Protected and Interfering
Contours For Licensed KIKM-FM Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40 dBu Contour (km)</u>
323.0	78	3.0000	21.5	71.5
324.0	78	3.0000	21.5	71.6
325.0	79	3.0000	21.5	71.6
326.0	78	3.0000	21.5	71.6
327.0	78	3.0000	21.5	71.5
328.0	78	3.0000	21.5	71.5
329.0	79	3.0000	21.5	71.6
330.0	79	3.0000	21.6	71.7
331.0	79	3.0000	21.6	71.7
332.0	80	3.0000	21.7	71.8
333.0	80	3.0000	21.7	71.8
334.0	80	3.0000	21.7	71.8
335.0	80	3.0000	21.7	71.9
336.0	81	3.0000	21.8	72.1
337.0	82	3.0000	22.0	72.4
338.0	84	3.0000	22.3	72.8
339.0	86	3.0000	22.5	73.2
340.0	88	3.0000	22.7	73.5
341.0	88	3.0000	22.8	73.7
342.0	90	3.0000	23.0	73.9
343.0	91	3.0000	23.1	74.1
344.0	92	3.0000	23.2	74.3
345.0	93	3.0000	23.3	74.5
346.0	93	3.0000	23.4	74.6
347.0	94	3.0000	23.4	74.7
348.0	93	3.0000	23.4	74.6
349.0	93	3.0000	23.4	74.6
350.0	93	3.0000	23.4	74.6
351.0	94	3.0000	23.4	74.7
352.0	94	3.0000	23.6	74.8
353.0	95	3.0000	23.6	75.0
354.0	96	3.0000	23.7	75.1
355.0	97	3.0000	23.8	75.3
356.0	98	3.0000	23.9	75.4
357.0	99	3.0000	24.1	75.7
358.0	101	3.0000	24.3	76.0
359.0	101	3.0000	24.5	76.4

Note : Terrain Source - USGS 30 Arc Second Point Database

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 610

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EXHIBIT 4(c)

Tabulation of Distances to Protected and Interfering Contours

For Licensed KBOC Facility

Site Coordinates : N 33° 13' 28" W 97° 47' 51"

Maximum ERP : 3.0 kW

Antenna Type : Omni- Directional

File Number : BLH-820811AK

Antenna Radiation : 336 meters AMSL
Center Height

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
0.0	49	3.0000	17.0	63.3
1.0	50	3.0000	17.1	63.6
2.0	50	3.0000	17.3	63.9
3.0	51	3.0000	17.4	64.0
4.0	51	3.0000	17.4	64.2
5.0	52	3.0000	17.5	64.3
6.0	53	3.0000	17.7	64.7
7.0	54	3.0000	17.9	65.1
8.0	55	3.0000	18.1	65.4
9.0	55	3.0000	18.2	65.7
10.0	56	3.0000	18.3	65.9
11.0	57	3.0000	18.4	66.1
12.0	57	3.0000	18.5	66.2
13.0	58	3.0000	18.6	66.4
14.0	58	3.0000	18.7	66.6
15.0	59	3.0000	18.9	66.9
16.0	60	3.0000	19.0	67.1
17.0	61	3.0000	19.1	67.3
18.0	62	3.0000	19.2	67.5
19.0	62	3.0000	19.3	67.6
20.0	63	3.0000	19.3	67.7
21.0	63	3.0000	19.4	67.9
22.0	64	3.0000	19.5	68.0
23.0	64	3.0000	19.6	68.2
24.0	65	3.0000	19.7	68.5
25.0	67	3.0000	19.9	68.9
26.0	69	3.0000	20.2	69.3
27.0	70	3.0000	20.4	69.7
28.0	72	3.0000	20.6	70.0
29.0	73	3.0000	20.8	70.3

RUBIN, BEDNAREK & ASSOCIATES, INC.

