

TECHNICAL STATEMENT
K241BZ KIHEI, HAWAII
KONA COAST RADIO, LLC
FCC FORM 349
FEBRUARY 2015

This Technical Statement is filed in support of a minor modification of Construction Permit, BNPFT-20130827ADN for K241BZ Kihei, Hawaii, facility ID 142637. K241BZ is seeking to change its transmitter location, and propose a new directional antenna system.

Figure 1 is a detailed interference study for the proposed operation of K241BZ on channel 241D. There will not be any prohibited outgoing interference to any same channel or pertinent adjacent channel stations.

Figure 2 shows the directional antenna data for the proposed K241BZ.

Figure 3 shows that the proposed 60 dB μ predicted contour will overlap with the current 60 dB μ contour of the licensed K241BZ.

K241BZ is proposing to be a “fill-in” translator for KQMY Kihei, Hawaii, facility ID 189544. Figure 4 attached is map showing that the proposed 60 dB μ contour for K241BZ and the present 60 dB μ contour of KQMY.

The new proposed operation of K241BZ Kihei, Hawaii was found to meet all of the Commissions rules and regulations for an FM translator station.

FIGURE 1 - DETAILED CHANNEL INTERFERENCE STUDY

K241BZ KIHEI, HAWAII, CH 241D

REFERENCE
20 42 34.0 N.
156 15 49.0 W.CH# 241D - 96.1 MHz, Pwr= 0.25 kW DA, HAAT= 1761.5 M, COR= 2990 M
Average Protected F(50-50)= 49.79 km
Standard DirectionalDISPLAY DATES
DATA 02-11-15
SEARCH 02-11-15

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
241D Kihei	K241BZ	CP	_C_	332.0 151.9	16.04 BNPFT20130827ADN	20 50 14.0 156 20 11.0	0.250 22	23.8 523	7.1 Kona Coast Radio, LIc	-56.1*	-113.3*
242C Kai Iua	KRTR-FM	LIC	_CX	294.3 113.7	169.75 BMLH20130125AEI	21 19 49.0 157 45 24.0	75.000 645	136.5 771	92.4 Sm-krtr-fm, LIc	-15.7	1.8
244D Maui	K244AG	LIC	DH_	238.8 58.8	15.26 BLFT20110406ACW	20 38 18.0 156 23 21.0	0.250 407	0.0 836	1.6 Visionary Related Entertai	-14.2*	12.4
238D Kihei	K238BR	LIC	DV_	238.5 58.5	15.41 BLFT20140707AAK	20 38 13.3 156 23 23.9	0.009 411	0.0 833	1.6 Visionary Related Entertai	-14.0*	12.7
241L1 Hawi	KNKR-LP	CP	___	139.4 319.6	70.00 BMPL20140911ACY	20 13 47.0 155 49 35.0	0.100 23	261	12.2 North Kohala Community Res		11.1
243D Honokawai	K243BY	LIC	DV_	279.8 99.6	63.74 BLFT20141117A0J	20 48 22.5 156 52 01.2	0.080	0.1 988	1.4 Visionary Related Entertai	16.3	46.0
239D Lahai na	K239CD	CP	DC_	282.9 102.7	68.02 BNPFT20130827ABP	20 50 42.0 156 54 03.0	0.210	1.0 702	28.6 Kona Coast Radio, LIc	19.1	37.1
239D Wai mea	K239BV	CP	_C_	161.9 342.0	115.14 BMPFT20141216AAA	19 43 15.0 155 55 16.0	0.110	0.7 1635	39.1 Hawaii Public Radio, Inc.	105.3	76.2
243D Kai Iua Kona	K243CB	CP	_C_	161.9 342.0	115.14 BNPFT20130827ADF	19 43 15.0 155 55 16.0	0.010 833	0.2 1625	18.5 Visionary Related Entertai	105.8	96.6
240C2 Hi I o	KPVS	LIC	_C_	128.7 309.1	154.16 BLH20000918AAAY	19 50 19.0 155 06 43.0	39.000 -78	41.4 280	25.1 Paci fic Radio Group, Inc.	107.3	96.8
240L1 Honol ul u	KXRG-LP	LIC	___	293.0 112.5	179.71 BLL20130524AAA	21 20 01.5 157 51 33.8	0.100	82	122.7 Ohana Broadcasters Corpora		97.7
295A Kawai hae	KWYI	LIC	_CN	145.3 325.5	110.98 BLH19931202KD	19 53 09.0 155 39 28.0	5.500 104	46.6 1306	131.8 Col in H. Naito	9.5R	101.5M
238C Honol ul u	KAIM-FM	LIC	DC_	292.2 111.5	205.38 BLH19990430KB	21 23 45.0 158 05 58.0	100.000 565	13.8 734	93.3 Salem Media Of Hawaii, Inc	142.6	110.4

