

INTERFERENCE EXHIBIT FOR HOUSTON KZLD-LP.A

The proposed facility is fully spaced to all relevant stations except KKHH and K260AS. The instant application seeks a waiver of the minimum distance separation requirement of 47 C.F.R. Section 73.807 for second adjacent facilities. The proposed facility will not interfere with KKHH.

As shown by the tabular analysis provided below using V-Soft's X-Field program, no population exists within the predicted region of interference with KKHH because the region does not extend far enough to reach any populated areas and/or the region exists above ground sufficiently to not interfere with any populated areas or structures. The closest the interfering contour comes to the ground is 34m. There are no affected buildings.

Tabular Analysis

KZLD-LP.A Houston, TX

74.1204(d) Showing

LPFM Maximum Licensed ERP = 0.057

LPFM Antenna Height AG = 41 Meters

KZLD-LP.A Antenna Model = BKG 77 4 5-8

Protected Station's Contour = 80.0698 dBu

LPFM's full Interference contour 120.0698

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.057 kW

Distance between stations = 44.0 km

Protected Station= KKHH, 100 kW, 605 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0570	052.5348	052.5348	041.000
01.00	0.994	1.0	0.0563	052.2196	052.2117	040.089
02.00	0.977	1.0	0.0544	051.3265	051.2953	039.209
03.00	0.949	1.0	0.0513	049.8556	049.7872	038.391
04.00	0.911	1.0	0.0473	047.8592	047.7427	037.662
05.00	0.863	1.0	0.0425	045.3376	045.1650	037.049
06.00	0.806	1.0	0.0370	042.3431	042.1111	036.574
07.00	0.742	1.0	0.0314	038.9809	038.6903	036.249
08.00	0.671	1.0	0.0257	035.2509	034.9078	036.094
09.00	0.596	1.0	0.0202	031.3108	030.9253	036.102
10.00	0.517	1.0	0.0152	027.1605	026.7479	036.284
11.00	0.434	1.0	0.0107	022.8001	022.3812	036.650
12.00	0.352	1.0	0.0071	018.4923	018.0882	037.155
13.00	0.271	1.0	0.0042	014.2369	013.8721	037.797
14.00	0.193	1.0	0.0021	010.1392	009.8380	038.547

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15.00	0.118	1.0	0.0008	006.1991	005.9879	039.396
16.00	0.049	1.0	0.0001	002.5742	002.4745	040.290
17.00	0.014	1.0	0.0000	000.7355	000.7034	040.785
18.00	0.071	1.0	0.0003	003.7300	003.5474	039.847
19.00	0.119	1.0	0.0008	006.2516	005.9110	038.965
20.00	0.161	1.0	0.0015	008.4581	007.9480	038.107
21.00	0.193	1.0	0.0021	010.1392	009.4658	037.366
22.00	0.217	1.0	0.0027	011.4001	010.5700	036.729
23.00	0.233	1.0	0.0031	012.2406	011.2675	036.217
24.00	0.242	1.0	0.0033	012.7134	011.6143	035.829
25.00	0.243	1.0	0.0034	012.7660	011.5699	035.605
26.00	0.237	1.0	0.0032	012.4508	011.1907	035.542
27.00	0.225	1.0	0.0029	011.8203	010.5320	035.634
28.00	0.208	1.0	0.0025	010.9272	009.6482	035.870
29.00	0.186	1.0	0.0020	009.7715	008.5463	036.263
30.00	0.161	1.0	0.0015	008.4581	007.3249	036.771
31.00	0.132	1.0	0.0010	006.9346	005.9441	037.428
32.00	0.102	1.0	0.0006	005.3586	004.5443	038.160
33.00	0.07	1.0	0.0003	003.6774	003.0842	038.997
34.00	0.038	1.0	0.0001	001.9963	001.6550	039.884
35.00	0.007	1.0	0.0000	000.3677	000.3012	040.789
36.00	0.023	1.0	0.0000	001.2083	000.9775	040.290
37.00	0.051	1.0	0.0001	002.6793	002.1398	039.388
38.00	0.077	1.0	0.0003	004.0452	003.1876	038.510
39.00	0.1	1.0	0.0006	005.2535	004.0827	037.694
40.00	0.12	1.0	0.0008	006.3042	004.8293	036.948
41.00	0.137	1.0	0.0011	007.1973	005.4319	036.278
42.00	0.15	1.0	0.0013	007.8802	005.8561	035.727
43.00	0.16	1.0	0.0015	008.4056	006.1474	035.267
44.00	0.167	1.0	0.0016	008.7733	006.3110	034.906
45.00	0.17	1.0	0.0016	008.9309	006.3151	034.685
46.00	0.17	1.0	0.0016	008.9309	006.2039	034.576
47.00	0.167	1.0	0.0016	008.7733	005.9834	034.584
48.00	0.162	1.0	0.0015	008.5106	005.6947	034.675
49.00	0.154	1.0	0.0014	008.0904	005.3078	034.894
50.00	0.144	1.0	0.0012	007.5650	004.8627	035.205
51.00	0.133	1.0	0.0010	006.9871	004.3971	035.570
52.00	0.12	1.0	0.0008	006.3042	003.8812	036.032
53.00	0.106	1.0	0.0006	005.5687	003.3513	036.553
54.00	0.091	1.0	0.0005	004.7807	002.8100	037.132
55.00	0.075	1.0	0.0003	003.9401	002.2600	037.772
56.00	0.06	1.0	0.0002	003.1521	001.7626	038.387
57.00	0.044	1.0	0.0001	002.3115	001.2590	039.061
58.00	0.028	1.0	0.0000	001.4710	000.7795	039.753
59.00	0.013	1.0	0.0000	000.6830	000.3517	040.415
60.00	0.001	1.0	0.0000	000.0525	000.0263	040.955

