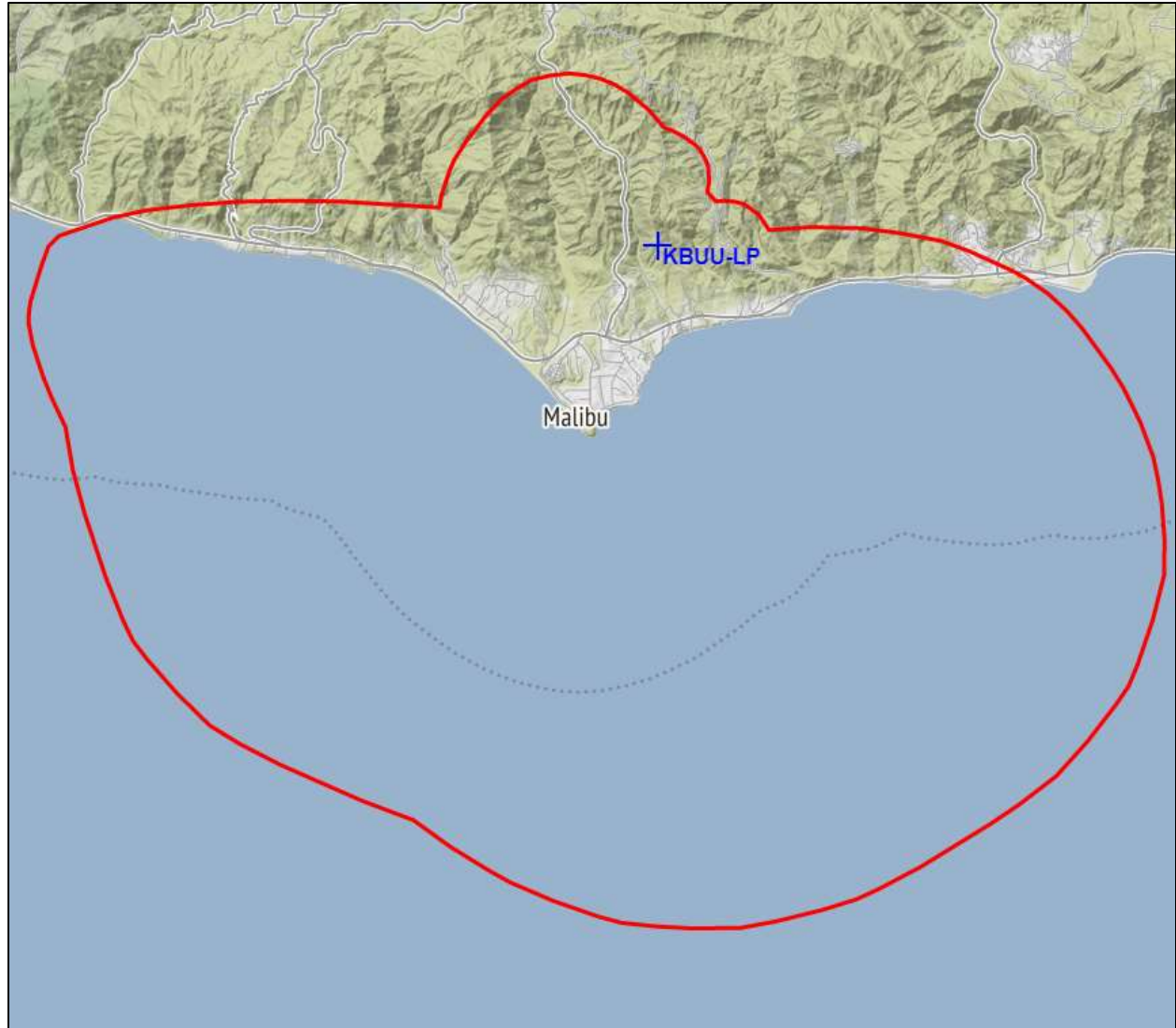




REC Networks
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Amendment to CP application for **KBUU-LP**
MALIBU, CA
ZUMA BEACH FM EMERGENCY & COMMUNITY BROADCASTERS
BPL-20170807ABE

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



MALIBU, CA – Channel 256L1 ~ 99.1 MHz ~ ERP 0.071 kW
Elev: 279 meters ~ RCAGL: 7 meters ~ RCAMSL: 286 meters ~ HAAT: 36 meters (GLOBE)
Overall tower height: 9 meters – ASR: None
NAD83 Latitude: 32° 02' 26.1" NL – Longitude: 118° 47' 23.0" WL
NAD27 Latitude: 32° 02' 26.1" NL – Longitude: 118° 47' 19.7" WL
No AM stations within 3km

