

LANCASTER EDUCATIONAL BROADCAST SERVICE

Minor Change, Licensed Facility, KLQS-LP

CHANNEL CHANGE REQUEST

Lancaster Educational Broadcast Service ("LEBS") was originally granted a CP in 2013 for a new LPFM station to serve Lancaster, CA. Upon final construction, it was found the facility was encroached by co-channel translator K256BS Lancaster, CA in addition to being short spaced by a construction permit KHHT (FM). LEBS attempted to find a relocation channel but none existed in Lancaster. LEBS was forced to moving its facility over the mountain to the east to find the nearest relocation channel, was permitted a new channel, and licensed to cover.

Recently on 02/19/2017 KWUH-LP (BNPL-20131114ARU) forfeited channel 224 in the Lancaster area opening a LPFM channel. The opportunity allows KLQS-LP to apply to move outside its current rural mountain vicinity and serve the population it was originally intending to serve.

LEBS requests moving from channel 244 to channel 224 for the following reasons:

- A substitute channel was not previously available for LEBS to relocate to so it had to relocate outside town.
- Due to distance separation and blocking terrain, the facility cannot serve its target audience.
- The currently the facility is co-channel to another Lancaster LPFM, KXFM-LP. Chris Comptom of KXFM emailed KLQS-LP's engineer inquiring if they station could locate on another frequency due to interference concerns (see Attachment). The channel change would permit reduced interference between both stations.

PROPOSED

Coordinates:	NAD 83	34 32 10.5 N 118 06 27.6 W
	NAD 27	34 32 10.5 N 118 06 24.3 W
Site	869 m	
AGL	13 m	
Tower	16.76 m	
ERP	100 watt	
CH	224	

SPACING

Lancaster Educational Broadcast Service						
REFERENCE						DISPLAY DATES
34 32 10.5 N.	CLASS = L1 Int = L1					DATA 05-27-17
118 06 24.3 W.	Current Spacings to 2nd Adj.					SEARCH 05-29-17
----- Channel 224 - 92.7 MHz -----						
Call	Channel	Location	Azi	Dist	FCC	Margin

*KCBS-FM	LIC	226B	Los Angeles	CA	174.6	33.90	66.5	-32.6
*KRRRL	LIC	222B	Los Angeles	CA	173.8	34.54	66.5	-32.0
KYRA	LIC	224A	Thousand Oaks	CA	240.8	74.97	66.5	8.5
KYZA	LIC	224A	Adelanto	CA	83.3	75.26	66.5	8.8
NEW	CP	224L1	Pasadena	CA	178.6	40.37	23.5	16.9
KYRA	CP	224A	Thousand Oaks	CA	240.7	83.99	66.5	17.5
KMYX-FM	LIC	223A	Arvin	CA	323.5	91.23	55.5	35.7
KYLA	LIC-Z	224A	Fountain Valley	CA	165.1	106.81	66.5	40.3

Reference station has protected zone issue: Mexico

All separation margins include rounding

* Second Adjacent, Waiver Request, See Below

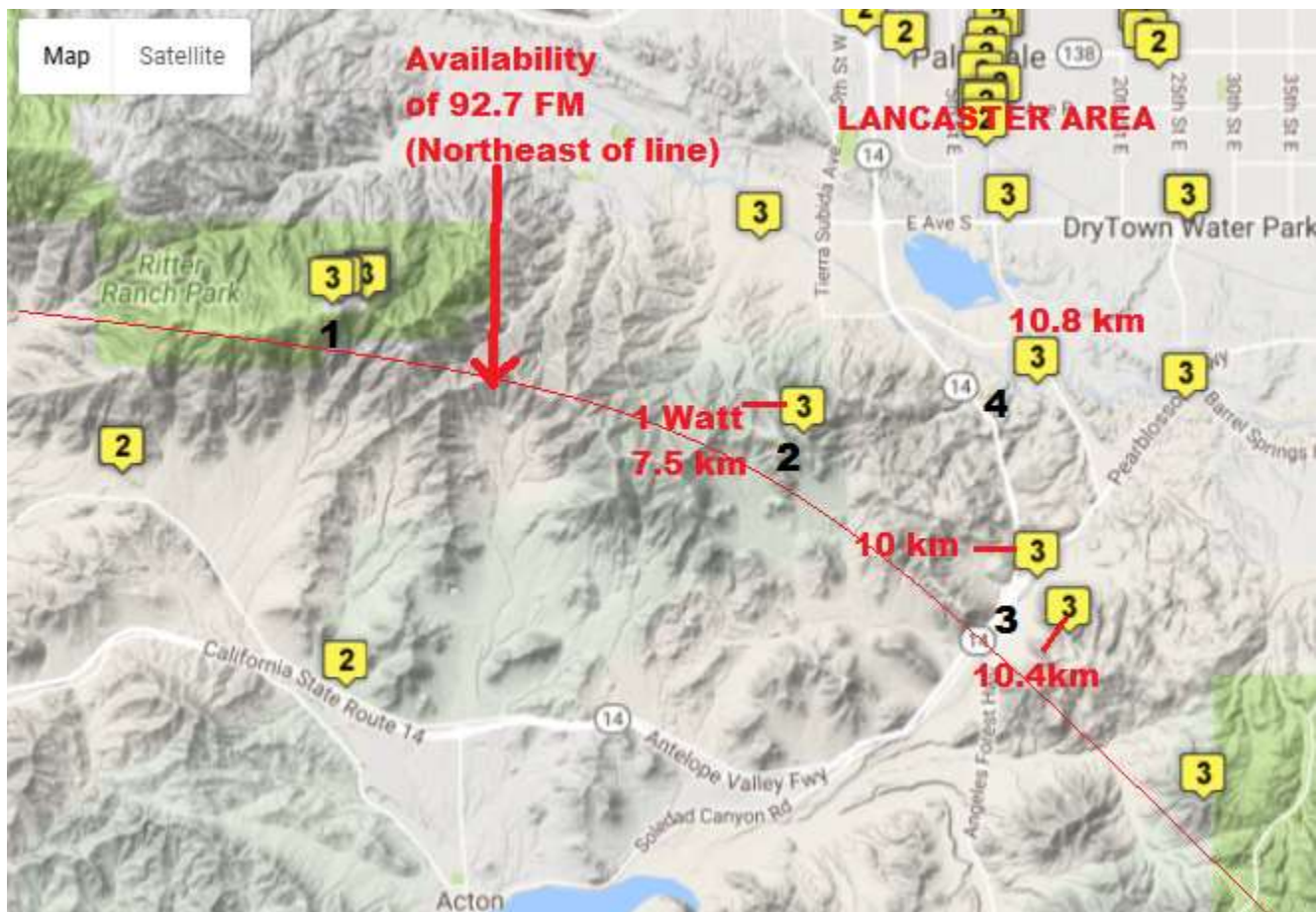
WAIVER REQUEST §73.870(a)