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EXHIBIT 4(c) - (continued)

Tabulation of Distances to Protected and Interfering Contours

For Licensed KBOC Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
30.0	74	3.0000	20.9	70.5
31.0	75	3.0000	21.0	70.7
32.0	75	3.0000	21.1	70.9
33.0	76	3.0000	21.2	71.1
34.0	77	3.0000	21.4	71.3
35.0	78	3.0000	21.5	71.5
36.0	79	3.0000	21.6	71.7
37.0	80	3.0000	21.7	71.8
38.0	80	3.0000	21.7	71.9
39.0	81	3.0000	21.8	72.1
40.0	82	3.0000	21.9	72.3
41.0	83	3.0000	22.1	72.5
42.0	84	3.0000	22.3	72.8
43.0	85	3.0000	22.4	73.0
44.0	86	3.0000	22.6	73.3
45.0	87	3.0000	22.7	73.4
46.0	88	3.0000	22.7	73.5
47.0	87	3.0000	22.7	73.4
48.0	86	3.0000	22.6	73.3
49.0	86	3.0000	22.5	73.1
50.0	86	3.0000	22.5	73.1
51.0	86	3.0000	22.5	73.2
52.0	86	3.0000	22.6	73.3
53.0	86	3.0000	22.6	73.3
54.0	87	3.0000	22.6	73.3
55.0	87	3.0000	22.6	73.3
56.0	87	3.0000	22.6	73.3
57.0	87	3.0000	22.7	73.4
58.0	87	3.0000	22.7	73.5
59.0	88	3.0000	22.7	73.5
60.0	88	3.0000	22.8	73.6
61.0	89	3.0000	22.9	73.7
62.0	89	3.0000	22.9	73.8
63.0	90	3.0000	23.0	74.0
64.0	91	3.0000	23.1	74.1
65.0	91	3.0000	23.2	74.2
66.0	91	3.0000	23.2	74.2
67.0	91	3.0000	23.2	74.3
68.0	91	3.0000	23.2	74.3
69.0	92	3.0000	23.2	74.3
70.0	92	3.0000	23.2	74.3
71.0	92	3.0000	23.3	74.4

RUBIN, BEDNAREK & ASSOCIATES, INC.

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EXHIBIT 4(c) - (continued)**Tabulation of Distances to Protected and Interfering Contours****For Licensed KBOC Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
72.0	92	3.0000	23.3	74.5
73.0	92	3.0000	23.3	74.5
74.0	92	3.0000	23.3	74.4
75.0	91	3.0000	23.2	74.2
76.0	91	3.0000	23.1	74.1
77.0	90	3.0000	23.0	74.0
78.0	90	3.0000	23.0	73.9
79.0	90	3.0000	23.0	74.0
80.0	91	3.0000	23.1	74.1
81.0	92	3.0000	23.2	74.3
82.0	93	3.0000	23.4	74.6
83.0	94	3.0000	23.5	74.8
84.0	95	3.0000	23.6	75.0
85.0	96	3.0000	23.7	75.1
86.0	96	3.0000	23.8	75.1
87.0	96	3.0000	23.8	75.1
88.0	96	3.0000	23.8	75.2
89.0	96	3.0000	23.8	75.2
90.0	96	3.0000	23.8	75.2
91.0	97	3.0000	23.8	75.2
92.0	97	3.0000	23.8	75.3
93.0	97	3.0000	23.8	75.3
94.0	97	3.0000	23.9	75.4
95.0	98	3.0000	24.0	75.5
96.0	99	3.0000	24.0	75.6
97.0	99	3.0000	24.1	75.8
98.0	100	3.0000	24.3	76.0
99.0	102	3.0000	24.4	76.2
100.0	103	3.0000	24.5	76.4
101.0	104	3.0000	24.7	76.7
102.0	105	3.0000	24.8	76.8
103.0	106	3.0000	24.9	77.0
104.0	106	3.0000	24.9	77.0
105.0	107	3.0000	24.9	77.1
106.0	107	3.0000	25.0	77.2
107.0	108	3.0000	25.1	77.3
108.0	109	3.0000	25.2	77.5
109.0	110	3.0000	25.3	77.7
110.0	111	3.0000	25.4	77.8
111.0	112	3.0000	25.5	77.9
112.0	112	3.0000	25.5	78.1
113.0	113	3.0000	25.6	78.2

RUBIN, BEDNAREK & ASSOCIATES, INC.
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EXHIBIT 4(c) - (continued)