Terrain database is USGS 03 SEC, R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"***"affixed to 'IN' or 'OUT' values = site inside restricted contour.

FIGURE 2 - DIRECTIONAL ANTENNA DATA

K241BZ.C

02-11-2015

RMS(V) = .511

Graph is Relative Field

Azi	Field	dBk	kW
000	0.656	-09.683	0.108
010	0.533	-11.486	0.071
020	0.397	-14.045	0.039
030	0.281	-17.046	0.020
040	0.194	-20.265	0.009
050	0.130	-23.742	0.004
060	0.084	-27.535	0.002
070	0.063	-30.034	0.001
080	0.048	-32.396	0.001
090	0.048	-32.396	0.001
100	0.048	-32.396	0.001
110	0.053	-31.535	0.001
120	0.053	-31.535	0.001
130	0.053	-31.535	0.001
140	0.053	-31.535	0.001
150	0.053	-31.535	0.001
160	0.048	-32.396	0.001
170	0.048	-32.396	0.001
180	0.048	-32.396	0.001
190	0.063	-30.034	0.001
200	0.084	-27.535	0.002
210	0.130	-23.742	0.004
220	0.194	-20.265	0.009
230	0.281	-17.046	0.020
240	0.397	-14.045	0.039
250	0.533	-11.486	0.071
260	0.656	-09.683	0.108
270	0.774	-08.246	0.150
280	0.865	-07.280	0.187
290	0.941	-06.549	0.221
300	0.980	-06.196	0.240
310	1.000	-06.021	0.250
320	0.980	-06.196	0.240
330	0.941	-06.549	0.221
340	0.865	-07.280	0.187
350	0.774	-08.246	0.150

