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ENGINEERING REPORT

APPLICATION FOR CONSTRUCTION PERMIT

for FACILITIES CHANGE:

POWER INCREASE

KAXX (AM) 1020 kHz

EAGLE RIVER, ALASKA

50 kW NON-DIRECTIONAL

Chester P. Coleman

January 2004

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1. Purpose of Application

This Engineering Report is part of an application for KAXX 1020 kHz Eagle River, Alaska. KAXX is currently licensed to operate on 1020 kHz with 10 kW using a omni-directional daytime antenna and directional antenna nighttime. This application proposes to operate at 50 kW using the existing non-directional tower. This station is licensed to Eagle River, Alaska, which is part of the City of Anchorage..

2. Allocation Considerations

All computations contained in this report are based on data taken from the December 29, 2003 edition of the FCC AM database. Region II conductivities were used in all cases. Computations for domestic considerations were performed using the applicable Rules and policies of the FCC.

The Canadian allocation for Terrace, British Columbia on 1020 kHz has been ignored for this application. This allotment has been in the database without any implementation since the US/Canada bilateral agreement in 1986. We respectfully request the Commission to request to Canada that this allocation be deleted.

KAXX is currently an Alaskan Class A station. This application has been calculated as Class B facility pursuant to the end note on §73.182(a)(1)(B)(ii):

> *... However, power increases by these stations above 10 kW (or by existing Alaskan Class A stations beyond their current power level) are subject to applicable protection requirements for co-channel Class B stations.*

a. Daytime

There are no daytime facilities within the following distances: co-channel 1070 km, 1st a adjacent channel 756 km, 2nd adjacent channel 363 km and 3rd adjacent channel 184 km. No daytime study maps have been included in this application.

b. Nighttime

All domestic stations on 1020 kHz and 1st adjacent channels, and all co-channel international stations within 10,000 km were considered in the preparation the limits to the proposed operation. There are no limits to this facility below 5,000 mV/m. No nighttime study has been included.

c. Critical Hours

No Critical Hours study have been provided.

3. Facilities Proposed

Chester P. Coleman proposes operation of KAXX on 1020 kHz with an operating power of 50 kW non-directional. The FCC Antenna Structure Registration is 1019797.

KAXX is currently licensed to Eagle River, Alaska. Eagle River is now part of Anchorage. Anchorage is a Borough of the State of Alaska, and is extensive in area, covering 4,397 km² (1.6 times the land area of the state of Rhode Island). All existing Anchorage radio stations have required waiver of §73.315(a) of the Commission's Rules regarding coverage of the community of license. Such waiver is fully justified by the practical impossibility of providing the entire Borough with coverage.

Antenna tower access will be restricted by a fences with locked gates that will be greater than 4 meters from the tower bases as required by OST-65. The antenna towers will be posted with warning signs, and all station personnel and contractors will be required to follow appropriate safety procedures before any work is commenced on the antenna towers, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

Exhibit 14-4
Tabulation of Azimuths, Fields & Conductivities
KAXX (AM) Eagle River, Alaska

JOB ID. CODE: EAGLE RIVER, AK D L

Call letters: KAXX

Coordinates: N 61 29 2 W 149 45 44

Frequency: 1020 kHz Dielectric constant: 15.0

Azimuth	Radiation (mV/m at one km)	Ground Conductivity Data: Region conductivity in mS/m followed by distance in km to the end of region. E - map data; M - measurement data.							
.0	1048.30	4.0E	60.3	2.0E	333.4	4.0E	444.3	2.0E	800.0
5.0	1048.30	4.0E	52.1	2.0E	348.6	4.0E	447.6	2.0E	800.0
10.0	1048.30	4.0E	46.1	2.0E	358.2	4.0E	453.0	2.0E	510.2
		4.0E	628.1	2.0E	800.0				
15.0	1048.30	4.0E	41.7	2.0E	370.5	4.0E	458.6	2.0E	528.7
		4.0E	682.9	2.0E	800.0				
20.0	1048.30	4.0E	38.3	2.0E	389.1	4.0E	463.5	2.0E	549.7
		4.0E	695.4	2.0E	800.0				
25.0	1048.30	4.0E	35.7	2.0E	414.7	4.0E	462.0	2.0E	554.7
		4.0E	680.2	2.0E	830.4				
30.0	1048.30	4.0E	33.6	2.0E	727.4	1.0E	800.0		
35.0	1048.30	4.0E	32.0	2.0E	652.1	1.0E	800.0		
40.0	1048.30	4.0E	31.2	2.0E	597.1	1.0E	800.0		
45.0	1048.30	4.0E	31.7	2.0E	554.5	1.0E	800.0		
50.0	1048.30	4.0E	32.4	2.0E	521.4	1.0E	800.0		
55.0	1048.30	4.0E	33.4	2.0E	497.7	1.0E	800.0		
60.0	1048.30	4.0E	34.7	2.0E	479.5	1.0E	800.0		
65.0	1048.30	4.0E	36.4	2.0E	466.3	1.0E	800.0		
70.0	1048.30	4.0E	38.7	2.0E	457.2	1.0E	800.0		
75.0	1048.30	4.0E	13.6	5000.0E	14.8	4.0E	41.5	2.0E	452.6
		1.0E	800.0						
80.0	1048.30	4.0E	11.1	5000.0E	13.8	4.0E	45.2	2.0E	452.4
		1.0E	800.0						
85.0	1048.30	4.0E	9.4	5000.0E	13.0	4.0E	47.0	2.0E	455.8
		1.0E	800.0						
90.0	1048.30	4.0E	8.2	5000.0E	12.4	4.0E	48.3	2.0E	461.4
		1.0E	800.0						
95.0	1048.30	4.0E	7.4	5000.0E	11.9	4.0E	50.0	2.0E	470.6