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 34 - 02' 26.0" - LONGITUDE: 118 - 47' 19.7"
CHANNEL: 256 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
254	98.7	KYSR : AMFM BROADCASTING LICENSES, LLC	LOS ANGELES	CA B	37.7	67.0	-29.3	76.5
255	98.9	KHHT : POINT FIVE LLC	METTLER	CA A	96.3	56.0	40.3	353.7
256	99.1	KXFM : POINT TEN LLC	SANTA MARIA	CA B	160.5	112.0	48.5	307.4
256	99.1	KGGI : AMFM BROADCASTING LICENSES, LLC	RIVERSIDE	CA B	153.6	112.0	41.6	81.4
256	99.1	KWSV-LP : STRATEGIC INTERNATIONAL MINISTRIES	SIMI VALLEY	CA L1	29.5	24.0	5.5	24.6
256	99.1	K256BS : ONDAS DE VIDA, INC.	PALMDALE	CA D6	77.3	39.0	38.3	43.0
256	99.1	KJBU-LP : THE COMMUNITY ADVOCACY COALITION OF VENTURA COUNTY	OXNARD	CA L1	37.8	24.0	13.8	295.1
256	99.1	KFEP-LP : ECHO PARK FILM CENTER	LOS ANGELES	CA L1	40.0	24.0	16.0	76.1
256	99.1	KLBP-LP : LONG BEACH COMMUNITY TELEVISION AND MEDIA CORPORATION	LONG BEACH	CA L1	57.3	24.0	33.3	124.7
256	99.1	KRKD-LP : HISTORIC DOWNTOWN LOS ANGELES BUSINESS IMPROVEMENT DISTRICT	LOS ANGELES	CA L1	57.3	24.0	33.3	124.7
256	99.1	KLDB-LP : FUTURE ROOTS, INC.	LOS ANGELES	CA L1	30.2	24.0	6.2	98.6
256	99.1	KLBP-LP : LONG BEACH COMMUNITY TELEVISION AND MEDIA CORPORATION	LONG BEACH	CA L1	53.5	24.0	29.5	127.6
256	99.1	K256CX : ABC RADIO LOS ANGELES ASSETS, LLC	BEAUMONT	CA D2	73.5	26.0	47.5	83.4
256	99.1	KFEP-LP : ECHO PARK FILM CENTER	LOS ANGELES	CA L1	42.0	24.0	18.0	82.5
256	99.1	K256CX : ABC RADIO LOS ANGELES ASSETS, LLC	BEAUMONT	CA D2	73.5	26.0	47.5	83.4
256	99.1	KWSV-LP : STRATEGIC INTERNATIONAL MINISTRIES	SIMI VALLEY	CA L1	29.5	24.0	5.5	24.6
256	99.1	KWSV-LP-FM1 : STRATEGIC INTERNATIONAL MINISTRIES	CHATS WORTH	CA D	27.6	24.0	3.6	29.6
256	99.1	KZUT-LP : MACHINE PROJECT	LOS ANGELES	CA L1	39.8	24.0	15.8	76.1
256	99.1	K256CX : ABC RADIO LOS ANGELES ASSETS, LLC	BEAUMONT	CA D2	73.5	26.0	47.5	83.4
256	99.1	KTPC-LP : REACH FOR THE TOP, INC.	VENICE	CA L1	30.2	24.0	6.2	98.6
258	99.5	KKLA-FM : NEW INSPIRATION BROADCASTING CO., INC.	LOS ANGELES	CA B	70.0	67.0	3.0	72.8

WAIVER OF §73.807(a) REQUEST
SHORT-SPACED SECOND ADJACENT CHANNEL

KBUU-LP
Malibu, CA
Channel 256L1 (99.1 MHz)

In this proposed modification, we are proposing to reduce the radiation center by two meters, increase the ERP to 71 watts and modify the station's directional pattern used to protect listeners and potential listeners of KYSR, Los Angeles, California.¹

Based on GLOBE SRTM terrain data, we have calculated the site elevation to be at 279 meters. With a 7 meter radiation center, the radiation center above mean sea level (RCAMSL) is 286 meters. The Commission's GLOBE HAAT calculator shows the following for each of the 8 radials:

0	-115.3
45	-71.5
90	128.7
135	285.4
180	283.8
225	283.4
270	175.1
315	-164.7
HAAT	101

Due to the station location, all points between 3 and 16 km long the 135 and 180 degree radials are completely over water. The 225 degree radial only has land between 3 and 4 km and the 270 degree radial only has land between 3 and 10 km. Using the 5 points along the 225 degree radial that are over land, we have recalculated the average terrain at 12.8 meters making that radial 271.2 meters HAAT. Using the 28 points along the 270 degree radial, we have recalculated the average terrain at 115.6 meters making that radial 168.4 meters HAAT. Considering those revised calculations for those two radials and eliminating the 135 and 180 degree radial from consideration, we come up with 36 meters HAAT.

