

# Educational Media Foundation

Exhibit 17

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Medical Lake, WA

## Allocation Study

### Compliance with 47 C.F.R. 73.207

The proposed facility meets all minimum distance separation requirements with regard to commercial co-channel, first, second, or third adjacent channel stations, and those separated by 53/54 channels, as can be seen in the following channel scan:

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REFERENCE                                     DISPLAY DATES
47 42 11.00 N.                               CLASS = C2 Int = B      DATA 09-14-20
117 44 30.00 W.                             Current Spacings to 3rd Adj. SEARCH 09-14-20
----- Channel 270 - 101.9 MHz -----
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Call		Channel	Location		Azi	Dist	FCC	Margin
KTSL	LIC	270C2	Medical Lake	WA	161.4	0.01	190.0	-190.0
KICR	LIC	272A	Coeur D'alene	ID	94.4	59.31	55.0	4.3
KPBX-FM	LIC	216C	Spokane	WA	106.5	51.55	35.0	16.6
KPQ-FM	LIC	271C	Wenatchee	WA	257.7	207.85	188.0	19.9
KZIU-FM	LIC	270C2	Weston	OR	188.9	214.65	190.0	24.7
KRAO-FM	LIC	273C3	Colfax	WA	155.2	102.91	56.0	46.9
KIBR	LIC	273A	Sandpoint	ID	57.0	109.07	55.0	54.1
KATW	LIC	268C1	Lewiston	ID	160.5	146.74	79.0	67.7
KATW	CP	268C1	Lewiston	ID	160.5	146.76	79.0	67.8
KATW	LIC	268C1	Lewiston	ID	158.1	148.68	79.0	69.7
KTNY	LIC	269A	Libby	MT	64.8	180.21	106.0	74.2

Therefore, the proposed facility is in compliance with 47 C.F.R. 73.207.

\* The proposed facility is not being moved from its current licensed location, therefore there is no change in relation to Canada.

**HAAT Calculation**

HAAT has been calculated for the application contemplated herein by using 8 evenly spaced radials as per FCC regulation. The 8 radials used to calculate HAAT for this application begin at 13 degrees azimuth and are evenly spaced from this azimuth. The result is shown in the chart below. Furthermore, a tabulation showing the HAAT for each of the 360 radials is shown at Exhibit 17-A. Also, the more accurate 3 second USGS terrain database was used.

Degree Azimuth	Distance	HAAT		
13	53.72	208.2		
58	55.45	229.2		
103	54.08	212.5		
148	52.39	192.3		
193	51.77	185		
238	47.36	146		
283	50.02	166.9		
328	52.55	194.2		
		191.8	average of 8 radials	

Therefore, the HAAT of 191.8 meters has been used for all calculations in this application.

## Exhibit 17-A

### Distance to Contour Report

Type of contour: FCC  
Location Variability: 50.0 %  
Time Variability: 50.0 %  
# of Radials Calculated: 360  
FCC Matching HAAT Calculation Used  
Field Strength: 60.00 dBuV/m

Primary Terrain: V-Soft 3 Second US Terrain  
Secondary Terrain: FCC 30 Second US Database

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Transmitter Information:

Call Letters: KTSL.P  
File Number: BMLED20080226ADB  
Latitude: 47-42-11 N  
Longitude: 117-44-30 W  
ERP: 31.00 kW  
Channel: 270  
Frequency: 101.9 MHz  
AMSL Height: 922.0 m  
Elevation: 826.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No  
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Azimuth (deg)	Distance (km)	HAAT (m)
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0.0	57.66	258.6
1.0	57.71	259.3
2.0	57.77	260.1
3.0	57.84	261.1
4.0	57.79	260.4
5.0	57.53	256.8
6.0	57.29	253.5
7.0	56.92	248.6
8.0	56.30	240.2
9.0	55.80	233.7
10.0	55.34	228.0
11.0	54.57	218.4
12.0	54.02	211.8
13.0	53.72	208.2
14.0	53.37	204.0
15.0	53.29	203.0
16.0	53.31	203.3
17.0	53.36	203.8
18.0	53.50	205.5
19.0	53.86	209.8
20.0	54.15	213.4