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                    1.0E  800.0

100.0    1048.30      4.0E    6.7 5000.0E   11.5    4.0E   52.3    2.0E  177.7
                   5000.0E  180.9    2.0E  499.1    1.0E  514.5    2.0E  533.4
                      1.0E  549.0    2.0E  591.9    1.0E  800.0

105.0    1048.30      4.0E    6.2 5000.0E   11.3    4.0E   55.3    2.0E  163.7
                   5000.0E  175.0    2.0E  566.7 5000.0E  591.1    2.0E  800.0

110.0    1048.30      4.0E    5.8 5000.0E   11.1    4.0E   59.1    2.0E  154.9
                   5000.0E  170.8    2.0E  174.4 5000.0E  192.3    2.0E  397.6
                   5000.0E  800.0

115.0    1048.30      4.0E    5.5 5000.0E   11.0    4.0E   60.6    2.0E   85.4
                   5000.0E   89.1    2.0E  139.3 5000.0E  326.7    2.0E  338.1
                   5000.0E  800.0

120.0    1048.30      4.0E    5.3 5000.0E   11.0    4.0E   61.0    2.0E   84.6
                   5000.0E  113.5    2.0E  126.9 5000.0E  800.0

125.0    1048.30      4.0E    5.1 5000.0E   11.1    4.0E   61.9    2.0E   86.7
                   5000.0E  800.0

130.0    1048.30      4.0E    5.0 5000.0E   11.3    4.0E   63.4    2.0E  106.2
                   5000.0E  800.0

135.0    1048.30      4.0E    4.9 5000.0E   11.6    4.0E   65.4    2.0E   98.3
                   5000.0E  800.0

140.0    1048.30      4.0E    4.8 5000.0E   11.9    4.0E   68.0    2.0E   94.4
                   5000.0E  106.7    2.0E  121.5 5000.0E  800.0

145.0    1048.30      4.0E    4.8 5000.0E   12.4    4.0E   67.4 5000.0E   68.1
                      4.0E   71.5    2.0E  124.6 5000.0E  128.5    2.0E  151.1
                   5000.0E  800.0

150.0    1048.30      4.0E    4.8 5000.0E   13.1    4.0E   61.0 5000.0E   66.9
                      4.0E   75.6    2.0E  175.8 5000.0E  800.0

155.0    1048.30      4.0E    4.9 5000.0E   13.9    4.0E   56.1 5000.0E   66.2
                      4.0E   77.9    2.0E  183.1 5000.0E  800.0

160.0    1048.30      4.0E    5.0 5000.0E   15.0    4.0E   52.3 5000.0E   66.0
                      4.0E   81.0    2.0E  174.1 5000.0E  800.0

165.0    1048.30      4.0E    5.1 5000.0E   16.4    4.0E   49.3 5000.0E   66.3
                      4.0E   85.0    2.0E  174.1 5000.0E  800.0

170.0    1048.30      4.0E    5.3 5000.0E   18.5    4.0E   47.0 5000.0E   67.1
                      4.0E   90.1    2.0E  169.8 5000.0E  800.0

175.0    1048.30      4.0E    5.6 5000.0E   21.4    4.0E   42.6 5000.0E   67.1
                      4.0E   96.7    2.0E  171.9 5000.0E  800.0

180.0    1048.30      4.0E    5.9 5000.0E   25.6    4.0E   39.2 5000.0E   64.2
                      4.0E  105.2    2.0E  192.3 5000.0E  800.0

185.0    1048.30      4.0E    6.3 5000.0E   32.2    4.0E   36.5 5000.0E   61.9
                      4.0E  116.4    2.0E  202.7 5000.0E  800.0

190.0    1048.30      4.0E    6.9 5000.0E   60.3    4.0E  134.4    2.0E  226.3
                   5000.0E  800.0

195.0    1048.30      4.0E    7.6 5000.0E   59.0    4.0E  161.0    2.0E  250.2
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                  5000.0E  800.0

200.0    1048.30      4.0E    8.5 5000.0E   58.0    4.0E  215.8    2.0E  271.4
                   5000.0E  379.3    2.0E  390.8 5000.0E  436.0    2.0E  480.0
                   5000.0E  800.0

205.0    1048.30      4.0E    9.8 5000.0E   57.5    4.0E  218.1 5000.0E  248.2
                      4.0E  284.3 5000.0E  359.2    2.0E  555.3 5000.0E  800.0