Facility requests move of 10.8 km; Section 73.870(a) permits 5.6 km moves. Applicant requests a waiver of 73.870(a) in the public interest due to following constricting relocation issues:

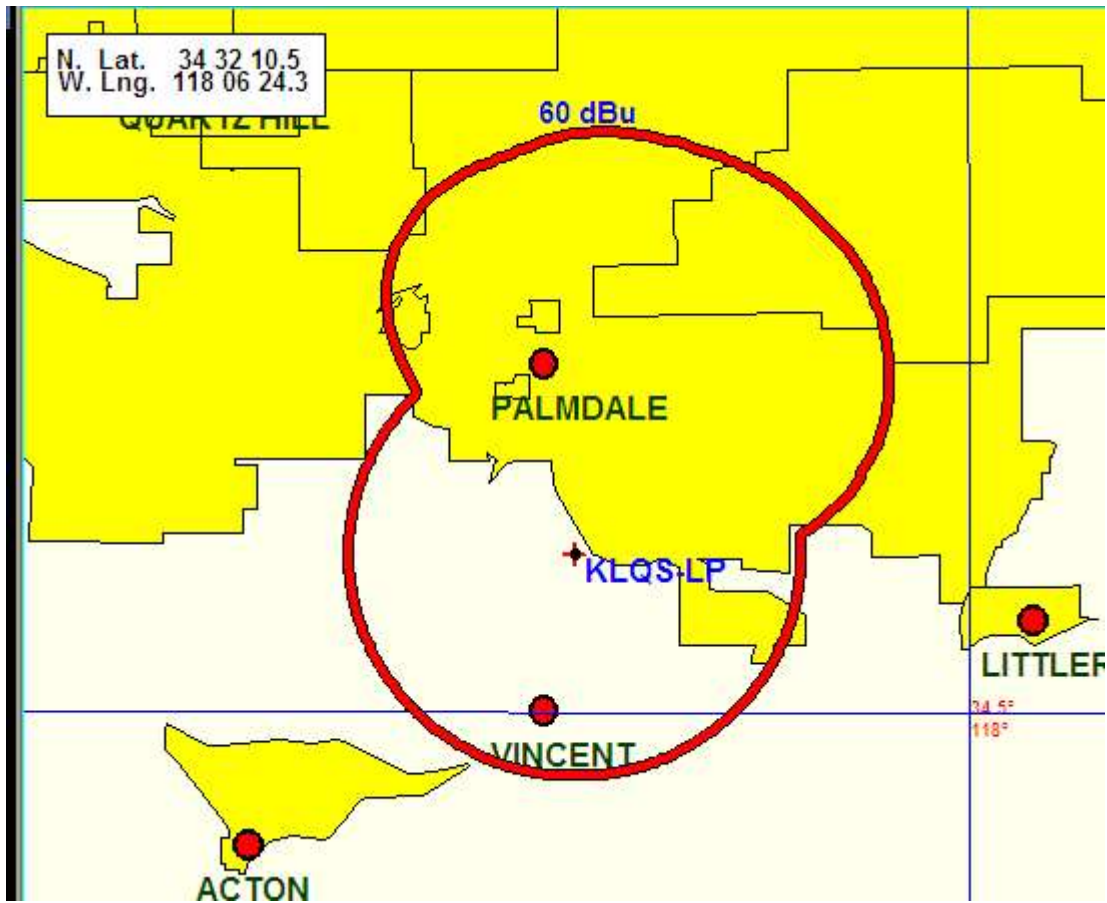
- The available channel is not available within a 5.6 km move (see map below).
- LEBS attempted to find the closest location where it could feasibly move to by scrutinizing the nearest available sites to move to. The yellow tags show available sites below:

- + Area "1" is too high in elevation (above HAAT wattage ceiling).
- + Site 2 is available at 1 watt. At this wattage, it would not be able to counter incoming co-channel interference from KYZA Adelanto, CA.
- + Area 3 (2 sites) to not adequately penetrate past the Highway 12 corridor in Lancaster
- + Site 4 is the closest site to allow population coverage in the Lancaster area.

KLQS-LP requests 10.8 km relocation move.