¹ - Please note that this application amends the previous waiver request where KBUU-LP proposed to operate on Channel 248L1 in a manner where an interfering contour would overlap a single-family dwelling that is under the direct control of a board member of the licensee. With this amendment, KBUU-LP withdraws that specific argument and in its place, we propose a facility on Channel 256L1 in a manner that is consistent with the handling of applications for KBUU-LP and does not cause interference to any radio service in accordance with §73.807(e)(1).

0	-115.3
45	-71.5
90	128.7
135	285.4
180	283.8
225	283.4 271.2
270	175.1 168.4
315	-164.7
HAAT	36

$$(-115.3 - 67.5 + 128.7 + 271.2 + 168.4 - 164.7)/6 = 36.1$$

At 36 meters HAAT, LPFM stations can operate at 71 watts ERP in accordance with §73.811(a) of the Commission's Rules.

KBUU-LP is second adjacent channel short spaced to KYSR, Los Angeles, California (Facility ID # 36019). KYSR is a Class B station operating 75 kW at 360 meters above average terrain operating a non-directional antenna. KYSR places a 71.9 dBu service contour at the LPFM site.

Using the U/D method², KBUU-LP at 71 watts ERP is predicted to produce an undesired interference overlap to KYSR to the proposed LPFM station's 111.9 dBu interference contour ("overlap zone") which would normally extend to 150 meters from the radiation center. Within the overlap zone, there is one occupied residential structure, several unoccupied structures used for agricultural purposes and a water tank facility that is not occupied.

Currently, the Commission has recognized these unoccupied structures based on the previous construction permit grant BPL-20160426ACC and its subsequent license application grant BLL-20160724AAB.

The move of KBUU-LP from Channel 248 to 256 places KBUU on a channel with a second-adjacent channel station with a stronger field strength thus resulting in a much small overlap zone. With that, KBUU-LP can specify operation on Channel 256L1 and through the rotation of their existing Scala CA2-FM/CP circular polarized antennas, they can achieve the change requested in the instant application while fully protecting the occupied single-family structure within the overlap zone.

² - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).

Likewise, KBUU-LP proposes to adjust their directional pattern to the following tabulations:
ROTATION: 3

0: 0.255	10: 0.226	20: 0.172	30: 0.107	40: 0.107	50: 0.172
60: 0.226	70: 255	80: 0.285	90: 0.431	100: 0.616	110: 0.776
120: 0.885	130: 0.936	140: 0.950	150: 0.989	160: 1.000	170: 0.975
180: 0.916	190: 0.843	200: 0.870	210: 0.924	220: 0.924	230: 0.870
240: 0.843	250: 0.916	260: 0.975	270: 1.000	280: 0.989	290: 0.950
300: 0.936	310: 0.885	320: 0.776	330: 0.616	340: 0.431	350: 0.285

