

Broadcast Engineering Services of Bonny Doon, Inc.

Donald E. Mussell Jr. NCE-CBT
Consulting Engineer
740 Front Street Suite 305
Santa Cruz, Ca 95060

(831) 420-1571 Office
(831) 588-9463 Cell
dmsml@well.com
www.well.com/user/dmsml

**Engineering Statement in support of a Minor Change
K210DX, Honolulu, Hawaii
BLFT-20051122AEZ**

The University of Hawaii (UH) is requesting a minor change to translator station K210DX. UH proposes to change the operating frequency to an I.F. Channel (264D, 100.7 mhz), this to avoid prohibited overlap with the construction permit for parent station KTUH, Honolulu (BPED-20101026AAL), which will place KTUH on first adjacent Ch. 211. No other changes are proposed.

An allocation study for Ch. 264D was performed to verify clearances to other authorized facilities surrounding the proposed site. The use of Ch. 264 causes no overlap with any other facility, with the exception of second adjacent KCCN-FM (BLH-19940331KA) and KORL-FM (BLH-20070706ACG). However, the 100 dbu overlap contour of this translator is limited to the transmitter site and surrounding mountain top. There is no permanent population at or surrounding the tower site. It is therefore compliant with 74.1204(e) of the FCC rules.

The existing and proposed antenna system is a Scala GP-FM, vertical polarization only. This antenna is currently mounted 4 meters above ground, and emits 10 watts vertical only. This creates less than 1% of the public limit, and is therefore compliant with the FCC rules concerning RFR both on and adjacent to the proposed tower location.

UH is ready to construct the facility with these specified changes. Once this modification is granted, construction will commence on the transmission facilities and will be completed well within the time limitations imposed by the construction permit.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Mussell', with a stylized flourish at the end.

Donald E. Mussell Jr. NCE-CBT
Consulting Engineer
August 30, 2012

Don Mussell Consulting Engineer
Broadcast Engineering Services of Bonny Doon, Inc.

K210DX Minor change
University Of Hawaii

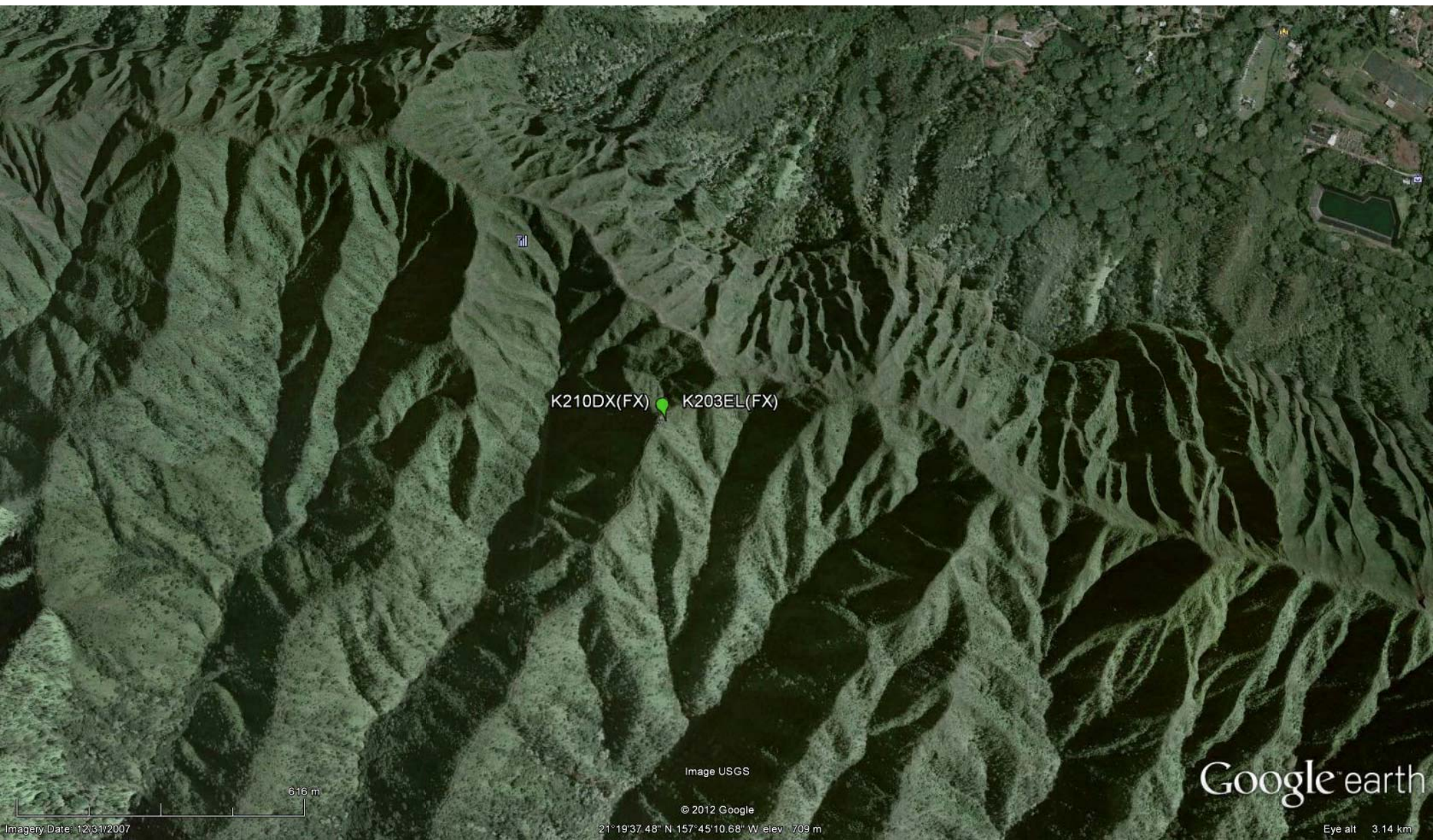
REFERENCE
21 19 49.0 N.
157 45 24.0 W.