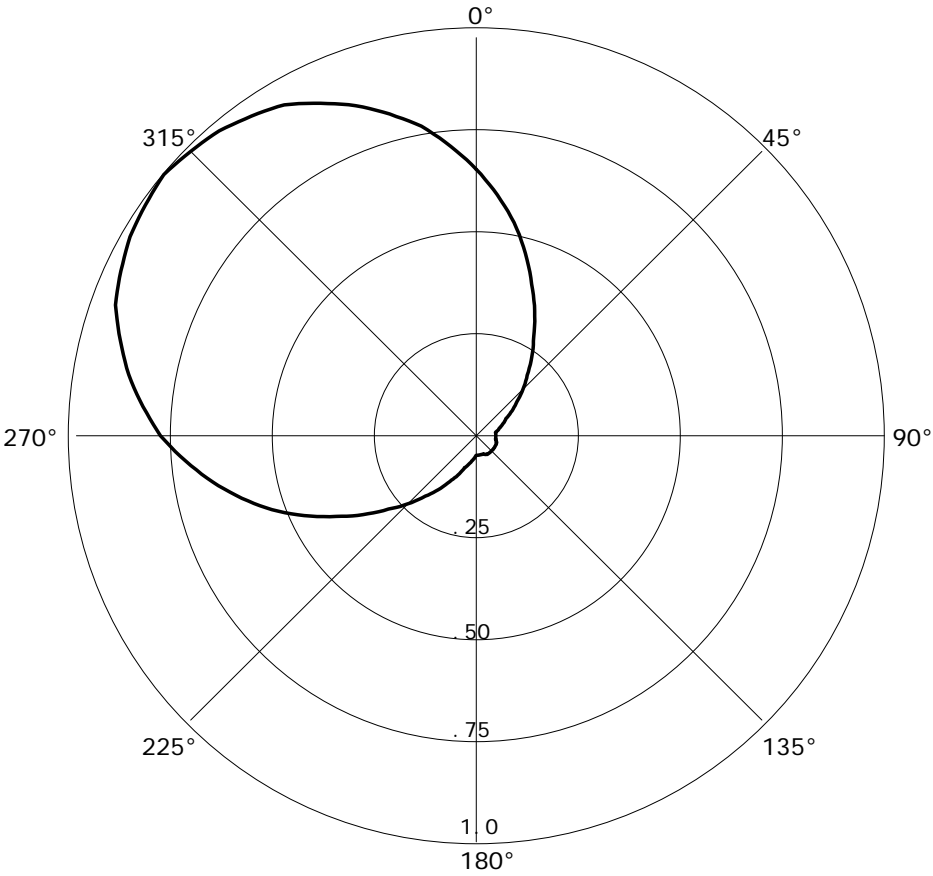


FIGURE 3 - PRESENT AND PROPOSED 60 DBU
K241BZ KIHEI, HAWAII, CH 241D