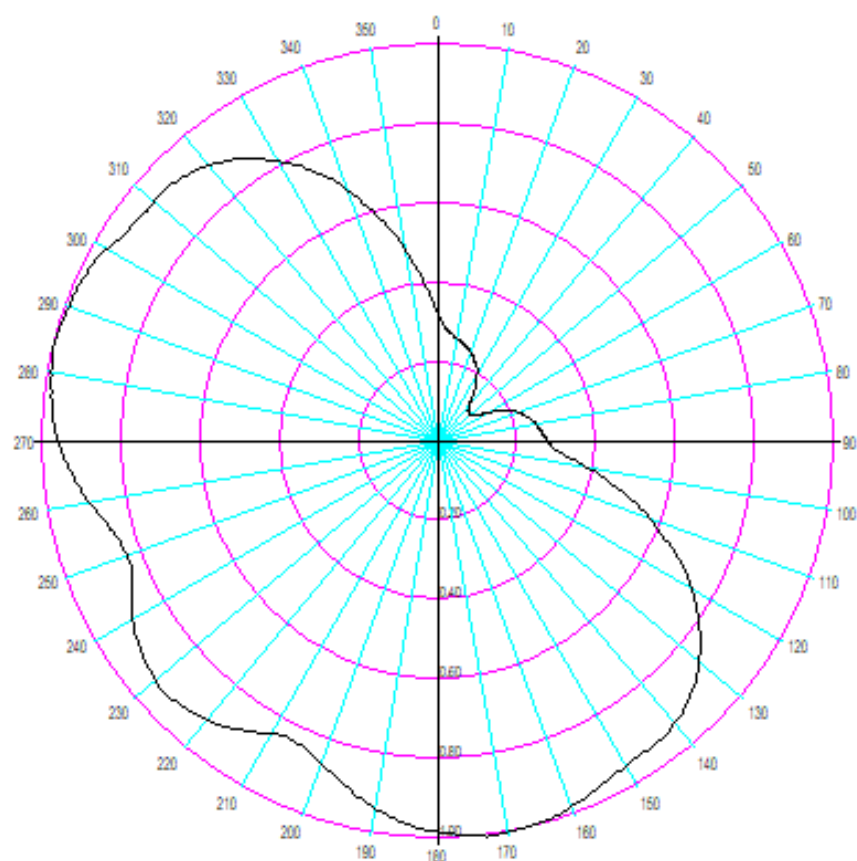
KBUU-LP provides a vital LPFM broadcast service along in an area that is not only blocked by terrain from many full-service FM broadcast stations but it is also in an area that is highly prone to mudslides, rockslides, high surf, brush fires and frequent road closures. KBUU-LP provides a public-safety broadcasting service that covers a stretch of Pacific Coast Highway (California Highway 1). This proposed change in the directional pattern will help KBUU-LP better serve listeners along the Pacific Coast Highway to the southeast of the transmitter site in the area around Pepperdine University and the Malibu Civic Center.

Based on these findings, the proposed modification for KBUU-LP will not create any interference to listeners or potential listeners of KYSR. KBUU-LP is requesting a waiver of §73.807(a) in respect to second-adjacent channel short-spaced stations KYSR, Los Angeles, California.³

Prepared by
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REC Networks
October 22, 2017

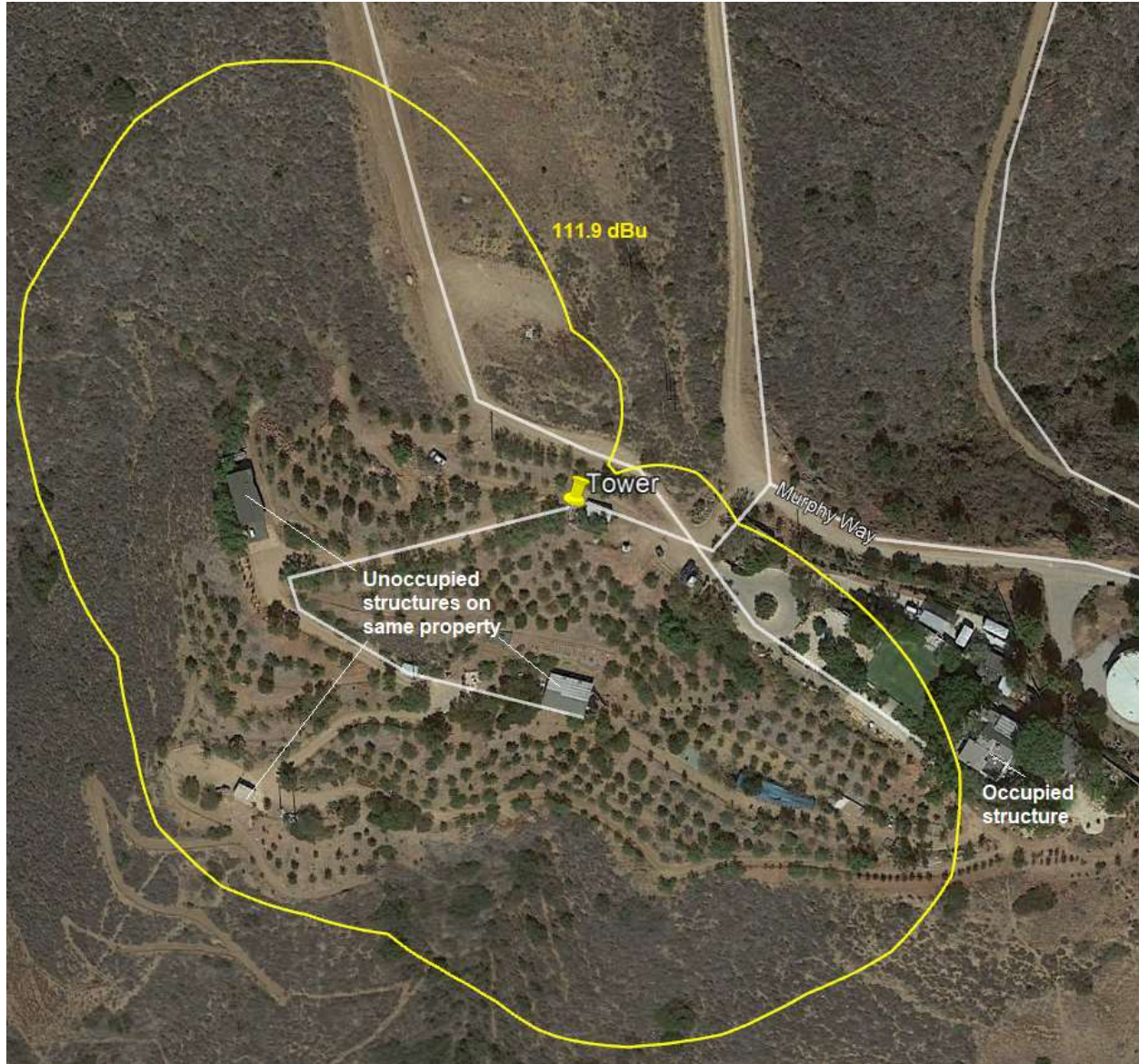
³ - This application is also first-adjacent channel short-spaced to the construction permit application for KXFM, Port Hueneme, California. This application, BPH-20151110ANR was dismissed on October 18, 2017 at the request of the applicant. The instant application is being filed contingent on the finality of the voluntary dismissal of the KXFM Port Hueneme application. KBUU-LP recognizes that no action can take place on this application until a time after 30 days from publication of the dismissal of BPH-20151110ANR in the Public Notice. See *Seminole County Community Broadcasters, Inc.*, BPL-20170913ABP (granted October 20, 2017, application granted 30 days after “short-spaced” construction permit was cancelled.).

