

LPFM STATION REQUESTS CHANNEL CHANGE

KQNS-LP

Haleiwa, HI

Facility ID: 194203

CH 245 96.9 FM

The purpose of this application is to request a channel change to **CH 297 107.3 FM**.

KQNS-LP only began operations a few days ago. But the licensee and listeners are disappointed by the poor coverage due to strong interference from co-channel station KFMN, Lihue, HI, 149 km away, blazing into our island, Oahu, over a salt water path.

Theoretical contours of KFMN, according to V-Soft, indicate that KQNS-LP is within about their 54 dBu contour. However, at the altitude of KQNS-LP, KFMN is much stronger... about 60 dBu. Former KFMN listeners in our area are now being blocked due to the operation of our new KQNS-LP.



The screenshot shows the FMCommander software interface. At the top, it displays 'Minimum Spacings' and 'Spacings Mode'. Below that, there are several status indicators: 'N. Lat. 21 38 36.0', '226 m COB', 'Current Tables', 'Haleiwa HI', 'L', 'haleiwa.vsl', 'W. Long. 158 02 16.0', '0.009 kW', 'CH 245.96.9', 'L1', '96.0 m HAA1', and 'HIHaleiwa 01-30-17'. The main part of the screen is a table with the following columns: Call, Type, Ch, Location, Azi, Dist, FCC, and Margin. The table lists several stations, including NEW, K246BR, K244EO, KFMN, K243BY, KRKH, and K244AG. At the bottom of the table, it says 'End of Screen List, Cardinal Radials = 36'. The Windows taskbar is visible at the bottom of the screenshot, showing the time as 7:51 PM on 1/30/2017.

Call	Type	Ch	Location	Azi	Dist	FCC	Margin	
NEW	CP	245L1	Haleiwa	HI	0.0	0.00	23.5	-23.5
NEW	CP	245L1	Kapolei	HI	190.2	30.42	23.5	6.9
K246BR	LIC	246D	Honolulu	HI	146.3	40.96	27.5	13.5
K244EO	LIC	244D	Honolulu	HI	158.3	35.00	14.5	20.5
KFMN	LIC	245C1	Lihue	HI	285.7	148.85	110.5	38.4
K243BY	LIC-D	243D	Honokawai	HI	127.3	152.84	20.5	132.3
KRKH	LIC-D	247C2	Wailea-makena	HI	121.9	205.13	52.5	152.6
K244AG	LIC-D	244D	Maui	HI	122.9	204.22	27.5	176.7

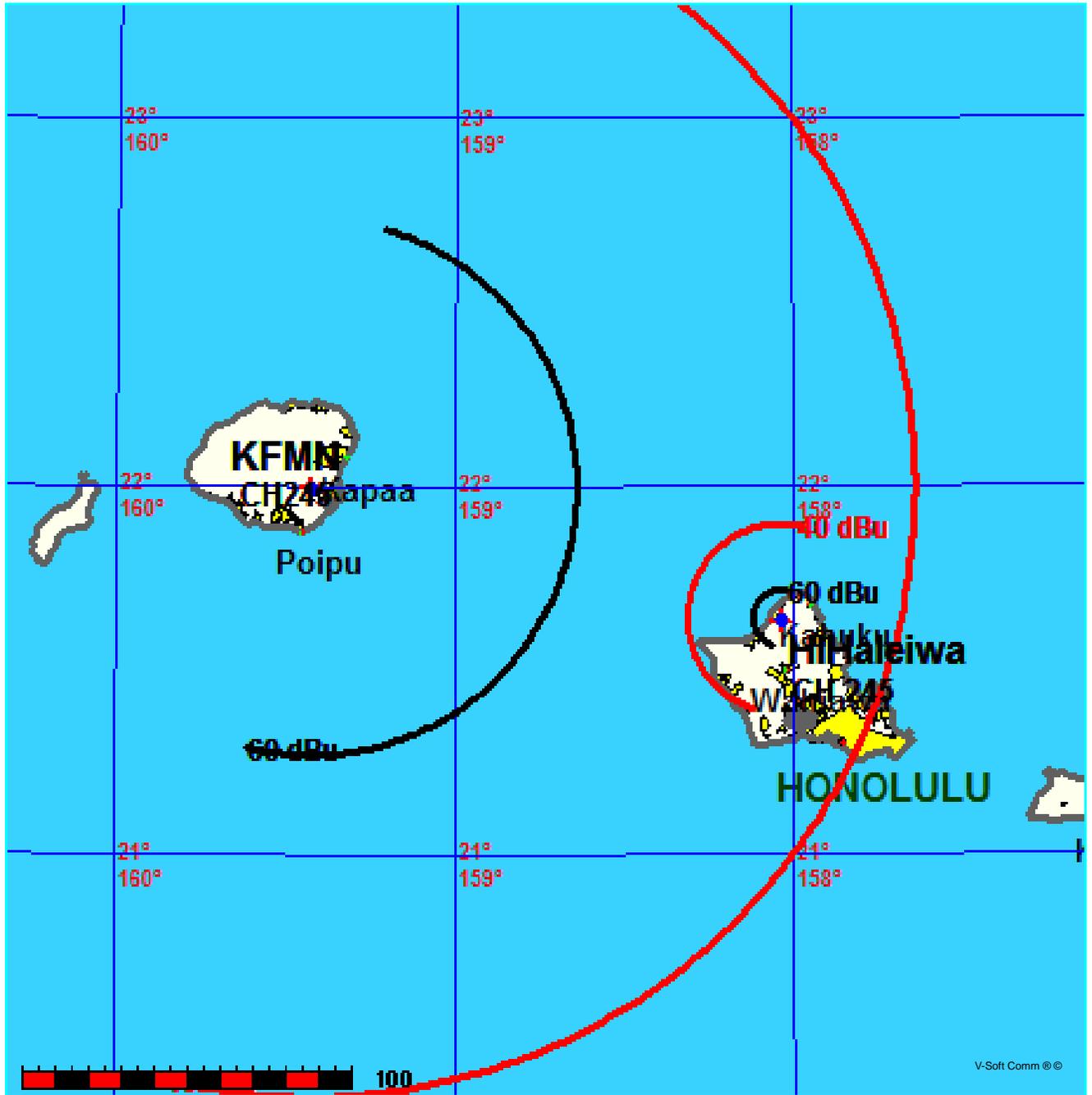
End of Screen List, Cardinal Radials = 36