CH# 264D - 100.7 MHz, Pwr= 0.01 kw, HAAT= 667.9 M, COR= 748 M
Average Protected F(50-50)= 14.47 km
Omni-directional

DISPLAY DATES
DATA 08-24-12
SEARCH 08-29-12

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
266C Waianae	AL9254	RSV-A	HI	281.9 101.8	36.40 RM10623	21 23 51.0 158 06 01.0	100.000 600	15.1 736	95.5	7.9	-59.3*
266C Waianae	KORL-FM	LIC DEX	HI	281.7 101.5	36.28 BLH20070706ACG	21 23 45.0 158 05 58.0	100.000 592	14.6 734	95.3 Hochman Hawaii-three, Inc.	8.4	-59.2*
262C Honolulu	KCCN-FM	LIC DEN	HI	281.9 101.8	36.40 BLH19940331KA	21 23 51.0 158 06 01.0	100.000 599	14.0 742	94.1 Cox Radio, Inc.	9.3	-57.9*
264C1 Kihei	KKHI	CP _CX	HI	111.2 291.8	168.47 BNPH20110630AEE	20 46 32.0 156 14 50.0	2.200 905	155.6 2102	70.7 Future Modulation Broadcas	-1.5	45.1
One Step Application											

Terrain database is FCC NGDC 30 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
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 protected contour.



K210DX(FX) K203EL(FX)