PROPOSED DIRECTIONAL PATTERN



Azim	RclFS	ERP [W]	dBk	Azim	RclFS	ERP [W]	dBk	Azim	RclFS	ERP [W]	dBk	Azim	RclFS	ERP [W]	dBk
0.0	0.318	7.180	-21.439	90.0	0.274	5.330	-22.732	180.0	0.982	68.467	-11.643	270.0	0.959	65.297	-11.851
5.0	0.278	5.487	-22.607	95.0	0.307	6.692	-21.745	185.0	0.964	65.980	-11.806	275.0	0.979	68.049	-11.672
10.0	0.262	4.874	-23.121	100.0	0.377	10.091	-19.961	190.0	0.935	62.070	-12.071	280.0	0.992	69.869	-11.557
15.0	0.250	4.437	-23.529	105.0	0.471	15.751	-18.027	195.0	0.900	57.510	-12.403	285.0	0.998	70.716	-11.505
20.0	0.236	3.954	-24.029	110.0	0.565	22.665	-16.446	200.0	0.862	52.756	-12.777	290.0	0.992	69.869	-11.557
25.0	0.217	3.343	-24.758	115.0	0.652	30.182	-15.202	205.0	0.840	50.098	-13.002	295.0	0.984	68.746	-11.628
30.0	0.191	2.590	-25.867	120.0	0.734	38.252	-14.173	210.0	0.849	51.177	-12.909	300.0	0.966	66.254	-11.788
35.0	0.155	1.706	-27.681	125.0	0.800	45.440	-13.426	215.0	0.884	55.483	-12.558	305.0	0.944	63.271	-11.988
40.0	0.120	1.022	-29.904	130.0	0.856	52.024	-12.838	220.0	0.912	59.054	-12.288	310.0	0.936	62.203	-12.062
45.0	0.105	0.783	-31.064	135.0	0.897	57.127	-12.432	225.0	0.930	61.408	-12.118	315.0	0.928	61.144	-12.136
50.0	0.104	0.768	-31.147	140.0	0.924	60.618	-12.174	230.0	0.933	61.805	-12.090	320.0	0.904	58.022	-12.364
55.0	0.116	0.955	-30.198	145.0	0.936	62.203	-12.062	235.0	0.916	59.573	-12.250	325.0	0.865	53.124	-12.747
60.0	0.146	1.513	-28.200	150.0	0.941	62.869	-12.016	240.0	0.891	56.366	-12.490	330.0	0.812	46.813	-13.296
65.0	0.185	2.430	-26.144	155.0	0.958	65.161	-11.860	245.0	0.856	52.024	-12.838	335.0	0.748	39.725	-14.009
70.0	0.213	3.221	-24.920	160.0	0.977	67.772	-11.690	250.0	0.838	49.839	-13.023	340.0	0.670	31.872	-14.966
75.0	0.232	3.822	-24.178	165.0	0.991	69.728	-11.566	255.0	0.856	52.024	-12.838	345.0	0.582	24.049	-16.189
80.0	0.247	4.332	-23.633	170.0	0.997	70.575	-11.514	260.0	0.892	56.492	-12.480	350.0	0.491	17.117	-17.666
85.0	0.260	4.800	-23.188	175.0	0.994	70.151	-11.540	265.0	0.929	61.276	-12.127	355.0	0.395	11.078	-19.555

