Broadcast Engineering Services of Bonny Doon, Inc.
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Engineering Statement
in support of a Minor Modification
to the Construction Permit for
New, Lihue, Hawaii
BNPED-20071019AFY

The licensee of this new construction permit, Calvary Chapel Kauai (CCK), is requesting a minor change to relocate the transmitter site, increase the antenna height above sea level and height above average terrain, reduce power to 1 kilowatt and upgrade from Class C3 to Class C2. The licensee also requests a channel change to Ch. 210 (89.9 mhz), one channel below the currently authorized channel.

This proposal is free from overlap, either caused or received. There are no FM or TV facilities in the entire state of Hawaii that are affected or overlapped by this proposal. An allocation study, along with detail maps, is attached to this statement.

The proposed antenna system is a Shively 6600-1, a one bay, horizontally polarized non-directional antenna, mounted 18 meters above ground. This antenna will produce a calculated worst-case RFR energy field of 32.35 microwatts per squared centimeter at a distance of 15.6 meters from the base of the tower support structure. Mt Kahili is a remote, multi-user site, with very restricted, helicopter-only access. Combined with the co-located facilities of KAQA, KITH(FM), KTOH(FM) and KJMQ(FM), the total maximum calculated RFR level on the ground at the tower site will be 113.24 microwatts per squared centimeter. This is just over 55% of the non-occupied limit, and is therefore compliant with the FCC rules concerning RFR both on and adjacent to the proposed tower location. There are no other broadcast facilities within 2 miles of this site.

CCK is ready to construct this new 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 underlying construction permit.