PROPOSED 60 dBu CONTOUR

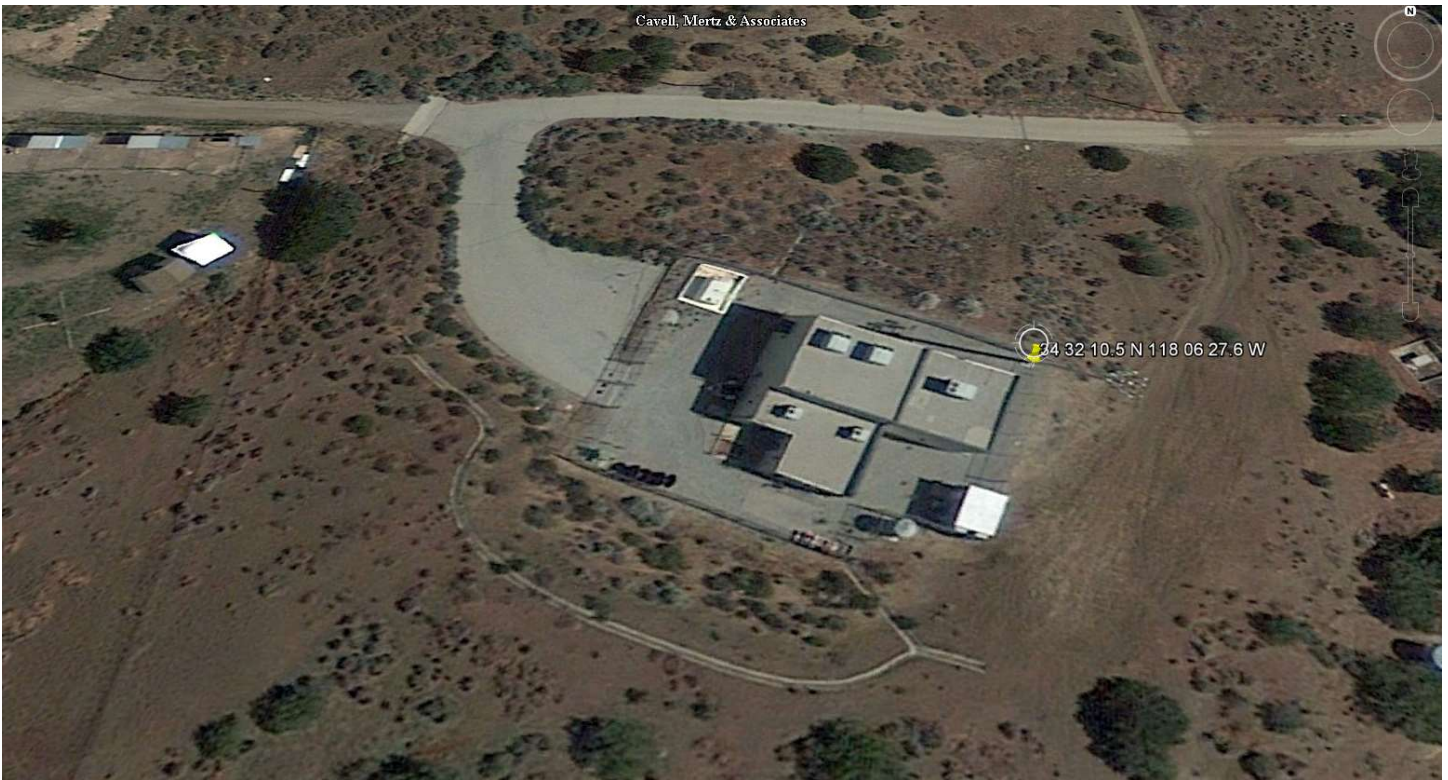


SECOND ADJACENT WAIVER REQUEST

Applicant request a waiver of the Second Adjacent minimum spacing requirements stated in §73.807 of the FCC rules using U/D nopopulation inference protocol ("Living Way"). At the proposed facility site, KRRL has an estimated signal strength is 78.3 dBu (and KCBS with a signal strength of 80.4 dBu, see below).



Contour protection to second adjacent station KRRL is provided using the ratio method. KRRL signal strength is 78.3 dBu at the selected site. Using the appropriate U/D ratio of 40 db, the corresponding interfering contour of the proposed facility is thus 118.3. dBu. 50 watts is prescribed as ERP. At 50 watts, this contour would extend to a distance of 51.9 meters from the antenna. However, the field strength of the proposed LPFM's antenna system falls quickly at depression angles below the horizon. Using elevation pattern data provided by Bext (3 bay 0.5 spaced TLFHO antenna) for a 0.5 wave spaced antenna, the distance to the 118.3 dBu contour at various depression angles is tabulated below. The data shows that the lowest point at which the signal strength rises to 118.3 dBu is 12.3 meters below the center of radiation of the antenna system, or 0.7 meters above the ground. Therefore, this is sufficient clearance, and the interference area encompasses zero population. The table below show that the lowest elevation point of the 118.3 dBu F(50,10) interfering contour is 0.7 meters above the ground. The antenna site a dedicated private tower site in a rural setting with fencing around it so no persons will encounter the inference area (see below).



Thus, the applicant requests second adjacent waiver based upon evidence no interference is proposed.

- A MAX ERP
- B DEPRESSION ANGLE BELOW HORIZON
- C RELATIVE FIELD
- D dB FROM RELATIVE
- E ERP
- F ANGULAR DISTANCE TO 118.3dBu CONTOUR
- G VERTICAL DISTANCE (below antenna)
- H HORIZONTAL DISTANCE TO 118.3dBu CONTOUR
- I CLEARENCE OF CONTOUR ABOVE GROUND

A	B	C	D	E	F	G	H	I
50	0	1.001	0.009	50.10	60.3	0	60.3	13
50	0.4	1	0.000	50.00	60.2	0.4	60.1	12.6
50	0.8	0.999	-0.009	49.90	60.2	0.8	60.1	12.2
50	1.1	0.998	-0.017	49.80	60.1	1.1	60	11.9
50	1.5	0.997	-0.026	49.70	60.1	1.5	60	11.5
50	1.9	0.995	-0.044	49.50	59.9	1.9	59.8	11.1
50	2.3	0.993	-0.061	49.30	59.8	2.3	59.7	10.7
50	2.6	0.991	-0.079	49.10	59.7	2.7	59.6	10.3
50	3	0.988	-0.105	48.81	59.5	3.1	59.4	9.9
50	3.4	0.986	-0.122	48.61	59.4	3.5	59.2	9.5
50	3.8	0.983	-0.149	48.31	59.2	3.9	59	9.1
50	4.1	0.979	-0.184	47.92	59	4.2	58.8	8.8
50	4.5	0.976	-0.211	47.63	58.8	4.6	58.6	8.4
50	4.9	0.972	-0.247	47.24	58.5	4.9	58.2	8.1
50	5.3	0.967	-0.291	46.75	58.2	5.3	57.9	7.7
50	5.6	0.962	-0.336	46.27	57.9	5.6	57.6	7.4