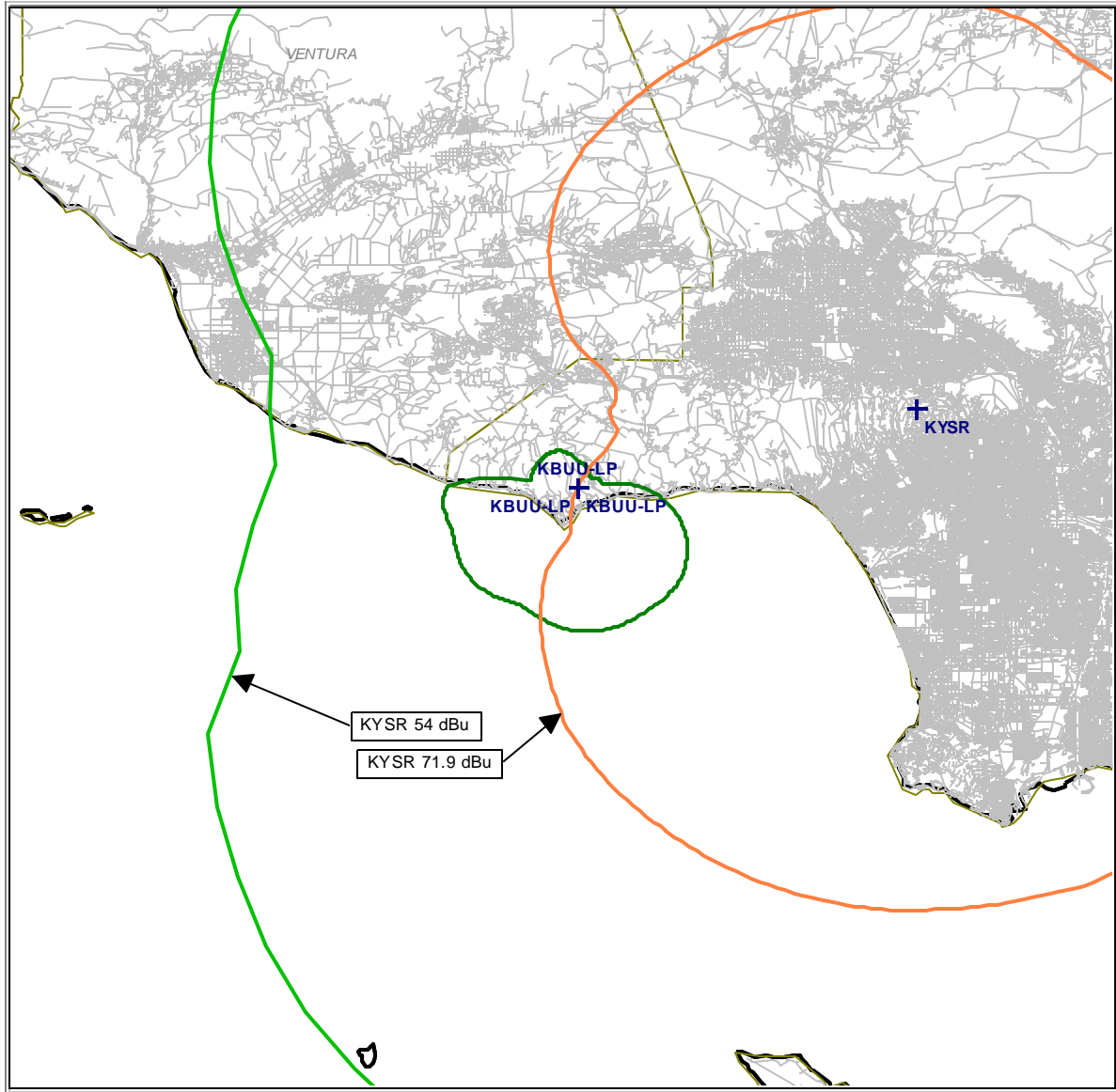
119 dBu OVERLAP ZONE USING PROPOSED DIRECTIONAL PATTERN





The occupied structures are outside of the 111.9 dBu interfering contour (overlap zone).