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61.00	0.015	1.0	0.0000	000.7880	000.3820	040.311
62.00	0.027	1.0	0.0000	001.4184	000.6659	039.748
63.00	0.039	1.0	0.0001	002.0489	000.9302	039.174
64.00	0.05	1.0	0.0001	002.6267	001.1515	038.639
65.00	0.059	1.0	0.0002	003.0996	001.3099	038.191
66.00	0.068	1.0	0.0003	003.5724	001.4530	037.736
67.00	0.075	1.0	0.0003	003.9401	001.5395	037.373
68.00	0.081	1.0	0.0004	004.2553	001.5941	037.055
69.00	0.086	1.0	0.0004	004.5180	001.6191	036.782
70.00	0.089	1.0	0.0005	004.6756	001.5991	036.606
71.00	0.093	1.0	0.0005	004.8857	001.5906	036.380
72.00	0.095	1.0	0.0005	004.9908	001.5422	036.253
73.00	0.096	1.0	0.0005	005.0433	001.4745	036.177
74.00	0.096	1.0	0.0005	005.0433	001.3901	036.152
75.00	0.096	1.0	0.0005	005.0433	001.3053	036.129
76.00	0.095	1.0	0.0005	004.9908	001.2074	036.157
77.00	0.094	1.0	0.0005	004.9383	001.1109	036.188
78.00	0.092	1.0	0.0005	004.8332	001.0049	036.272
79.00	0.089	1.0	0.0005	004.6756	000.8921	036.410
80.00	0.086	1.0	0.0004	004.5180	000.7845	036.551
81.00	0.085	1.0	0.0004	004.4655	000.6986	036.590
82.00	0.083	1.0	0.0004	004.3604	000.6068	036.682
83.00	0.081	1.0	0.0004	004.2553	000.5186	036.776
84.00	0.078	1.0	0.0003	004.0977	000.4283	036.925
85.00	0.076	1.0	0.0003	003.9926	000.3480	037.023
86.00	0.076	1.0	0.0003	003.9926	000.2785	037.017
87.00	0.075	1.0	0.0003	003.9401	000.2062	037.065
88.00	0.075	1.0	0.0003	003.9401	000.1375	037.062
89.00	0.074	1.0	0.0003	003.8876	000.0678	037.113
90.00	0.074	1.0	0.0003	003.8876	000.0000	037.112