50	6	0.957	-0.382	45.79	57.6	6	57.2	7
50	6.4	0.951	-0.436	45.22	57.3	6.3	56.9	6.7
50	6.8	0.945	-0.491	44.65	56.9	6.7	56.5	6.3
50	7.1	0.939	-0.547	44.09	56.6	6.9	56.1	6.1
50	7.5	0.933	-0.602	43.52	56.2	7.3	55.7	5.7
50	7.9	0.926	-0.668	42.87	55.8	7.6	55.2	5.4
50	8.3	0.919	-0.734	42.23	55.4	7.9	54.8	5.1
50	8.6	0.912	-0.800	41.59	54.9	8.2	54.2	4.8
50	9	0.905	-0.867	40.95	54.5	8.5	53.8	4.5
50	9.4	0.897	-0.944	40.23	54	8.8	53.2	4.2
50	9.8	0.889	-1.022	39.52	53.5	9.1	52.7	3.9
50	10.2	0.881	-1.100	38.81	53.1	9.3	52.2	3.7
50	10.5	0.872	-1.190	38.02	52.5	9.5	51.6	3.5
50	10.9	0.863	-1.280	37.24	52	9.8	51	3.2
50	11.3	0.854	-1.371	36.47	51.4	10	50.4	3
50	11.7	0.845	-1.463	35.70	50.9	10.3	49.8	2.7
50	12	0.835	-1.566	34.86	50.3	10.4	49.2	2.6
50	12.4	0.826	-1.660	34.11	49.7	10.6	48.5	2.4
50	12.8	0.816	-1.766	33.29	49.1	10.8	47.8	2.2
50	13.2	0.806	-1.873	32.48	48.5	11	47.2	2
50	13.5	0.796	-1.982	31.68	47.9	11.1	46.5	1.9
50	13.9	0.785	-2.103	30.81	47.3	11.3	45.9	1.7
50	14.3	0.775	-2.214	30.03	46.7	11.5	45.2	1.5
50	14.7	0.764	-2.338	29.18	46	11.6	44.4	1.4
50	15	0.754	-2.453	28.43	45.4	11.7	43.8	1.3
50	15.4	0.742	-2.592	27.53	44.7	11.8	43	1.2
50	15.8	0.731	-2.722	26.72	44	11.9	42.3	1.1
50	16.2	0.719	-2.865	25.85	43.3	12	41.5	1
50	16.5	0.707	-3.012	24.99	42.6	12	40.8	1
50	16.9	0.696	-3.148	24.22	41.9	12.1	40	0.9
50	17.3	0.684	-3.299	23.39	41.2	12.2	39.3	0.8
50	17.7	0.672	-3.453	22.58	40.5	12.3	38.5	0.7
50	18	0.66	-3.609	21.78	39.7	12.2	37.7	0.8
50	18.4	0.648	-3.768	21.00	39	12.3	37	0.7
50	18.8	0.636	-3.931	20.22	38.3	12.3	36.2	0.7
50	19.2	0.624	-4.096	19.47	37.6	12.3	35.5	0.7
50	19.6	0.612	-4.265	18.73	36.8	12.3	34.6	0.7
50	19.9	0.599	-4.451	17.94	36.1	12.2	33.9	0.8
50	20.3	0.587	-4.627	17.23	35.3	12.2	33.1	0.8
50	20.7	0.574	-4.822	16.47	34.6	12.2	32.3	0.8
50	21.1	0.562	-5.005	15.79	33.8	12.1	31.5	0.9
50	21.4	0.549	-5.209	15.07	33	12	30.7	1
50	21.8	0.536	-5.417	14.36	32.3	11.9	29.9	1.1
50	22.2	0.524	-5.613	13.73	31.5	11.8	29.1	1.2

50	22.6	0.511	-5.832	13.06	30.8	11.8	28.4	1.2
50	22.9	0.499	-6.038	12.45	30	11.6	27.6	1.4
50	23.3	0.486	-6.267	11.81	29.2	11.5	26.8	1.5
50	23.7	0.474	-6.484	11.23	28.5	11.4	26	1.6
50	24.1	0.461	-6.726	10.63	27.7	11.3	25.2	1.7
50	24.4	0.449	-6.955	10.08	27	11.1	24.5	1.9
50	24.8	0.436	-7.210	9.50	26.2	10.9	23.7	2.1
50	25.2	0.424	-7.453	8.99	25.5	10.8	23	2.2
50	25.6	0.412	-7.702	8.49	24.8	10.7	22.3	2.3
50	25.9	0.399	-7.981	7.96	24	10.4	21.5	2.6
50	26.3	0.387	-8.246	7.49	23.3	10.3	20.8	2.7
50	26.7	0.375	-8.519	7.03	22.6	10.1	20.1	2.9
50	27.1	0.363	-8.802	6.59	21.8	9.9	19.4	3.1
50	27.4	0.351	-9.094	6.16	21.1	9.7	18.7	3.3
50	27.8	0.339	-9.396	5.75	20.4	9.5	18	3.5
50	28.2	0.327	-9.709	5.35	19.7	9.3	17.3	3.7
50	28.6	0.316	-10.006	4.99	19	9	16.6	4
50	29	0.304	-10.343	4.62	18.3	8.8	16	4.2
50	29.3	0.293	-10.663	4.29	17.6	8.6	15.3	4.4
50	29.7	0.282	-10.995	3.98	17	8.4	14.7	4.6
50	30.1	0.271	-11.341	3.67	16.3	8.1	14.1	4.9
50	30.5	0.259	-11.734	3.35	15.6	7.9	13.4	5.1
50	30.8	0.248	-12.111	3.08	14.9	7.6	12.8	5.4
50	31.2	0.237	-12.505	2.81	14.2	7.3	12.1	5.7
50	31.6	0.227	-12.879	2.58	13.6	7.1	11.5	5.9
50	32	0.216	-13.311	2.33	13	6.8	11	6.2
50	32.3	0.206	-13.723	2.12	12.4	6.6	10.4	6.4
50	32.7	0.195	-14.199	1.90	11.7	6.3	9.8	6.7
50	33.1	0.185	-14.657	1.71	11.1	6	9.3	7
50	33.5	0.175	-15.139	1.53	10.5	5.7	8.7	7.3
50	33.8	0.166	-15.598	1.38	10	5.5	8.3	7.5
50	34.2	0.156	-16.138	1.22	9.4	5.2	7.7	7.8
50	34.6	0.147	-16.654	1.08	8.8	4.9	7.2	8.1
50	35	0.137	-17.266	0.94	8.2	4.7	6.7	8.3
50	35.3	0.128	-17.856	0.82	7.7	4.4	6.2	8.6
50	35.7	0.119	-18.489	0.71	7.1	4.1	5.7	8.9
50	36.1	0.111	-19.094	0.62	6.6	3.8	5.3	9.2
50	36.5	0.102	-19.828	0.52	6.1	3.6	4.9	9.4
50	36.8	0.094	-20.537	0.44	5.6	3.3	4.4	9.7
50	37.2	0.085	-21.412	0.36	5.1	3	4	10
50	37.6	0.077	-22.270	0.30	4.6	2.8	3.6	10.2
50	38	0.07	-23.098	0.25	4.2	2.5	3.3	10.5
50	38.4	0.062	-24.152	0.19	3.7	2.2	2.9	10.8
50	38.7	0.055	-25.193	0.15	3.3	2	2.5	11