21.0	54.53	217.9
22.0	54.66	219.5
23.0	54.40	216.4
24.0	54.42	216.6
25.0	54.68	219.8
26.0	54.89	222.3
27.0	54.97	223.3
28.0	55.21	226.3
29.0	55.28	227.2
30.0	55.45	229.3
31.0	55.64	231.6
32.0	55.61	231.3
33.0	55.86	234.4
34.0	55.88	234.8
35.0	56.01	236.5
36.0	56.20	239.0
37.0	56.41	241.7
38.0	56.64	244.8
39.0	56.90	248.3
40.0	56.96	249.1
41.0	56.95	249.0
42.0	56.81	247.1
43.0	56.52	243.1
44.0	56.34	240.8
45.0	56.15	238.3
46.0	56.05	237.0
47.0	56.03	236.7
48.0	56.13	238.0
49.0	56.04	236.8
50.0	55.99	236.2
51.0	56.15	238.3
52.0	56.07	237.1
53.0	55.98	236.0
54.0	55.85	234.4
55.0	55.75	233.1
56.0	55.60	231.2
57.0	55.42	228.9
58.0	55.45	229.2
59.0	55.60	231.2
60.0	55.80	233.7
61.0	56.13	238.0
62.0	56.47	242.5
63.0	57.03	250.1
64.0	57.50	256.4
65.0	57.98	262.9
66.0	57.88	261.6
67.0	57.69	259.0
68.0	57.55	257.1
69.0	57.52	256.6
70.0	57.86	261.2
71.0	57.74	259.6
72.0	57.48	256.1
73.0	57.20	252.3

74.0	57.06	250.5
75.0	57.12	251.2
76.0	57.31	253.9
77.0	57.36	254.5
78.0	57.41	255.2
79.0	57.39	254.9
80.0	56.96	249.1
81.0	56.65	244.9
82.0	56.54	243.5
83.0	56.49	242.7
84.0	56.43	241.9
85.0	56.36	241.1
86.0	56.14	238.1
87.0	55.59	231.1
88.0	55.21	226.3
89.0	55.22	226.4
90.0	55.26	226.9
91.0	55.30	227.4
92.0	55.22	226.4
93.0	55.34	227.9
94.0	55.60	231.1
95.0	56.12	237.8
96.0	56.33	240.7
97.0	56.00	236.3
98.0	55.35	228.0
99.0	54.74	220.5
100.0	54.35	215.8
101.0	54.39	216.2
102.0	54.32	215.4
103.0	54.08	212.5
104.0	53.89	210.2
105.0	53.83	209.5
106.0	53.79	209.0
107.0	53.79	209.0
108.0	53.72	208.1
109.0	53.61	206.9
110.0	53.50	205.5
111.0	53.48	205.3
112.0	53.47	205.2
113.0	53.44	204.9
114.0	53.49	205.4
115.0	53.63	207.1
116.0	53.71	208.0
117.0	53.66	207.5
118.0	53.49	205.5
119.0	53.34	203.6
120.0	53.24	202.4
121.0	53.16	201.5
122.0	53.04	200.1
123.0	52.98	199.3
124.0	52.94	198.8
125.0	52.90	198.3
126.0	52.85	197.8

127.0	52.79	197.1
128.0	52.73	196.3
129.0	52.69	195.8
130.0	52.62	195.1
131.0	52.59	194.7
132.0	52.59	194.7
133.0	52.59	194.6
134.0	52.62	195.1
135.0	52.70	196.1
136.0	52.81	197.3
137.0	52.88	198.1
138.0	52.91	198.5
139.0	52.89	198.3
140.0	52.85	197.8
141.0	52.78	197.0
142.0	52.74	196.4
143.0	52.70	196.0
144.0	52.65	195.4
145.0	52.58	194.5
146.0	52.51	193.7
147.0	52.44	192.9
148.0	52.39	192.3
149.0	52.36	191.9
150.0	52.30	191.2
151.0	52.28	191.0
152.0	52.32	191.5
153.0	52.32	191.4
154.0	52.25	190.6
155.0	52.13	189.2
156.0	52.01	187.8
157.0	52.09	188.7
158.0	52.23	190.4
159.0	52.26	190.8
160.0	52.32	191.5
161.0	52.37	192.1
162.0	52.42	192.7
163.0	52.47	193.2
164.0	52.52	193.8
165.0	52.54	194.1
166.0	52.43	192.8
167.0	52.29	191.2
168.0	52.32	191.5
169.0	52.34	191.7
170.0	52.32	191.4
171.0	52.21	190.2
172.0	51.71	184.3
173.0	51.12	177.6
174.0	50.71	173.4
175.0	50.56	171.9
176.0	50.38	170.2
177.0	50.21	168.7
178.0	50.38	170.2
179.0	50.77	173.9