Image USGS

© 2012 Google

21°19'37.48" N 157°45'10.68" W elev 709 m

Google earth

Eye alt 3.14 km

616 m

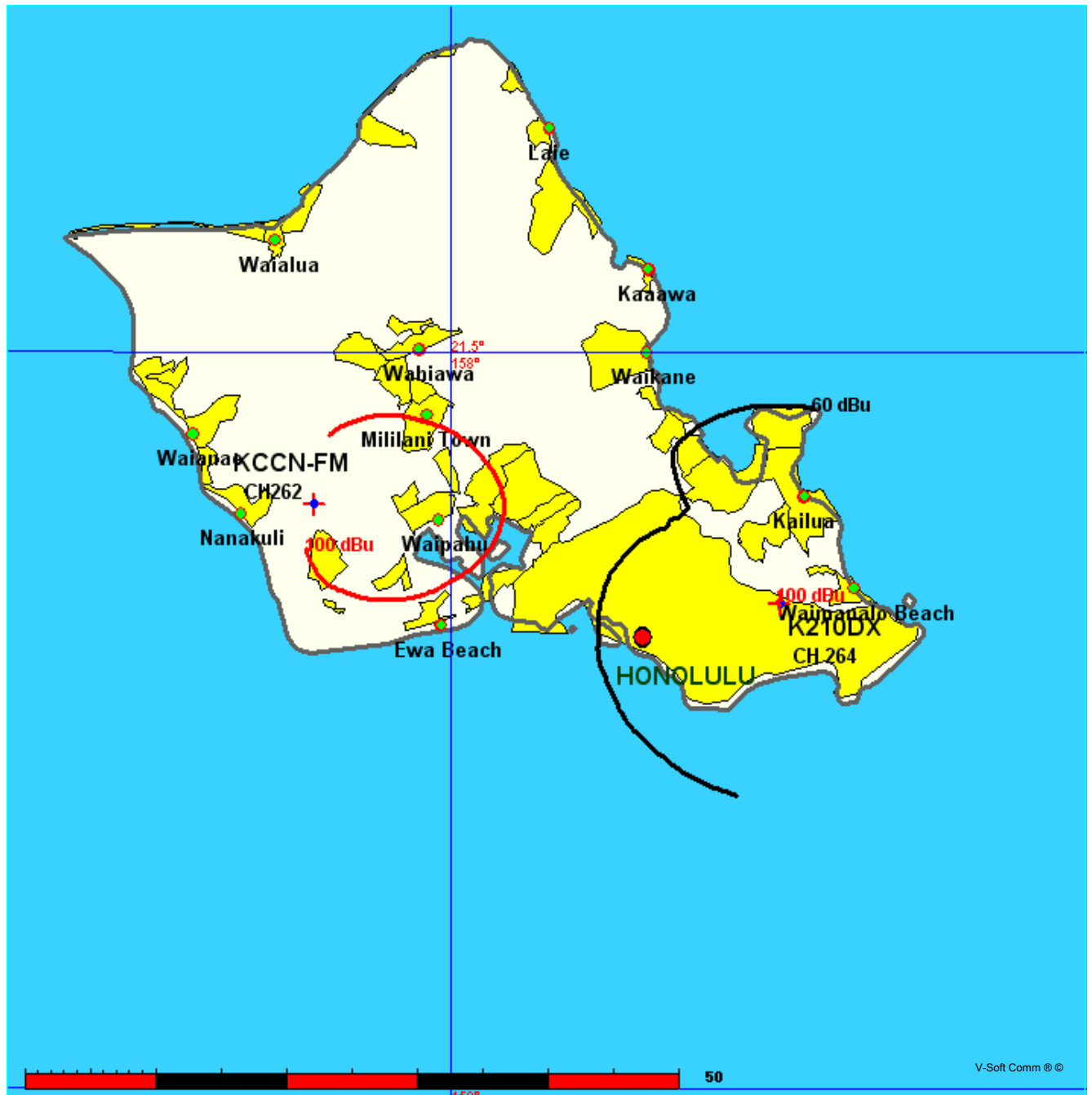
Imagery Date: 12/31/2007

K210DX - KCCN-FM
University Of Hawaii

FMCommander Single Allocation Study - 08-29-2012 - FCC NGDC 30 Sec
K210DX's Overlaps (In= 9.34 km, Out= -57.87 km)

K210DX CH 264 D
Lat= 21 19 49.0, Lng= 157 45 24.0
0.01 kW 667.9 M HAAT, 748 M COR
Prot.= 60 dBu, Intef.= 100 dBu

KCCN-FM CH 262 C DA BLH19940331KA
Lat= 21 23 51.0, Lng= 158 06 01.0
100.0 kW 599 M HAAT, 742 M COR
Prot.= 60 dBu, Intef.= 100 dBu