Coverage Study - USGS 03 SEC
02-11-2015

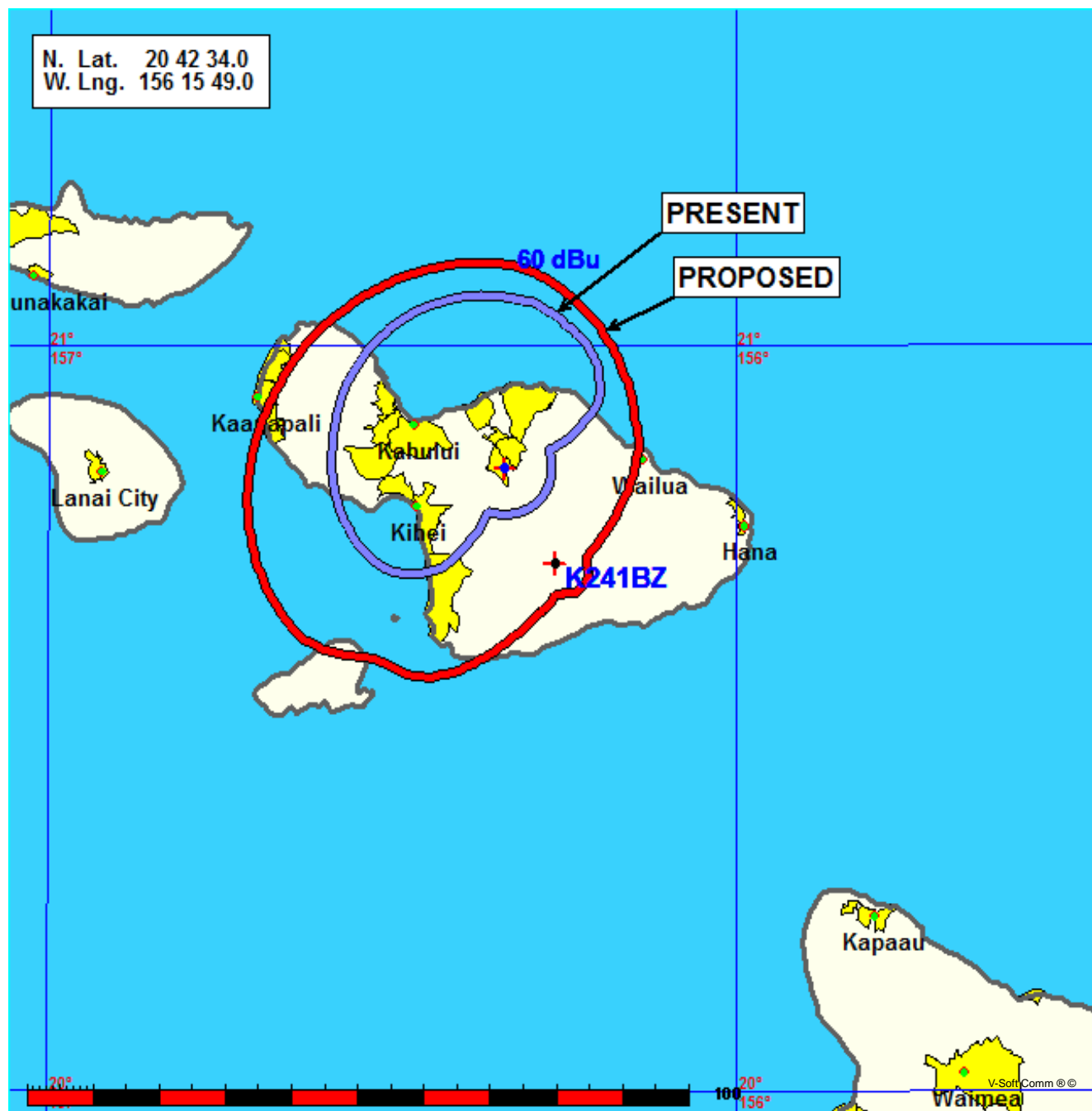
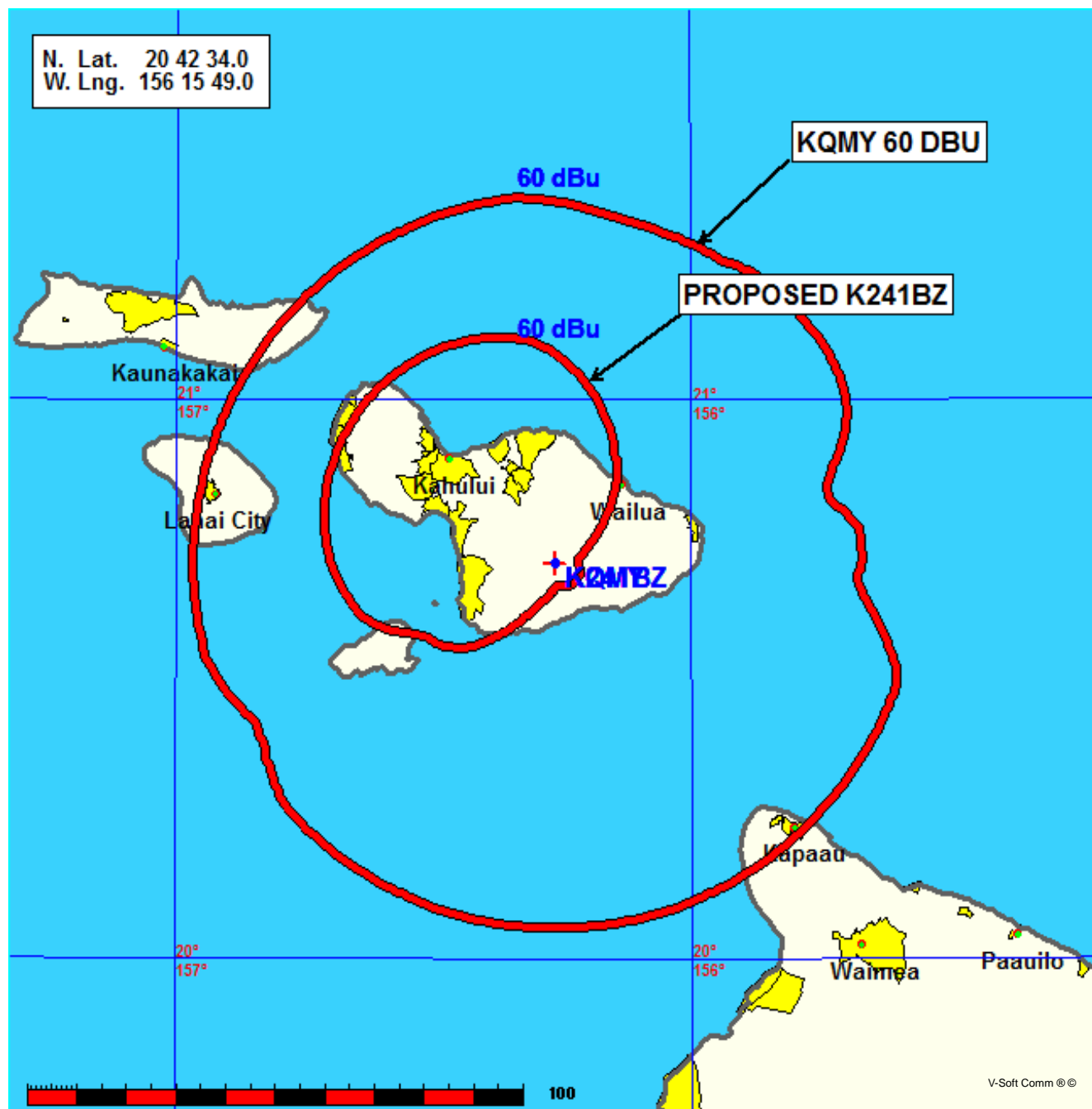