180.0	51.00	176.3
181.0	51.23	178.7
182.0	51.43	180.9
183.0	51.60	182.9
184.0	51.73	184.4
185.0	51.74	184.6
186.0	51.76	184.9
187.0	51.78	185.1
188.0	51.81	185.4
189.0	51.82	185.6
190.0	51.81	185.4
191.0	51.80	185.3
192.0	51.79	185.1
193.0	51.77	185.0
194.0	51.76	184.8
195.0	51.74	184.6
196.0	51.73	184.5
197.0	51.71	184.3
198.0	51.69	184.0
199.0	51.65	183.6
200.0	51.60	182.9
201.0	51.55	182.3
202.0	51.48	181.5
203.0	51.40	180.6
204.0	51.27	179.2
205.0	51.12	177.6
206.0	50.97	175.9
207.0	50.80	174.2
208.0	50.58	172.0
209.0	50.31	169.6
210.0	50.03	167.0
211.0	49.77	164.7
212.0	49.55	162.9
213.0	49.43	161.9
214.0	49.36	161.3
215.0	49.27	160.6
216.0	49.21	160.1
217.0	49.28	160.6
218.0	49.16	159.7
219.0	49.15	159.6
220.0	49.09	159.1
221.0	48.99	158.3
222.0	48.80	156.8
223.0	48.51	154.6
224.0	48.22	152.4
225.0	48.07	151.3
226.0	48.04	151.0
227.0	47.91	150.0
228.0	47.64	148.0
229.0	47.28	145.4
230.0	47.20	144.8
231.0	47.07	143.9
232.0	46.87	142.5

233.0	46.75	141.6
234.0	46.84	142.2
235.0	47.11	144.1
236.0	47.29	145.5
237.0	47.39	146.2
238.0	47.36	146.0
239.0	47.42	146.4
240.0	47.56	147.5
241.0	47.87	149.7
242.0	48.14	151.8
243.0	48.35	153.3
244.0	48.53	154.7
245.0	48.67	155.8
246.0	48.82	157.0
247.0	48.98	158.3
248.0	49.12	159.3
249.0	49.22	160.1
250.0	49.28	160.7
251.0	49.31	160.9
252.0	49.29	160.7
253.0	49.27	160.6
254.0	49.25	160.4
255.0	49.21	160.1
256.0	49.17	159.8
257.0	49.11	159.3
258.0	48.98	158.3
259.0	48.77	156.6
260.0	48.54	154.8
261.0	48.36	153.4
262.0	48.18	152.0
263.0	48.02	150.9
264.0	47.86	149.7
265.0	47.67	148.2
266.0	47.45	146.7
267.0	47.31	145.6
268.0	47.28	145.4
269.0	47.23	145.1
270.0	47.14	144.4
271.0	47.02	143.5
272.0	46.91	142.7
273.0	46.91	142.7
274.0	47.00	143.4
275.0	47.11	144.2
276.0	47.26	145.3
277.0	47.67	148.3
278.0	48.17	152.0
279.0	48.59	155.2
280.0	48.92	157.7
281.0	49.33	161.0
282.0	49.74	164.5
283.0	50.02	166.9
284.0	50.17	168.2
285.0	50.20	168.5



286.0	50.19	168.5
287.0	50.22	168.7
288.0	50.27	169.2
289.0	50.37	170.1
290.0	50.43	170.7
291.0	50.49	171.3
292.0	50.49	171.2
293.0	50.40	170.4
294.0	50.18	168.3
295.0	50.05	167.2
296.0	50.34	169.9
297.0	50.79	174.1
298.0	51.02	176.5
299.0	51.01	176.3
300.0	50.97	176.0
301.0	51.23	178.7
302.0	51.43	181.0
303.0	51.85	185.9
304.0	52.37	192.0
305.0	52.81	197.3
306.0	53.11	200.9
307.0	53.22	202.2
308.0	53.26	202.7
309.0	53.21	202.1
310.0	53.14	201.3
311.0	52.98	199.3
312.0	52.87	198.1
313.0	52.62	195.0
314.0	52.33	191.7
315.0	52.05	188.3
316.0	51.75	184.7
317.0	51.69	184.0
318.0	51.75	184.7
319.0	51.88	186.2
320.0	52.14	189.3
321.0	52.50	193.6
322.0	52.98	199.4
323.0	52.92	198.6
324.0	52.78	197.0
325.0	52.55	194.2
326.0	52.22	190.3
327.0	52.27	190.8
328.0	52.55	194.2
329.0	53.36	203.8
330.0	54.57	218.4
331.0	55.30	227.4
332.0	55.83	234.1
333.0	56.42	241.8
334.0	57.02	249.9
335.0	57.50	256.5
336.0	57.72	259.4
337.0	57.91	261.9
338.0	58.01	263.4

339.0	58.11	264.7
340.0	58.18	265.6
341.0	58.25	266.6
342.0	58.30	267.3
343.0	58.30	267.2
344.0	58.38	268.3
345.0	58.54	270.5
346.0	58.69	272.6
347.0	58.77	273.7
348.0	58.76	273.6
349.0	58.73	273.1
350.0	58.71	272.9
351.0	58.79	274.0
352.0	58.88	275.2
353.0	58.83	274.6
354.0	58.70	272.8
355.0	58.40	268.7
356.0	57.77	260.0
357.0	57.55	257.1
358.0	57.24	252.9
359.0	57.28	253.4

Average HAAT for radials shown: 201.4 m