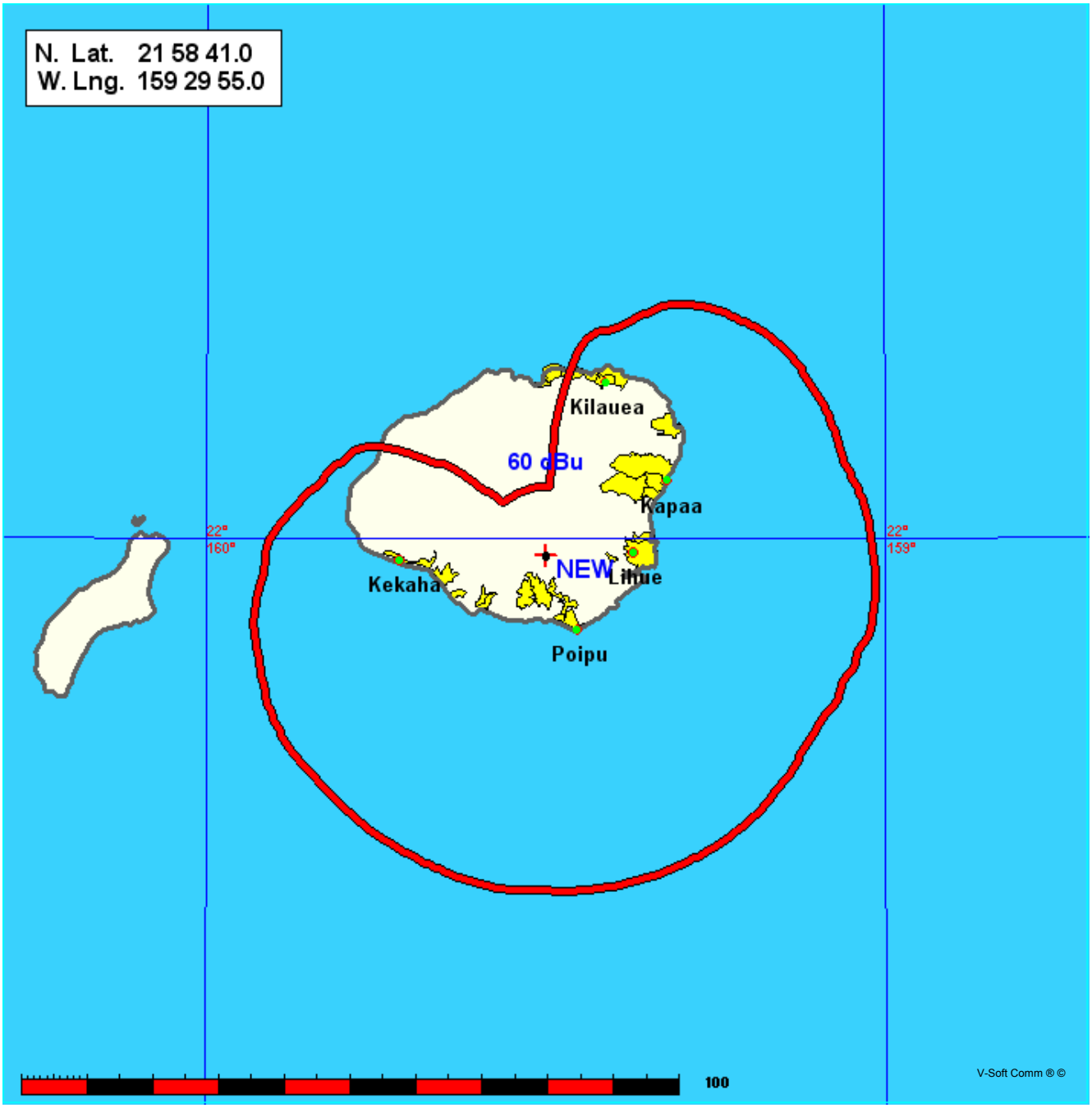
Respectfully submitted,

Donald E. Mussell Jr. NCE-CBT
Consulting Engineer
November 17, 2012

Minor Change
Calvary Chapel Kauai

Coverage Study - FCC NGDC 30 Sec
11-17-2012

NEW CH210 C2, 1.0 kW, 539.1M HAAT, 859.0M COR AMSL
Service Contour = 60 dBu. Population = 55,141



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

Minor Change Allocation Study
Calvary Chapel Kauai

REFERENCE CH# 210C2 - 89.9 MHz, Pwr= 1 kW, HAAT= 539.1 M, COR= 859 M DISPLAY DATES
21 58 41.0 N. Average Protected F(50-50)= 42.12 km DATA 11-17-12
159 29 55.0 W. Omni-directional SEARCH 11-17-12

CH CALL / CITY	TYPE ANT / STATE	AZI / <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* / (Overlap in km)	*OUT* / (Overlap in km)
211C3 NEW Lihue	CP _CX HI	130.3 310.3	7.20 BNPED20071019AFY	21 56 10.0 159 26 43.0	4.000 237	21.1 414	14.2 Calvary Chapel Kauai	-63.2*	-80.6*
209D K209FK Lihue	LIC _V_ HI	73.1 253.2	7.78 BLFT20110103ABA	21 59 54.0 159 25 35.0	0.019 140	5.3 375	3.7 Calvary Chapel Of Twin Fal	-44.8*	-73.4
264D 634577« Kapaa	APP _C_ HI	52.1 232.2	21.63 BNPFT20030313AOP	22 05 51.0 159 19 58.0	0.250 -2	142.9 100	62.7 George Hochman	14.5R	7.1M
211C1 KTUH Honolulu	APP _HX HI	112.0 292.6	187.94 BMPED20120827AER	21 20 12.0 157 49 03.0	7.500 501	90.3 619	60.3 The Universit	48.9	52.3