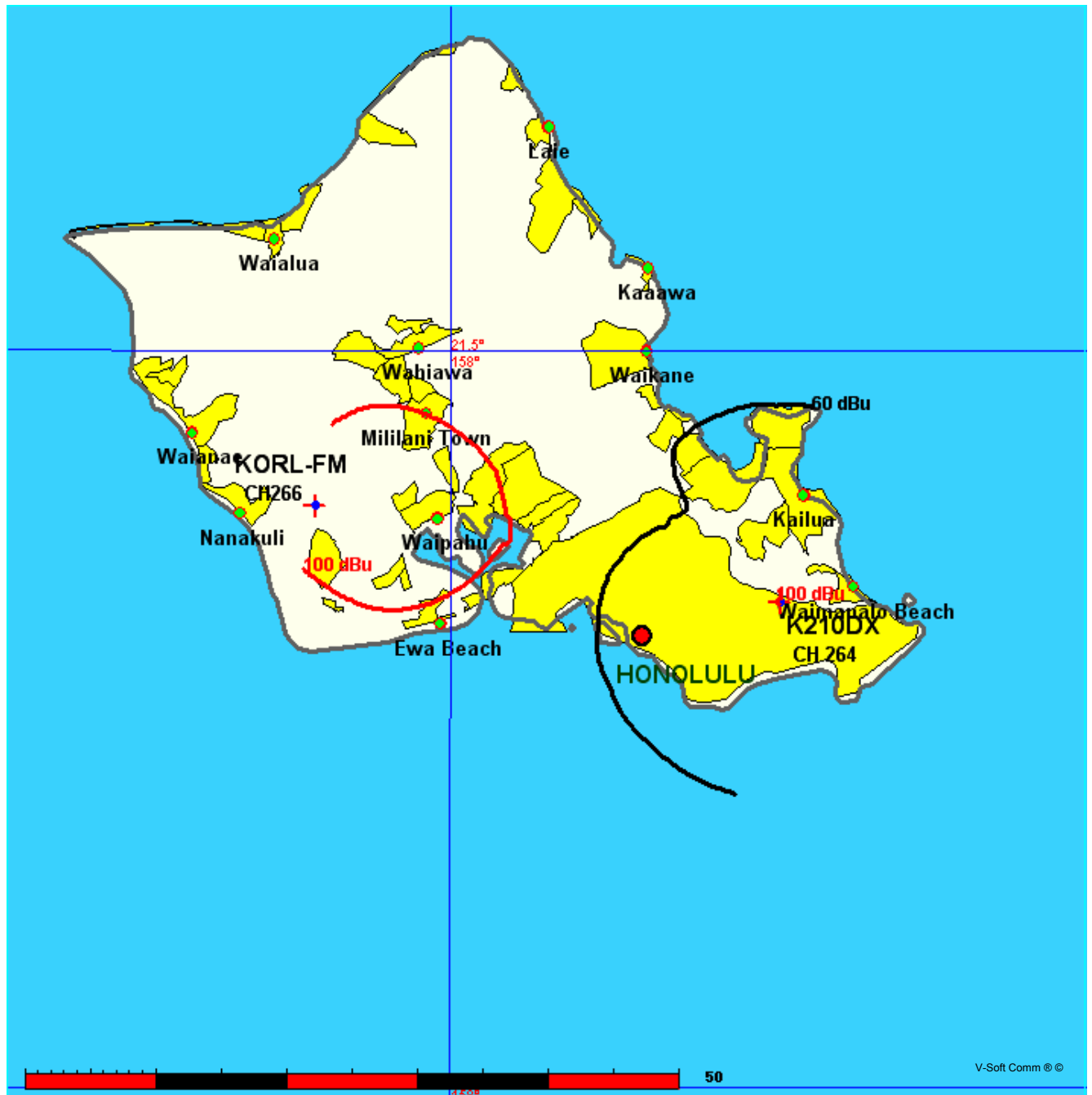


K210DX - KORL
University Of Hawaii

FMCommander Single Allocation Study - 08-29-2012 - FCC NGDC 30 Sec
K210DX's Overlaps (In= 8.37 km, Out= -59.19 km)

K210DX CH 264 D
Lat= 21 19 49.0, Lng= 157 45 24.0
0.01 kW 667.9 M HAAT, 748 M COR
Prot.= 60 dBu, Intef.= 100 dBu

KORL-FM CH 266 C DA BLH20070706ACG
Lat= 21 23 45.0, Lng= 158 05 58.0
100.0 kW 592 M HAAT, 734 M COR
Prot.= 60 dBu, Intef.= 100 dBu



**AFFIDAVIT AND QUALIFICATIONS OF
DONALD E. MUSSELL JR.**

State of Hawaii)
Kilauea)
County of Kauai)

Donald E. Mussell Jr. affirms that he is a consulting radio and electronics engineer; that he is Certified as a Broadcast Engineer, Class 1, by the National Association of Radio and Telecommunications Engineers, Inc., License #E1-00619, issued in 1985;

That he is recognized as a Broadcast Technologist by the Society of Broadcast Engineers, License # 22301, and a member of the Society of Broadcast Engineers since 1980;

That he held a First Class Radiotelephone License from 1975 until 1985, when it was replaced by a lifetime General Class Radiotelephone license (PG-12-20588), issued by the Federal Communications Commission in January of 1985;

That he has submitted many applications to the Federal Communications Commission for broadcast and auxiliary broadcast construction permits and licenses, and that his experience in Radio and Television broadcast engineering extends over four decades;

That he declares, under penalty of perjury, that the foregoing engineering exhibits were prepared by him or under his direction and supervision; and that the statements contained therein are true and correct to the best of his belief and knowledge.

A handwritten signature in black ink, appearing to read 'Donald E. Mussell Jr.', with a stylized, cursive script.

Donald E. Mussell Jr. NCE-CBT
Consulting Engineer
August 30, 2012