Tabulation of Distances to Protected and Interfering Contours

For Licensed KBOC Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
114.0	113	3.0000	25.6	78.2
115.0	114	3.0000	25.7	78.3
116.0	114	3.0000	25.7	78.4
117.0	115	3.0000	25.8	78.5
118.0	115	3.0000	25.8	78.5
119.0	115	3.0000	25.8	78.6
120.0	115	3.0000	25.8	78.5
121.0	115	3.0000	25.8	78.5
122.0	114	3.0000	25.8	78.4
123.0	114	3.0000	25.7	78.4
124.0	113	3.0000	25.7	78.3
125.0	113	3.0000	25.6	78.2
126.0	113	3.0000	25.6	78.1
127.0	112	3.0000	25.5	78.0
128.0	111	3.0000	25.5	77.9
129.0	111	3.0000	25.4	77.8
130.0	109	3.0000	25.2	77.5
131.0	108	3.0000	25.1	77.3
132.0	106	3.0000	24.9	77.0
133.0	105	3.0000	24.7	76.7
134.0	104	3.0000	24.7	76.6
135.0	103	3.0000	24.5	76.4
136.0	102	3.0000	24.4	76.3
137.0	101	3.0000	24.3	76.1
138.0	100	3.0000	24.2	75.9
139.0	100	3.0000	24.2	75.9
140.0	101	3.0000	24.3	76.0
141.0	101	3.0000	24.3	76.1
142.0	101	3.0000	24.4	76.1
143.0	101	3.0000	24.4	76.1
144.0	101	3.0000	24.3	76.1
145.0	100	3.0000	24.2	75.9
146.0	99	3.0000	24.1	75.7
147.0	98	3.0000	24.0	75.5
148.0	97	3.0000	23.9	75.3
149.0	96	3.0000	23.8	75.2
150.0	96	3.0000	23.7	75.1
151.0	95	3.0000	23.6	75.0
152.0	94	3.0000	23.5	74.8
153.0	93	3.0000	23.4	74.6
154.0	92	3.0000	23.3	74.4
155.0	91	3.0000	23.1	74.2

RUBIN, BEDNAREK & ASSOCIATES, INC.

CONSULTING TELECOMMUNICATIONS ENGINEERS

1350 CONNECTICUT AVENUE, NW - SUITE 610

WASHINGTON, DC 20036

EXHIBIT 4(c) - (continued)**Tabulation of Distances to Protected and Interfering Contours****For Licensed KBOC Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
156.0	90	3.0000	23.0	73.9
157.0	89	3.0000	22.8	73.7
158.0	88	3.0000	22.7	73.5
159.0	87	3.0000	22.6	73.4
160.0	86	3.0000	22.5	73.2
161.0	85	3.0000	22.4	73.0
162.0	85	3.0000	22.3	72.9
163.0	84	3.0000	22.3	72.8
164.0	84	3.0000	22.2	72.7
165.0	83	3.0000	22.1	72.6
166.0	82	3.0000	22.0	72.4
167.0	81	3.0000	21.9	72.2
168.0	80	3.0000	21.7	71.9
169.0	79	3.0000	21.5	71.6
170.0	77	3.0000	21.4	71.3
171.0	76	3.0000	21.2	71.0
172.0	75	3.0000	21.0	70.8
173.0	74	3.0000	21.0	70.6
174.0	74	3.0000	20.9	70.5
175.0	72	3.0000	20.7	70.2
176.0	71	3.0000	20.5	69.9
177.0	70	3.0000	20.3	69.6
178.0	69	3.0000	20.2	69.3
179.0	68	3.0000	20.1	69.2
180.0	68	3.0000	20.0	69.0
181.0	67	3.0000	19.9	68.9
182.0	66	3.0000	19.8	68.7
183.0	65	3.0000	19.7	68.4
184.0	64	3.0000	19.5	68.1
185.0	62	3.0000	19.3	67.6
186.0	60	3.0000	19.0	67.2
187.0	59	3.0000	18.8	66.7
188.0	58	3.0000	18.6	66.4
189.0	56	3.0000	18.3	65.9
190.0	54	3.0000	18.0	65.2
191.0	52	3.0000	17.6	64.4
192.0	49	3.0000	17.1	63.5
193.0	47	3.0000	16.6	62.6
194.0	46	3.0000	16.4	62.1
195.0	46	3.0000	16.3	62.0
196.0	47	3.0000	16.6	62.6
197.0	50	3.0000	17.2	63.6

RUBIN, BEDNAREK & ASSOCIATES, INC.
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EXHIBIT 4(c) - (continued)