210.0    1048.30      4.0E   11.7 5000.0E   57.5    4.0E  229.2 5000.0E  433.9
                      2.0E  569.0 5000.0E  800.0

215.0    1048.30      4.0E   14.5 5000.0E   66.2    4.0E  185.0 5000.0E  800.0

220.0    1048.30      4.0E   22.3 5000.0E   84.6    4.0E  136.9 5000.0E  358.4
                      2.0E  526.0 5000.0E  800.0

225.0    1048.30      4.0E   33.9 5000.0E  233.3    2.0E  281.8 5000.0E  353.9
                      2.0E  837.0

230.0    1048.30      4.0E   36.0 5000.0E  194.6    4.0E  210.0 5000.0E  222.0
                      2.0E  606.6 5000.0E  760.4    2.0E  800.0

235.0    1048.30      4.0E   38.7 5000.0E  129.1    4.0E  174.5    2.0E  513.6
                   5000.0E  800.0

240.0    1048.30      4.0E   42.2 5000.0E  113.3    4.0E  143.4    2.0E  568.6
                   5000.0E  590.5    2.0E  614.1 5000.0E  800.0

245.0    1048.30      4.0E   45.8 5000.0E   83.6    4.0E  123.8    2.0E  618.5
                   5000.0E  800.0

250.0    1048.30      4.0E   45.7 5000.0E   66.7    4.0E  111.9    2.0E  800.0

255.0    1048.30      4.0E   46.0 5000.0E   55.8    4.0E  102.9    2.0E  800.0

260.0    1048.30      4.0E   46.7 5000.0E   48.3    4.0E   97.1    2.0E  800.0

265.0    1048.30      4.0E   95.9    2.0E  800.0

270.0    1048.30      4.0E   95.6    2.0E  257.2    4.0E  266.5    2.0E  593.9
                      4.0E  800.0

275.0    1048.30      4.0E  100.6    2.0E  236.7    4.0E  269.2    2.0E  569.3
                      4.0E  800.0

280.0    1048.30      4.0E  112.0    2.0E  220.2    4.0E  260.3    2.0E  549.1
                      4.0E  800.0

285.0    1048.30      4.0E  127.5    2.0E  207.3    4.0E  253.4    2.0E  530.9
                      4.0E  800.0

290.0    1048.30      4.0E  135.7    2.0E  201.0    4.0E  257.5    2.0E  509.6
                      4.0E  800.0

295.0    1048.30      4.0E  141.3    2.0E  196.5    4.0E  263.5    2.0E  480.5
                      4.0E  604.4    2.0E  800.0

300.0    1048.30      4.0E  136.4    2.0E  193.7    4.0E  269.8    2.0E  445.0
                      4.0E  596.4    2.0E  800.0

305.0    1048.30      4.0E  132.8    2.0E  192.4    4.0E  277.9    2.0E  415.2
                      4.0E  590.5    2.0E  800.0
```

310.0	1048.30	4.0E	128.8	2.0E	193.4	4.0E	281.3	2.0E	409.4
		4.0E	513.4	2.0E	553.4	4.0E	592.3	2.0E	800.0
315.0	1048.30	4.0E	124.8	2.0E	196.6	4.0E	287.1	2.0E	418.7
		4.0E	490.3	2.0E	552.6	4.0E	598.7	2.0E	653.0
		4.0E	800.0						
320.0	1048.30	4.0E	122.1	2.0E	201.4	4.0E	292.6	2.0E	550.0
		4.0E	608.6	2.0E	639.6	4.0E	766.1	5000.0E	800.0
325.0	1048.30	4.0E	120.3	2.0E	208.1	4.0E	299.0	2.0E	553.5
		4.0E	617.0	2.0E	643.7	4.0E	800.0		
330.0	1048.30	4.0E	119.5	2.0E	217.3	4.0E	308.4	2.0E	416.5
		4.0E	455.3	2.0E	568.9	4.0E	619.9	2.0E	658.4
		4.0E	800.0						
335.0	1048.30	4.0E	119.6	2.0E	229.8	4.0E	321.1	2.0E	395.1
		4.0E	444.2	2.0E	681.1	4.0E	775.2	2.0E	800.0
340.0	1048.30	4.0E	112.4	2.0E	245.8	4.0E	331.7	2.0E	382.4
		4.0E	436.9	2.0E	800.0				
345.0	1048.30	4.0E	99.0	2.0E	267.4	4.0E	345.0	2.0E	366.1
		4.0E	437.6	2.0E	800.0				
350.0	1048.30	4.0E	89.2	2.0E	293.5	4.0E	441.2	2.0E	800.0
355.0	1048.30	4.0E	72.8	2.0E	313.4	4.0E	441.6	2.0E	800.0

6. Statement of Engineer

This Engineering Report, relative to a change in power increase for KAXX (AM) Eagle River, Alaska has been prepared under my direct supervision. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am a partner in the firm of Hatfield and Dawson Consulting Engineers and am Registered as a Professional Engineer in the State of Washington and Alaska.

Signed this 9th day of January, 2004

Stephen S. Lockwood, P.E.