KBUU-LP Channel 256L1 - Second adjacent channel



REQUEST FOR HANDLING UNDER §73.870(a)
NON-ADJACENT CHANNEL

KBUU-LP
Malibu, California
Channel 256L1 (99.1 MHz)

KBUU-LP is currently licensed and operating on Channel 248L1 (97.5 MHz) at Malibu, California.

A study of Channel 248L1 shows that KBUU-LP is well inside the 34 dBu interfering contour of co-channel stations KYGA, Goleta, California and KLYY, Riverside California. KYGA places a 53.6 dBu interfering F[50, 10] contour at the KBUU-LP site while KLYY places a 48.4 dBu interfering contour at the KBUU-LP site. All listeners within the KBUU-LP 60 dBu service contour are receiving interference from both KYGA and KLYY impacting 9,496 persons.

Pending the finality of the voluntary dismissal of BPH-20151110ANR, Channel 256L1 will meet §73.807 minimum spacing requirements with the exception of KYSR, Los Angeles, California in which a waiver has been requested in accordance with §73.807(e)(1) of the Rules.

A study of Channel 256L1 shows that the 34 dBu interfering contour of the licensed co-channel facility of KXFM, Santa Maria, California falls short of the 60 dBu service contour F[50, 50] of KBUU-LP. Another co-channel facility, KGGI, San Bernardino, California, places a 34 dBu interfering contour very close to the KBUU-LP site. As a result, only a portion of the KBUU-LP 60 dBu service contour would receive interference, in this case, from KGGI.

On Channel 256L1, the number of listeners receiving interference is reduced from 9,496 to 3,648.

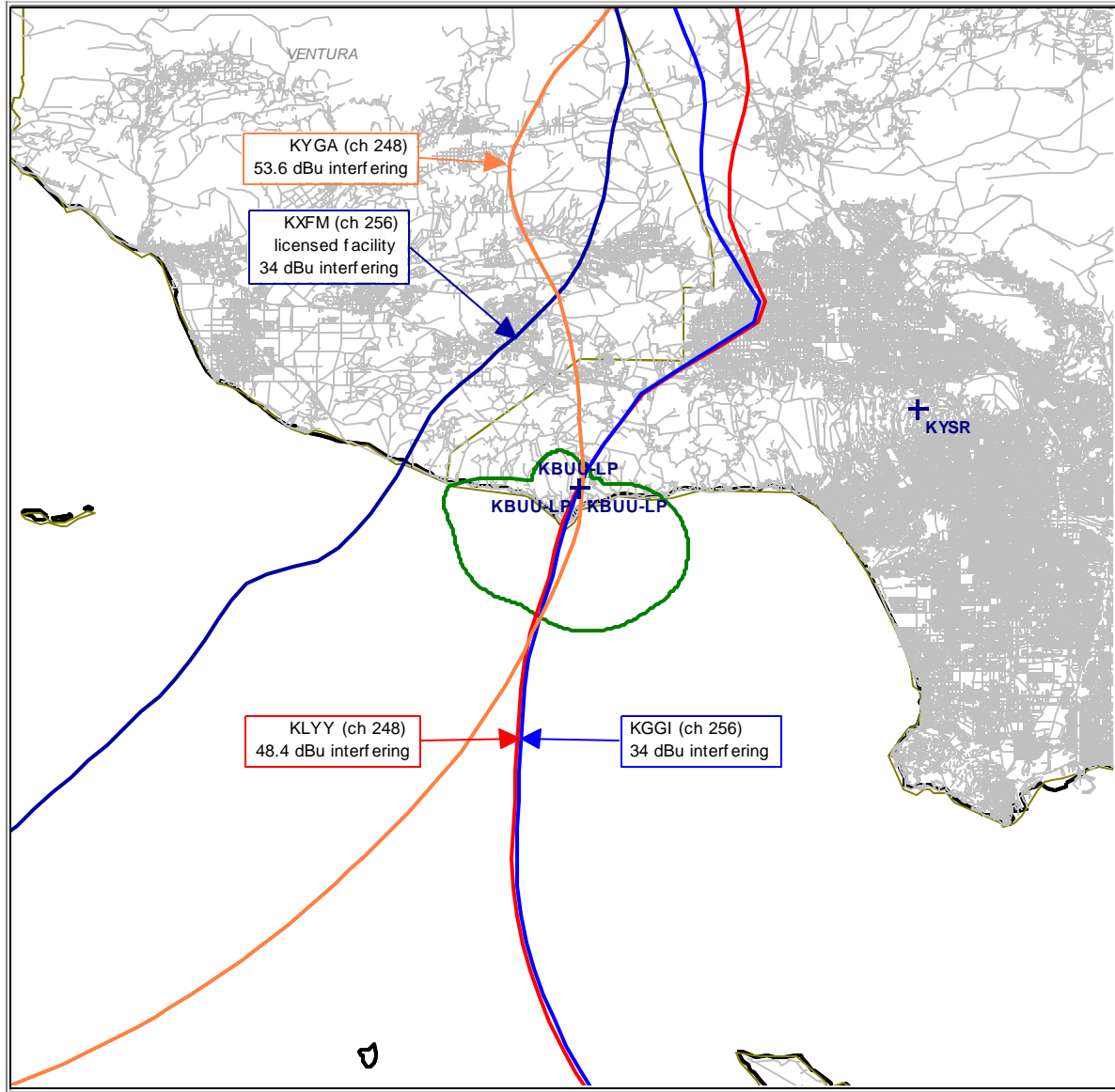
§73.870(a)(1) of the Rules permits “changes in frequency to adjacent or IF frequencies, or, upon a technical showing of reduced interference” to be handled by the Commission as a minor change.⁴ In the instant case, the change to Channel 256L1 will result in nearly two-thirds of KBUU’s service contour not receiving co-channel interference. Because of this, we have made a showing of “reduced interference” as required by §73.870(a)(1) of the Commission’s Rules.