50	39.1	0.047	-26.558	0.11	2.8	1.7	2.1	11.3
50	39.5	0.04	-27.959	0.08	2.4	1.5	1.8	11.5
50	39.9	0.033	-29.630	0.05	1.9	1.2	1.4	11.8
50	40.2	0.026	-31.701	0.03	1.5	0.9	1.1	12.1
50	40.6	0.02	-33.979	0.02	1.2	0.7	0.9	12.3
50	41	0.013	-37.721	0.01	0.7	0.4	0.5	12.6
50	41.4	0.007	-43.098	0.00	0.4	0.2	0.3	12.8
50	41.7	0.001	-60.000	0.00	0	0	0	13
50	42.1	0.005	-46.021	0.00	0.3	0.2	0.2	12.8
50	42.5	0.01	-40.000	0.01	0.6	0.4	0.4	12.6
50	42.9	0.016	-35.918	0.01	0.9	0.6	0.6	12.4
50	43.2	0.021	-33.556	0.02	1.2	0.8	0.8	12.2
50	43.6	0.026	-31.701	0.03	1.5	1	1	12
50	44	0.031	-30.173	0.05	1.8	1.2	1.2	11.8
50	44.4	0.036	-28.874	0.06	2.1	1.4	1.5	11.6
50	44.7	0.04	-27.959	0.08	2.4	1.6	1.7	11.4
50	45.1	0.045	-26.936	0.10	2.7	1.9	1.9	11.1
50	45.5	0.049	-26.196	0.12	2.9	2	2	11
50	45.9	0.053	-25.514	0.14	3.1	2.2	2.1	10.8
50	46.2	0.057	-24.883	0.16	3.4	2.4	2.3	10.6
50	46.6	0.061	-24.293	0.19	3.6	2.6	2.4	10.4
50	47	0.064	-23.876	0.20	3.8	2.7	2.5	10.3
50	47.4	0.068	-23.350	0.23	4	2.9	2.7	10.1
50	47.8	0.071	-22.975	0.25	4.2	3.1	2.8	9.9
50	48.1	0.074	-22.615	0.27	4.4	3.2	2.9	9.8
50	48.5	0.077	-22.270	0.30	4.6	3.4	3	9.6
50	48.9	0.079	-22.047	0.31	4.7	3.5	3	9.5
50	49.3	0.082	-21.724	0.34	4.9	3.7	3.1	9.3
50	49.6	0.085	-21.412	0.36	5.1	3.8	3.3	9.2
50	50	0.087	-21.210	0.38	5.2	3.9	3.3	9.1
50	50.4	0.089	-21.012	0.40	5.3	4	3.3	9
50	50.8	0.091	-20.819	0.41	5.4	4.1	3.4	8.9
50	51.1	0.093	-20.630	0.43	5.6	4.3	3.5	8.7
50	51.5	0.095	-20.446	0.45	5.7	4.4	3.5	8.6
50	51.9	0.096	-20.355	0.46	5.7	4.4	3.5	8.6
50	52.3	0.098	-20.175	0.48	5.9	4.6	3.6	8.4
50	52.6	0.099	-20.087	0.49	5.9	4.6	3.5	8.4
50	53	0.1	-20.000	0.50	6	4.7	3.6	8.3
50	53.4	0.101	-19.914	0.51	6	4.8	3.5	8.2
50	53.8	0.102	-19.828	0.52	6.1	4.9	3.6	8.1
50	54.1	0.103	-19.743	0.53	6.2	5	3.6	8
50	54.5	0.104	-19.659	0.54	6.2	5	3.6	8
50	54.9	0.105	-19.576	0.55	6.3	5.1	3.6	7.9
50	55.3	0.105	-19.576	0.55	6.3	5.1	3.5	7.9