Tabulation of Distances to Protected and Interfering Contours

For Licensed KBOC Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
198.0	53	3.0000	17.8	64.8
199.0	56	3.0000	18.3	65.8
200.0	58	3.0000	18.7	66.6
201.0	61	3.0000	19.1	67.2
202.0	63	3.0000	19.3	67.7
203.0	64	3.0000	19.5	68.1
204.0	65	3.0000	19.7	68.3
205.0	66	3.0000	19.8	68.6
206.0	67	3.0000	19.9	68.8
207.0	68	3.0000	20.1	69.1
208.0	69	3.0000	20.2	69.3
209.0	69	3.0000	20.3	69.5
210.0	70	3.0000	20.4	69.6
211.0	71	3.0000	20.5	69.8
212.0	72	3.0000	20.7	70.1
213.0	73	3.0000	20.8	70.4
214.0	74	3.0000	20.9	70.5
215.0	73	3.0000	20.8	70.4
216.0	73	3.0000	20.7	70.3
217.0	72	3.0000	20.7	70.1
218.0	72	3.0000	20.6	70.1
219.0	72	3.0000	20.7	70.1
220.0	73	3.0000	20.8	70.3
221.0	74	3.0000	20.9	70.5
222.0	74	3.0000	21.0	70.6
223.0	75	3.0000	21.0	70.7
224.0	75	3.0000	21.0	70.7
225.0	74	3.0000	21.0	70.6
226.0	74	3.0000	20.9	70.5
227.0	72	3.0000	20.7	70.2
228.0	71	3.0000	20.5	69.8
229.0	69	3.0000	20.3	69.5
230.0	68	3.0000	20.1	69.2
231.0	68	3.0000	20.1	69.1
232.0	68	3.0000	20.1	69.1
233.0	69	3.0000	20.2	69.3
234.0	69	3.0000	20.3	69.5
235.0	70	3.0000	20.4	69.7
236.0	71	3.0000	20.5	69.9
237.0	72	3.0000	20.7	70.1
238.0	73	3.0000	20.8	70.3
239.0	74	3.0000	20.9	70.5

RUBIN, BEDNAREK & ASSOCIATES, INC.

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1350 CONNECTICUT AVENUE, NW - SUITE 610

WASHINGTON, DC 20036

EXHIBIT 4(c) - (continued)**Tabulation of Distances to Protected and Interfering Contours****For Licensed KBOC Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
240.0	75	3.0000	21.0	70.8
241.0	76	3.0000	21.2	71.0
242.0	76	3.0000	21.2	71.1
243.0	76	3.0000	21.1	70.9
244.0	74	3.0000	20.9	70.6
245.0	72	3.0000	20.6	70.0
246.0	69	3.0000	20.3	69.4
247.0	67	3.0000	19.9	68.8
248.0	64	3.0000	19.6	68.2
249.0	62	3.0000	19.3	67.6
250.0	61	3.0000	19.1	67.3
251.0	60	3.0000	18.9	67.0
252.0	59	3.0000	18.8	66.8
253.0	59	3.0000	18.8	66.7
254.0	59	3.0000	18.7	66.6
255.0	58	3.0000	18.7	66.6
256.0	59	3.0000	18.8	66.7
257.0	59	3.0000	18.9	66.9
258.0	60	3.0000	19.0	67.1
259.0	61	3.0000	19.1	67.3
260.0	62	3.0000	19.2	67.5
261.0	63	3.0000	19.4	67.8
262.0	64	3.0000	19.6	68.2
263.0	65	3.0000	19.7	68.5
264.0	66	3.0000	19.9	68.7
265.0	67	3.0000	20.0	68.9
266.0	68	3.0000	20.2	69.2
267.0	70	3.0000	20.3	69.6
268.0	71	3.0000	20.5	69.8
269.0	72	3.0000	20.6	70.0
270.0	73	3.0000	20.7	70.2
271.0	73	3.0000	20.8	70.4
272.0	74	3.0000	21.0	70.6
273.0	75	3.0000	21.1	70.8
274.0	76	3.0000	21.2	71.0
275.0	76	3.0000	21.2	71.0
276.0	76	3.0000	21.2	71.1
277.0	76	3.0000	21.1	70.9
278.0	75	3.0000	21.1	70.9
279.0	75	3.0000	21.1	70.9
280.0	76	3.0000	21.2	71.0
281.0	76	3.0000	21.2	71.0