Based on the information presented, the applicant is requesting handling under §73.870(a)(1) to specify non-adjacent channel 256L1.

Prepared by
Michelle Bradley
REC Networks
October 22, 2017

⁴ - See 47 C.F.R. §73.870(a).

KBUU-LP Channel 256L1 - §73.870(a)(1) showing



SUMMARY OF RADIALS USED FOR HAAT CALCULATION

135, 180, 225 and 270 degree radials showing their locations in respect to the ocean.





Point	km from site	225° elevation (m)
1	3.00	38
2	3.27	14
3	3.53	9
4	3.80	9
5	4.06	4
Average		14.8
RCAMSL		286
HAAT		271.2

270 DEGREE RADIAL



Close-up on area over water:



Point	km from site	270° elevation (m)
1	3.00	241
2	3.27	284
3	3.53	281
4	3.80	318
5	4.06	243
6	4.33	155
7	4.59	124
8	4.86	31
9	5.12	79
10	5.39	127
11	5.65	113
12	5.92	115
13	6.18	132
14	6.45	93
15	6.71	135
16	6.98	117
17	7.24	36
18	7.51	84
19	7.78	78
20	8.04	66
21	8.31	71
22	8.57	63
23	8.84	56
24	9.10	50
25	9.37	37
26	9.63	25
27	9.90	21
Average Terrain		117.6
RCAMSL		286
HAAT		168.4

ORIGINAL GLOBE HAAT RESULT WITH CORRECTIONS

Antenna Height Above Average Terrain Calculations -- Results

Input Data

Latitude 34° 2' 26.1" North
Longitude 118° 47' 19.7" (NAD 27)

These coordinates convert to NAD 83 coordinates of
34° 02' 26.13", North, 118° 47' 23.02" West (NAD 83).

Height of antenna radiation center above mean sea level: 286 meters AMSL

Number of Evenly Spaced Radials = 8 0° is referenced to True North

Results

Calculated HAAT = ~~101 meters~~ **36 meters**
 $(-115.3-69.5+128.7+271.2+168.4-164.7)/6 = 36.1$
Antenna Height Above Average Terrain calculated
using 1 km GLOBE terrain data

Individual "Radial HAAT" Values, in meters

0°	-115.3 m	
45°	-71.5 m	
90°	128.7 m	
135°	285.4 m	135 and 180 completely over water
180°	283.8 m	
225°	283.4 m	271.2m
270°	175.1 m	168.4m
315°	-164.7 m	