50	55.6	0.106	-19.494	0.56	6.3	5.1	3.5	7.9
50	56	0.106	-19.494	0.56	6.3	5.2	3.5	7.8
50	56.4	0.106	-19.494	0.56	6.3	5.2	3.4	7.8
50	56.8	0.107	-19.412	0.57	6.4	5.3	3.5	7.7
50	57.2	0.107	-19.412	0.57	6.4	5.3	3.4	7.7
50	57.5	0.107	-19.412	0.57	6.4	5.3	3.4	7.7
50	57.9	0.106	-19.494	0.56	6.3	5.3	3.3	7.7
50	58.3	0.106	-19.494	0.56	6.3	5.3	3.3	7.7
50	58.7	0.106	-19.494	0.56	6.3	5.3	3.2	7.7
50	59	0.106	-19.494	0.56	6.3	5.3	3.2	7.7
50	59.4	0.105	-19.576	0.55	6.3	5.4	3.2	7.6
50	59.8	0.105	-19.576	0.55	6.3	5.4	3.1	7.6
50	60.2	0.104	-19.659	0.54	6.2	5.3	3	7.7
50	60.5	0.103	-19.743	0.53	6.2	5.3	3	7.7
50	60.9	0.103	-19.743	0.53	6.2	5.4	3	7.6
50	61.3	0.102	-19.828	0.52	6.1	5.3	2.9	7.7
50	61.7	0.101	-19.914	0.51	6	5.2	2.8	7.8
50	62	0.1	-20.000	0.50	6	5.2	2.8	7.8
50	62.4	0.099	-20.087	0.49	5.9	5.2	2.7	7.8
50	62.8	0.098	-20.175	0.48	5.9	5.2	2.6	7.8
50	63.2	0.097	-20.265	0.47	5.8	5.1	2.6	7.9
50	63.5	0.096	-20.355	0.46	5.7	5	2.5	8
50	63.9	0.095	-20.446	0.45	5.7	5.1	2.5	7.9
50	64.3	0.094	-20.537	0.44	5.6	5	2.4	8
50	64.7	0.092	-20.724	0.42	5.5	4.9	2.3	8.1
50	65	0.091	-20.819	0.41	5.4	4.8	2.2	8.2
50	65.4	0.09	-20.915	0.41	5.4	4.9	2.2	8.1
50	65.8	0.088	-21.110	0.39	5.3	4.8	2.1	8.2
50	66.2	0.087	-21.210	0.38	5.2	4.7	2.1	8.3
50	66.6	0.086	-21.310	0.37	5.1	4.6	2	8.4
50	66.9	0.084	-21.514	0.35	5	4.5	1.9	8.5
50	67.3	0.083	-21.618	0.34	5	4.6	1.9	8.4
50	67.7	0.081	-21.830	0.33	4.8	4.4	1.8	8.6
50	68.1	0.08	-21.938	0.32	4.8	4.4	1.7	8.6
50	68.4	0.078	-22.158	0.30	4.7	4.3	1.7	8.7
50	68.8	0.077	-22.270	0.30	4.6	4.2	1.6	8.8
50	69.2	0.075	-22.499	0.28	4.5	4.2	1.6	8.8
50	69.6	0.074	-22.615	0.27	4.4	4.1	1.5	8.9
50	69.9	0.072	-22.853	0.26	4.3	4	1.4	9
50	70.3	0.07	-23.098	0.25	4.2	3.9	1.4	9.1
50	70.7	0.069	-23.223	0.24	4.1	3.8	1.3	9.2
50	71.1	0.067	-23.479	0.22	4	3.7	1.2	9.3
50	71.4	0.066	-23.609	0.22	3.9	3.6	1.2	9.4
50	71.8	0.064	-23.876	0.20	3.8	3.6	1.1	9.4

50	72.2	0.062	-24.152	0.19	3.7	3.5	1.1	9.5
50	72.6	0.061	-24.293	0.19	3.6	3.4	1	9.6
50	72.9	0.059	-24.583	0.17	3.5	3.3	1	9.7
50	73.3	0.057	-24.883	0.16	3.4	3.2	0.9	9.8
50	73.7	0.056	-25.036	0.16	3.3	3.1	0.9	9.9
50	74.1	0.054	-25.352	0.15	3.2	3	0.8	10
50	74.4	0.052	-25.680	0.14	3.1	2.9	0.8	10.1
50	74.8	0.051	-25.849	0.13	3	2.8	0.7	10.2
50	75.2	0.049	-26.196	0.12	2.9	2.8	0.7	10.2
50	75.6	0.047	-26.558	0.11	2.8	2.7	0.6	10.3
50	76	0.046	-26.745	0.11	2.7	2.6	0.6	10.4
50	76.3	0.044	-27.131	0.10	2.6	2.5	0.6	10.5
50	76.7	0.043	-27.331	0.09	2.5	2.4	0.5	10.6
50	77.1	0.041	-27.744	0.08	2.4	2.3	0.5	10.7
50	77.5	0.039	-28.179	0.08	2.3	2.2	0.4	10.8
50	77.8	0.038	-28.404	0.07	2.2	2.1	0.4	10.9
50	78.2	0.036	-28.874	0.06	2.1	2	0.4	11
50	78.6	0.035	-29.119	0.06	2.1	2	0.4	11
50	79	0.033	-29.630	0.05	1.9	1.8	0.3	11.2
50	79.3	0.031	-30.173	0.05	1.8	1.7	0.3	11.3
50	79.7	0.03	-30.458	0.05	1.8	1.7	0.3	11.3
50	80.1	0.028	-31.057	0.04	1.6	1.5	0.2	11.5
50	80.5	0.027	-31.373	0.04	1.6	1.5	0.2	11.5
50	80.8	0.026	-31.701	0.03	1.5	1.4	0.2	11.6
50	81.2	0.024	-32.396	0.03	1.4	1.3	0.2	11.7
50	81.6	0.023	-32.765	0.03	1.3	1.2	0.1	11.8
50	82	0.022	-33.152	0.02	1.3	1.2	0.1	11.8
50	82.3	0.02	-33.979	0.02	1.2	1.1	0.1	11.9
50	82.7	0.019	-34.425	0.02	1.1	1	0.1	12
50	83.1	0.018	-34.895	0.02	1	0.9	0.1	12.1
50	83.5	0.016	-35.918	0.01	0.9	0.8	0.1	12.2
50	83.8	0.015	-36.478	0.01	0.9	0.8	0	12.2
50	84.2	0.014	-37.077	0.01	0.8	0.7	0	12.3
50	84.6	0.012	-38.416	0.01	0.7	0.6	0	12.4
50	85	0.011	-39.172	0.01	0.6	0.5	0	12.5
50	85.4	0.01	-40.000	0.01	0.6	0.5	0	12.5
50	85.7	0.009	-40.915	0.00	0.5	0.4	0	12.6
50	86.1	0.009	-40.915	0.00	0.5	0.4	0	12.6
50	86.5	0.008	-41.938	0.00	0.4	0.3	0	12.7
50	86.9	0.007	-43.098	0.00	0.4	0.3	0	12.7
50	87.2	0.006	-44.437	0.00	0.3	0.2	0	12.8
50	87.6	0.005	-46.021	0.00	0.3	0.2	0	12.8
50	88	0.004	-47.959	0.00	0.2	0.1	0	12.9
50	88.4	0.004	-47.959	0.00	0.2	0.1	0	12.9