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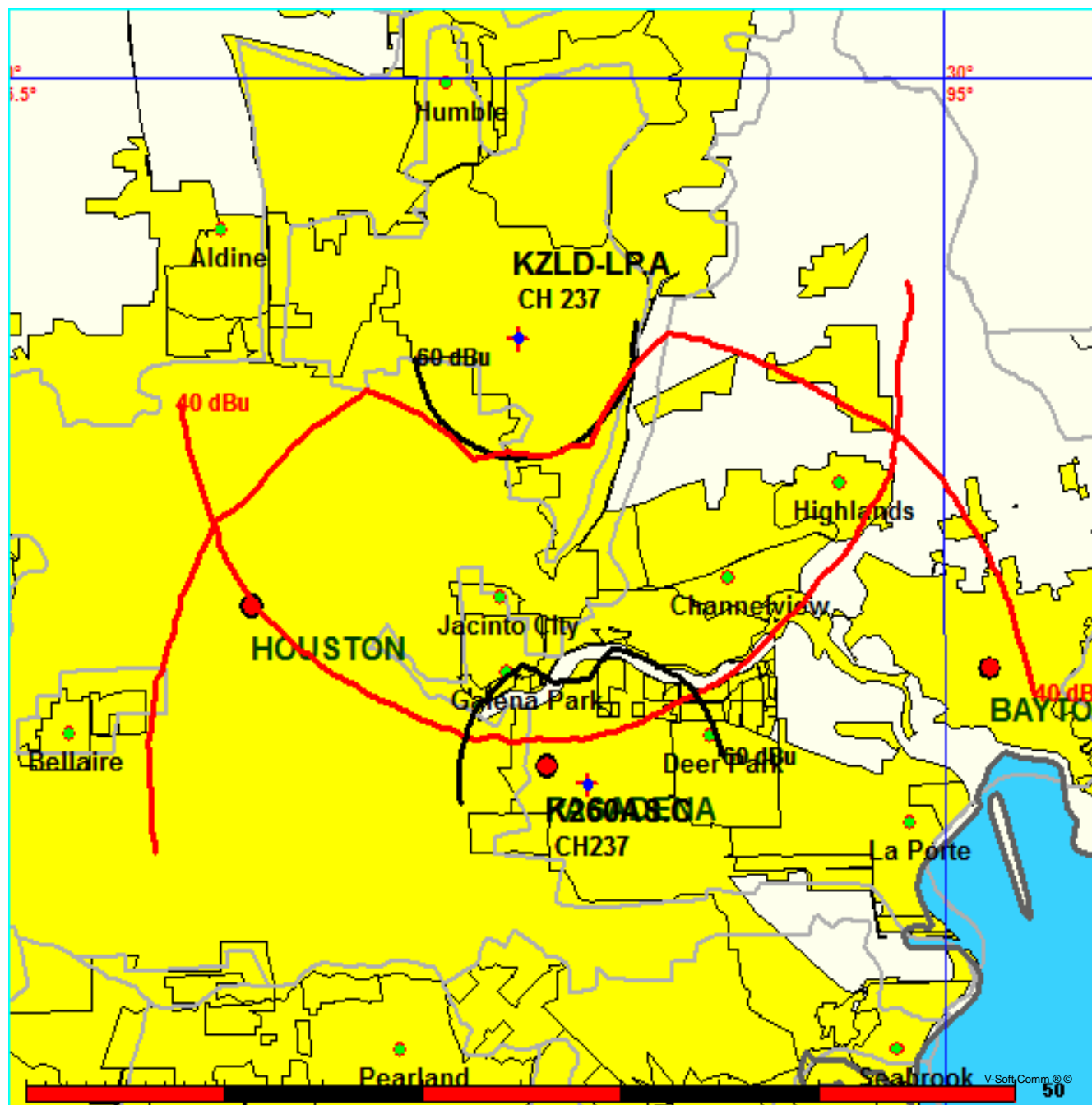
With respect to K260AS, the modification of K260AS caused a short-spacing of 3.6 kM to the instant application. This modification is to move the antenna higher on the tower and adjust power accordingly. The instant application now receives interference from K260AS (see following).

Minor Modification of KZLD-LP.A

FMCommander Single Allocation Study - 03-07-2017 - NED 03 SEC
KZLD-LP.A's Overlaps (In= 0.0 km, Out= 0.0 km)

KZLD-LP.A CH 237 L1
Lat= 29 53 00.2, Lng= 95 13 24.7
0.057 kW 39.5 m HAAT, 55 m COR
Prot.= 60 dBu, Intef.= 40 dBu

K260AS CH 237 D DA BPFT20160729ACT
Lat= 29 41 01.0, Lng= 95 11 10.4
0.058 kW 0 m HAAT, 65 m COR
Prot.= 60 dBu, Intef.= 40 dBu



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A HAAT of 39.5m is obtained utilizing 36 radials and NED 03 Second terrain.

