

TECHNICAL STATEMENT AND 73.215 PROCESSING REQUEST  
KKHI, KAUNAKAKAI, HAWAII, CH. 240C1  
FCC FORM 301  
KONA COAST RADIO, LLC  
MAY 2016

This Technical Statement and 73.215 processing request is made in support of an application filed by Kona Coast Radio, LLC (“KCR”) for a KKHI at Kaunakakai, Hawaii, on channel 240C1. This minor change of license form 301 FCC application is being filed to specify a “one step” upgrade channel of service at the same site where KKHI is currently licensed. KCR proposes operation at Kaunakakai, Hawaii on channel 240C1, with an Effective Radiated Power of 19 Kilowatts, horizontal only polarization, with an antenna height of 694 meters Above Mean Sea Level, 21 meters above ground, and 513 meters Height Above Average Terrain with its Center of Radiation. It will operate from an existing non-FCC registered tower which is 31 meters in overall height. This site is a developed communications site on Puu Kilea

Figure 1 shows a channel spacing study conducted from the proposed allotment point of N. 21° 06’ 27”, W 156° 46’ 42” for channel 240C1. The allotment point is located approximately 25 kilometers east of the community of Kaunakakai, Hawaii. This is well within the normal 50.0 kilometers allowed for a Class C1 allotment. Figure 1 also shows this 50.0 kilometer radius from the allotment point.

Figure 2 shows a channel spacing study conducted from the proposed transmitter site of N. 20°-50’-41”, W 156°-54’-04” for channel 240C1. It shows that the new proposed operation at Kaunakakai will meet all of the normal spacing requirements under 73.207 with the exceptions of KPVS(FM) Hilo, Hawaii, facility ID 51240 on channel 240C2 and KRTR-FM Kailua, Hawaii, facility ID 50118 on channel 242C.

Figure 3 shows a detailed contour interference study with KPVS(FM) Hilo on the same channel. The predicted 40 dB $\mu$  interference contour from either station will not overlap with the 60 dB $\mu$  protected contour of either station. KPVS was adjusted for maximum class C2 facilities for this study.

Figure 4 show a detailed contour interference study with KRTR-FM Kailua on the second adjacent channel. The predicted 100 dB $\mu$  interference study from either station will not overlap with the 60 dB $\mu$  protected contour of either station. KRTR-FM was adjusted for maximum class C facilities for this study.

KKHI requests processing under section 73.215 in regards to KPVS(FM) and KRTR-FM. KKHI will exceed the minimum spacing requirements under 73.215 towards KPVS(FM) and KRTR-FM and there will not be any prohibited overlap between the new proposed operation of KKHI and KPVS and KRTR.

Figure 5 is a predicted 70 dB $\mu$  normal FCC predicted (F50,50) contour map showing that the 70 dB $\mu$  contour will completely encompass the entire community of Kaunakakai as required.

Figure 6 is a tabulation of distances to contours used for this study.

It was determined that the proposed operation of KKHI at Kaunakakai, Hawaii on channel 240C1 from its proposed transmitter will meet all of the requirements for a commercial FM broadcast station under the current technical rules of the commission.