50	88.7	0.003	-50.458 0.00	0.1	0	0	13
50	89.1	0.002	-53.979 0.00	0.1	0	0	13
50	89.5	0.001	-60.000 0.00	0	0	0	13
50	89.9	0	#NUM! #NUM! #NUM! #NUM! #NUM! #NUM!				
50	90.2	0.001	-60.000 0.00	0	0	0	13
50	90.6	0.001	-60.000 0.00	0	0	0	13
50	91	0.002	-53.979 0.00	0.1	0	0	13
50	91.4	0.003	-50.458 0.00	0.1	0	0	13
50	91.7	0.004	-47.959 0.00	0.2	0.1	0	12.9
50	92.1	0.005	-46.021 0.00	0.3	0.2	0	12.8
50	92.5	0.006	-44.437 0.00	0.3	0.2	0	12.8
50	92.9	0.007	-43.098 0.00	0.4	0.3	0	12.7
50	93.2	0.008	-41.938 0.00	0.4	0.3	0	12.7
50	93.6	0.008	-41.938 0.00	0.4	0.3	0	12.7
50	94	0.009	-40.915 0.00	0.5	0.4	0	12.6
50	94.4	0.01	-40.000 0.01	0.6	0.5	0	12.5
50	94.8	0.011	-39.172 0.01	0.6	0.5	0	12.5
50	95.1	0.012	-38.416 0.01	0.7	0.6	0	12.4
50	95.5	0.013	-37.721 0.01	0.7	0.6	0	12.4
50	95.9	0.015	-36.478 0.01	0.9	0.8	0	12.2
50	96.3	0.016	-35.918 0.01	0.9	0.8	0	12.2
50	96.6	0.017	-35.391 0.01	1	0.9	-0.1	12.1
50	97	0.018	-34.895 0.02	1	0.9	-0.1	12.1
50	97.4	0.02	-33.979 0.02	1.2	1.1	-0.1	11.9
50	97.8	0.021	-33.556 0.02	1.2	1.1	-0.1	11.9
50	98.1	0.022	-33.152 0.02	1.3	1.2	-0.1	11.8
50	98.5	0.023	-32.765 0.03	1.3	1.2	-0.1	11.8
50	98.9	0.025	-32.041 0.03	1.5	1.4	-0.2	11.6
50	99.3	0.026	-31.701 0.03	1.5	1.4	-0.2	11.6
50	99.6	0.027	-31.373 0.04	1.6	1.5	-0.2	11.5
50	100	0.028	-31.057 0.04	1.6	1.5	-0.2	11.5
50	100.4	0.03	-30.458 0.05	1.8	1.7	-0.3	11.3
50	100.8	0.031	-30.173 0.05	1.8	1.7	-0.3	11.3
50	101.1	0.033	-29.630 0.05	1.9	1.8	-0.3	11.2
50	101.5	0.034	-29.370 0.06	2	1.9	-0.3	11.1
50	101.9	0.036	-28.874 0.06	2.1	2	-0.4	11
50	102.3	0.037	-28.636 0.07	2.2	2.1	-0.4	10.9
50	102.6	0.039	-28.179 0.08	2.3	2.2	-0.4	10.8
50	103	0.04	-27.959 0.08	2.4	2.3	-0.5	10.7
50	103.4	0.041	-27.744 0.08	2.4	2.3	-0.5	10.7
50	103.8	0.043	-27.331 0.09	2.5	2.4	-0.5	10.6
50	104.2	0.044	-27.131 0.10	2.6	2.5	-0.6	10.5
50	104.5	0.046	-26.745 0.11	2.7	2.6	-0.6	10.4
50	104.9	0.047	-26.558 0.11	2.8	2.7	-0.7	10.3