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EXHIBIT 4(c) - (continued)

Tabulation of Distances to Protected and Interfering Contours

For Licensed KBOC Facility

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
282.0	77	3.0000	21.3	71.2
283.0	77	3.0000	21.3	71.3
284.0	77	3.0000	21.4	71.3
285.0	77	3.0000	21.4	71.3
286.0	77	3.0000	21.3	71.2
287.0	76	3.0000	21.2	71.1
288.0	75	3.0000	21.1	70.9
289.0	74	3.0000	20.9	70.5
290.0	72	3.0000	20.6	70.1
291.0	70	3.0000	20.4	69.6
292.0	69	3.0000	20.2	69.3
293.0	68	3.0000	20.0	69.0
294.0	66	3.0000	19.9	68.7
295.0	65	3.0000	19.7	68.4
296.0	64	3.0000	19.6	68.2
297.0	64	3.0000	19.5	68.0
298.0	63	3.0000	19.4	67.9
299.0	63	3.0000	19.3	67.8
300.0	62	3.0000	19.3	67.6
301.0	61	3.0000	19.1	67.4
302.0	61	3.0000	19.0	67.2
303.0	60	3.0000	19.0	67.1
304.0	61	3.0000	19.0	67.2
305.0	61	3.0000	19.1	67.4
306.0	61	3.0000	19.2	67.4
307.0	62	3.0000	19.2	67.5
308.0	62	3.0000	19.3	67.6
309.0	63	3.0000	19.4	67.9
310.0	65	3.0000	19.7	68.5
311.0	67	3.0000	19.9	68.9
312.0	68	3.0000	20.0	69.0
313.0	67	3.0000	20.0	69.0
314.0	67	3.0000	19.9	68.8
315.0	67	3.0000	19.9	68.8
316.0	67	3.0000	19.9	68.8
317.0	67	3.0000	19.9	68.8
318.0	66	3.0000	19.8	68.6
319.0	65	3.0000	19.7	68.4
320.0	64	3.0000	19.5	68.1
321.0	63	3.0000	19.4	67.9
322.0	62	3.0000	19.3	67.7
323.0	62	3.0000	19.2	67.5

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EXHIBIT 4(c) - (continued)**Tabulation of Distances to Protected and Interfering Contours****For Licensed KBOC Facility**

<u>Azimuth</u>	<u>HAAT(m)</u>	<u>ERP (kw)</u>	<u>Distance to F(50,50) 60dBu Contour (km)</u>	<u>Distance to F(50,10) 40dBu Contour (km)</u>
324.0	61	3.0000	19.1	67.3
325.0	60	3.0000	18.9	67.0
326.0	58	3.0000	18.7	66.5
327.0	57	3.0000	18.5	66.1
328.0	56	3.0000	18.4	65.9
329.0	56	3.0000	18.3	65.9
330.0	57	3.0000	18.5	66.1
331.0	59	3.0000	18.7	66.6
332.0	60	3.0000	19.0	67.1
333.0	61	3.0000	19.1	67.4
334.0	61	3.0000	19.1	67.3
335.0	60	3.0000	18.9	66.9
336.0	58	3.0000	18.7	66.5
337.0	57	3.0000	18.4	66.0
338.0	55	3.0000	18.2	65.7
339.0	54	3.0000	18.1	65.3
340.0	53	3.0000	17.8	64.9
341.0	52	3.0000	17.6	64.4
342.0	50	3.0000	17.3	63.9
343.0	49	3.0000	17.0	63.3
344.0	47	3.0000	16.6	62.6
345.0	46	3.0000	16.4	62.1
346.0	45	3.0000	16.2	61.8
347.0	45	3.0000	16.2	61.7
348.0	45	3.0000	16.1	61.6
349.0	44	3.0000	16.0	61.4
350.0	44	3.0000	16.0	61.3
351.0	44	3.0000	16.0	61.4
352.0	44	3.0000	16.0	61.3
353.0	44	3.0000	16.0	61.4
354.0	45	3.0000	16.1	61.5
355.0	45	3.0000	16.2	61.7
356.0	46	3.0000	16.4	62.1
357.0	47	3.0000	16.5	62.4
358.0	48	3.0000	16.7	62.7
359.0	48	3.0000	16.8	63.0

Note : Terrain Source - USGS 30 Arc Second Point Database