KFMN vs. KQNS-LP

FMCommander Single Allocation Study - 01-30-2017 - NGDC 30 SEC
HIHaleiwa's Overlaps (In= 0.0 km, Out= 0.0 km)

HIHaleiwa CH 245 L1
Lat= 21 38 36.0, Lng= 158 02 16.0
0.009 kW 96 m HAAT, 226 m COR
Prot.= 60 dBu, Intef.= 40 dBu

KFMN CH 245 C1 BLH19880301KC
Lat= 21 59 54.0, Lng= 159 25 35.0
100.0 kW 122 m HAAT, 416 m COR
Prot.= 60 dBu, Intef.= 40 dBu



Consequently it's reasonable and necessary that KQNS-LP move to another channel to alleviate this congestion and unintentional harmful interference.

Neither a move up or down up to three channels nor using the IF channel is possible.

Thus, KQNS-LP proposes moving to a perfectly clear channel, 297, 107.3 FM.

V-Soft indicates that no prohibited spacing will occur with this change.

The screenshot shows the FMCommander software interface. At the top, it displays 'Minimum Spacings' and 'Spacings Mode'. Below that, there are several status indicators: 'N. Lat. 21 38 35.0', 'W. Long. 158 02 16.0', '226 m CDR', '0.009 kW', 'Current Tables', 'CH 297, 107.3', 'L1', 'Haleiwa HI', '96.0 m HAAT', 'L', 'KQNS-LP2', '01-30-17', and 'kqns-lp2.vsl'. The main part of the screen is a table with the following columns: Call, Type, Ch, Location, Azi, Dist, FCC, and Margin. The table lists several stations with their respective parameters. Below the table, it says 'End of Screen List, Cardinal Radials = 36'. The Windows taskbar at the bottom shows the time as 1:55 PM on 2/1/2017.

Call	Type	Ch	Location	Azi	Dist	FCC	Margin	
K298BA	LIC	298D	Honolulu	HI	146.3	40.96	27.5	13.5
K296GD	LIC-D	296D	Wailuku, Etc.	HI	127.3	153.27	27.5	125.8
KHEI-FM	LIC	298C2	Kihei	HI	117.1	209.30	79.5	129.8
KRKW-LP	LIC	297L1	Waimea	HI	282.0	172.35	23.5	148.9
KWYI	CP	295C1	Kawaihae	HI	133.8	306.48	72.5	234.0
KWYI	LIC	295A	Kawaihae	HI	127.9	315.09	28.5	286.6
KFIP-LP	CP	297L1	Kailua-kona	HI	135.7	312.16	23.5	288.7
KKOA	LIC	299C2	Volcano	HI	128.0	342.92	52.5	290.4

End of Screen List, Cardinal Radials = 36

No FM translators within 10 kilometers are receiving a signal on or near this channel.

There are no AM stations within many miles.

Consequently, we believe the Commission should be able to grant us the use of CH297 in our area.