50	105.3	0.048	-26.375	0.12	2.8	2.7	-0.7	10.3
50	105.7	0.05	-26.021	0.13	3	2.8	-0.8	10.2
50	106	0.051	-25.849	0.13	3	2.8	-0.8	10.2
50	106.4	0.053	-25.514	0.14	3.1	2.9	-0.8	10.1
50	106.8	0.054	-25.352	0.15	3.2	3	-0.9	10
50	107.2	0.056	-25.036	0.16	3.3	3.1	-0.9	9.9
50	107.5	0.057	-24.883	0.16	3.4	3.2	-1	9.8
50	107.9	0.059	-24.583	0.17	3.5	3.3	-1	9.7
50	108.3	0.06	-24.437	0.18	3.6	3.4	-1.1	9.6
50	108.7	0.061	-24.293	0.19	3.6	3.4	-1.1	9.6
50	109	0.063	-24.013	0.20	3.7	3.4	-1.2	9.6
50	109.4	0.064	-23.876	0.20	3.8	3.5	-1.2	9.5
50	109.8	0.065	-23.742	0.21	3.9	3.6	-1.3	9.4
50	110.2	0.067	-23.479	0.22	4	3.7	-1.3	9.3
50	110.5	0.068	-23.350	0.23	4	3.7	-1.3	9.3
50	110.9	0.07	-23.098	0.25	4.2	3.9	-1.4	9.1
50	111.3	0.071	-22.975	0.25	4.2	3.9	-1.5	9.1
50	111.7	0.072	-22.853	0.26	4.3	3.9	-1.5	9.1
50	112	0.073	-22.734	0.27	4.4	4	-1.6	9
50	112.4	0.075	-22.499	0.28	4.5	4.1	-1.7	8.9
50	112.8	0.076	-22.384	0.29	4.5	4.1	-1.7	8.9
50	113.2	0.077	-22.270	0.30	4.6	4.2	-1.8	8.8
50	113.6	0.078	-22.158	0.30	4.7	4.3	-1.8	8.7
50	113.9	0.08	-21.938	0.32	4.8	4.3	-1.9	8.7
50	114.3	0.081	-21.830	0.33	4.8	4.3	-1.9	8.7
50	114.7	0.082	-21.724	0.34	4.9	4.4	-2	8.6
50	115.1	0.083	-21.618	0.34	5	4.5	-2.1	8.5
50	115.4	0.084	-21.514	0.35	5	4.5	-2.1	8.5
50	115.8	0.085	-21.412	0.36	5.1	4.5	-2.2	8.5
50	116.2	0.086	-21.310	0.37	5.1	4.5	-2.2	8.5
50	116.6	0.087	-21.210	0.38	5.2	4.6	-2.3	8.4
50	116.9	0.087	-21.210	0.38	5.2	4.6	-2.3	8.4
50	117.3	0.088	-21.110	0.39	5.3	4.7	-2.4	8.3
50	117.7	0.089	-21.012	0.40	5.3	4.6	-2.4	8.4
50	118.1	0.09	-20.915	0.41	5.4	4.7	-2.5	8.3
50	118.4	0.09	-20.915	0.41	5.4	4.7	-2.5	8.3
50	118.8	0.091	-20.819	0.41	5.4	4.7	-2.5	8.3
50	119.2	0.092	-20.724	0.42	5.5	4.8	-2.6	8.2
50	119.6	0.092	-20.724	0.42	5.5	4.7	-2.7	8.3
50	119.9	0.092	-20.724	0.42	5.5	4.7	-2.7	8.3
50	120.3	0.093	-20.630	0.43	5.6	4.8	-2.8	8.2
50	120.7	0.093	-20.630	0.43	5.6	4.8	-2.8	8.2
50	121.1	0.093	-20.630	0.43	5.6	4.7	-2.8	8.3
50	121.4	0.094	-20.537	0.44	5.6	4.7	-2.9	8.3

50	121.8	0.094	-20.537	0.44	5.6	4.7	-2.9	8.3
50	122.2	0.094	-20.537	0.44	5.6	4.7	-2.9	8.3
50	122.6	0.094	-20.537	0.44	5.6	4.7	-3	8.3
50	123	0.094	-20.537	0.44	5.6	4.6	-3	8.4
50	123.3	0.093	-20.630	0.43	5.6	4.6	-3	8.4
50	123.7	0.093	-20.630	0.43	5.6	4.6	-3.1	8.4
50	124.1	0.093	-20.630	0.43	5.6	4.6	-3.1	8.4
50	124.5	0.092	-20.724	0.42	5.5	4.5	-3.1	8.5
50	124.8	0.092	-20.724	0.42	5.5	4.5	-3.1	8.5
50	125.2	0.091	-20.819	0.41	5.4	4.4	-3.1	8.6
50	125.6	0.091	-20.819	0.41	5.4	4.3	-3.1	8.7
50	126	0.09	-20.915	0.41	5.4	4.3	-3.1	8.7
50	126.3	0.089	-21.012	0.40	5.3	4.2	-3.1	8.8
50	126.7	0.088	-21.110	0.39	5.3	4.2	-3.1	8.8
50	127.1	0.087	-21.210	0.38	5.2	4.1	-3.1	8.9
50	127.5	0.086	-21.310	0.37	5.1	4	-3.1	9
50	127.8	0.084	-21.514	0.35	5	3.9	-3	9.1
50	128.2	0.083	-21.618	0.34	5	3.9	-3	9.1
50	128.6	0.081	-21.830	0.33	4.8	3.7	-2.9	9.3
50	129	0.08	-21.938	0.32	4.8	3.7	-3	9.3
50	129.3	0.078	-22.158	0.30	4.7	3.6	-2.9	9.4
50	129.7	0.076	-22.384	0.29	4.5	3.4	-2.8	9.6
50	130.1	0.074	-22.615	0.27	4.4	3.3	-2.8	9.7
50	130.5	0.072	-22.853	0.26	4.3	3.2	-2.7	9.8
50	130.8	0.07	-23.098	0.25	4.2	3.1	-2.7	9.9
50	131.2	0.068	-23.350	0.23	4	3	-2.6	10
50	131.6	0.065	-23.742	0.21	3.9	2.9	-2.5	10.1
50	132	0.062	-24.152	0.19	3.7	2.7	-2.4	10.3
50	132.4	0.06	-24.437	0.18	3.6	2.6	-2.4	10.4
50	132.7	0.057	-24.883	0.16	3.4	2.5	-2.3	10.5
50	133.1	0.054	-25.352	0.15	3.2	2.3	-2.1	10.7
50	133.5	0.051	-25.849	0.13	3	2.1	-2	10.9
50	133.9	0.048	-26.375	0.12	2.8	2	-1.9	11
50	134.2	0.044	-27.131	0.10	2.6	1.8	-1.8	11.2
50	134.6	0.041	-27.744	0.08	2.4	1.7	-1.6	11.3
50	135	0.037	-28.636	0.07	2.2	1.5	-1.5	11.5

APPENDIX: Communication with KXFM-LP Lancaster Co-Channel

----- Forwarded message -----

From: Chris Compton

Date: Tue, Jan 24, 2017 at 3:32 PM

Subject: Re: Contact info

To: Todd Urick <toddurick@gmail.com>

Hi Todd,

Longley -Rice indicates that at 100 watts erp your signal will interfere with my signal in Palmdale, Quartz hill and other places where we have built quite a listenership with Senior Citizens,our focus. The people that support our station financially are in the area that interference would make difficult to hear our station and thus we would loose support and have to go silent. What about another channel?

I would be happy to help you with this at no cost as I have the software required to find a suitable LPFM channel for you. This can be filed as an amendment to your application.

Chris