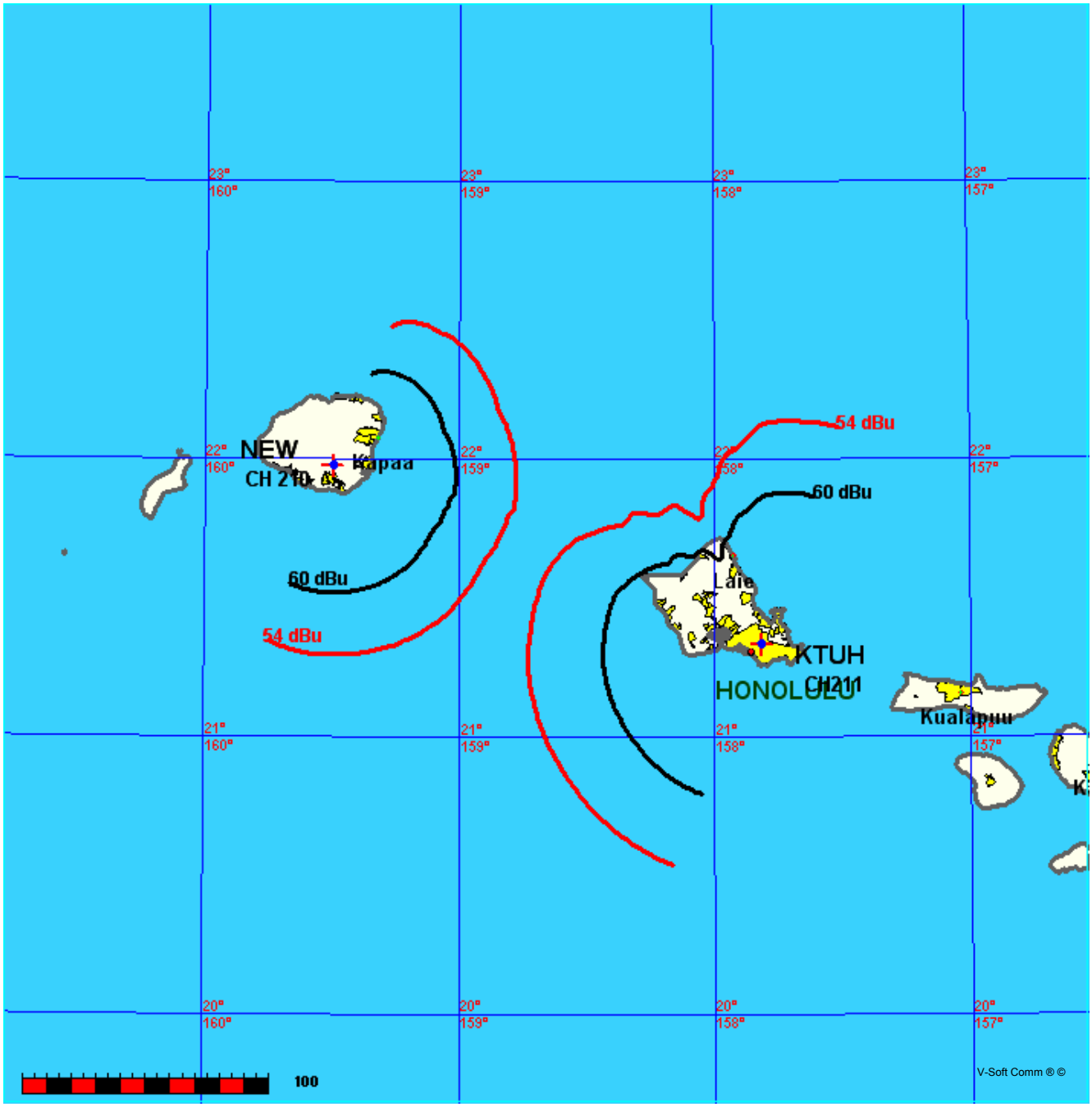
Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= - Zone 2, Co to 3rd adjacent.
All separation margins (if shown) include rounding
Ant Column: (D= DA Standard, 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.
« = Station meets FCC minimum distance spacing for its class.

New - KTUH
Calvary Chapel Kauai

FMCommander Single Allocation Study - 11-17-2012 - FCC NGDC 30 Sec
NEW's Overlaps (In= 48.86 km, Out= 52.25 km)

NEW CH 210 C2
Lat= 21 58 41.0, Lng= 159 29 55.0
1.0 kW 539.1 M HAAT, 859 M COR
Prot.= 60 dBu, Intef.= 54 dBu

KTUH-A CH 211 C1 BMPED20120827AER
Lat= 21 20 12.0, Lng= 157 49 03.0
7.5 kW 501 M HAAT, 619 M COR
Prot.= 60 dBu, Intef.= 54 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.

Donald E. Mussell Jr. NCE-CBT
Consulting Engineer
November 17, 2012