FIGURE 4 - FILL IN MAP WITH KQMY KIHEI, HI
K241BZ KIHEI, HAWAII, CH. 241D

Coverage Study - USGS 03 SEC
02-11-2015



Contour.out

N. Lat. = 204234.0 W. Lng. = 1561549.0
HAAT and Distance to Contour,
FCC, FM 2-10 Mi, 51 pts Method - USGS 03 SEC

FIGURE 5 - TABULATION OF DISTANCES TO CONTOURS, K241BZ

Azi.	AV EL	HAAT	dBk	60-F5	40-F1	54-F1	100-F1
000	1460.6	1529.4	-9.68	41.68	109.71	63.23	0.73
010	1597.6	1392.4	-11.49	36.43	101.10	55.57	0.59
020	1646.6	1343.4	-14.04	30.39	91.34	47.80	0.44
030	1651.2	1338.8	-17.05	24.43	80.80	40.30	0.31
040	1598.7	1391.3	-20.26	18.79	71.54	33.57	0.22
050	1625.7	1364.3	-23.74	12.78	60.16	25.39	0.14
060	1761.2	1228.9	-27.54	8.48	47.04	16.63	0.09
070	2134.1	855.9	-30.03	6.30	33.52	11.18	0.07
080	2177.2	812.8	-32.40	4.88	28.04	8.86	0.05
090	2057.1	932.9	-32.40	4.90	30.09	9.11	0.05
100	1844.0	1146.0	-32.40	4.90	34.04	9.48	0.05
110	1284.2	1705.8	-31.54	5.48	42.92	10.57	0.06
120	864.8	2125.2	-31.54	5.48	42.92	10.57	0.06
130	634.7	2355.3	-31.54	5.48	42.92	10.57	0.06
140	533.7	2456.3	-31.54	5.48	42.92	10.57	0.06
150	493.7	2496.3	-31.54	5.48	42.92	10.57	0.06
160	496.4	2493.6	-32.40	4.91	40.73	9.64	0.05
170	520.9	2469.1	-32.40	4.91	40.73	9.64	0.05
180	554.6	2435.4	-32.40	4.91	40.73	9.64	0.05
190	637.7	2352.3	-30.03	6.57	46.73	12.47	0.07
200	774.3	2215.7	-27.54	8.53	53.14	17.79	0.09
210	925.7	2064.3	-23.74	12.90	64.17	27.30	0.14
220	1146.5	1843.5	-20.26	19.87	75.88	36.00	0.22
230	1405.8	1584.2	-17.05	26.77	86.03	43.95	0.31
240	1663.8	1326.2	-14.04	30.17	90.95	47.49	0.44
250	1474.6	1515.4	-11.49	37.78	103.24	57.57	0.59
260	1250.6	1739.4	-9.68	42.21	110.81	64.37	0.73
270	1081.0	1909.0	-8.25	45.16	115.75	69.20	0.86
280	956.5	2033.5	-7.28	47.15	119.06	72.47	0.96
290	902.8	2087.2	-6.55	48.67	121.58	74.93	1.04
300	893.7	2096.3	-6.20	49.41	122.79	76.11	1.09
310	913.4	2076.6	-6.02	49.79	123.39	76.70	1.11
320	963.3	2026.7	-6.20	49.41	122.79	76.11	1.09
330	1061.2	1928.8	-6.55	48.67	121.58	74.93	1.04
340	1172.1	1817.9	-7.28	47.15	119.06	72.47	0.96
350	1325.3	1664.7	-8.25	45.16	115.75	69.20	0.86

Ave EI = 1207.92 M HAAT= 1782.08 M AMSL= 2990