

Non-Interference Compliance

Regarding Facility id 89650

Channel 214

Description of Exhibit 13 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Note: This application is filed simultaneously with a CP Mod for K216FI. This proposal will combine K216FI and K215EH on the same tower on the same antenna. K215EH will be changed to channel 214 so these two stations will be 2nd adjacents. Both stations will qualify for 1204(d) population waivers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1724589	BLED20160321AAC	KTUH	139.8	124
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				124

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **124 dBμ**, this makes the proposed translator's worst-case interfering contour **164 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **0.1 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population").

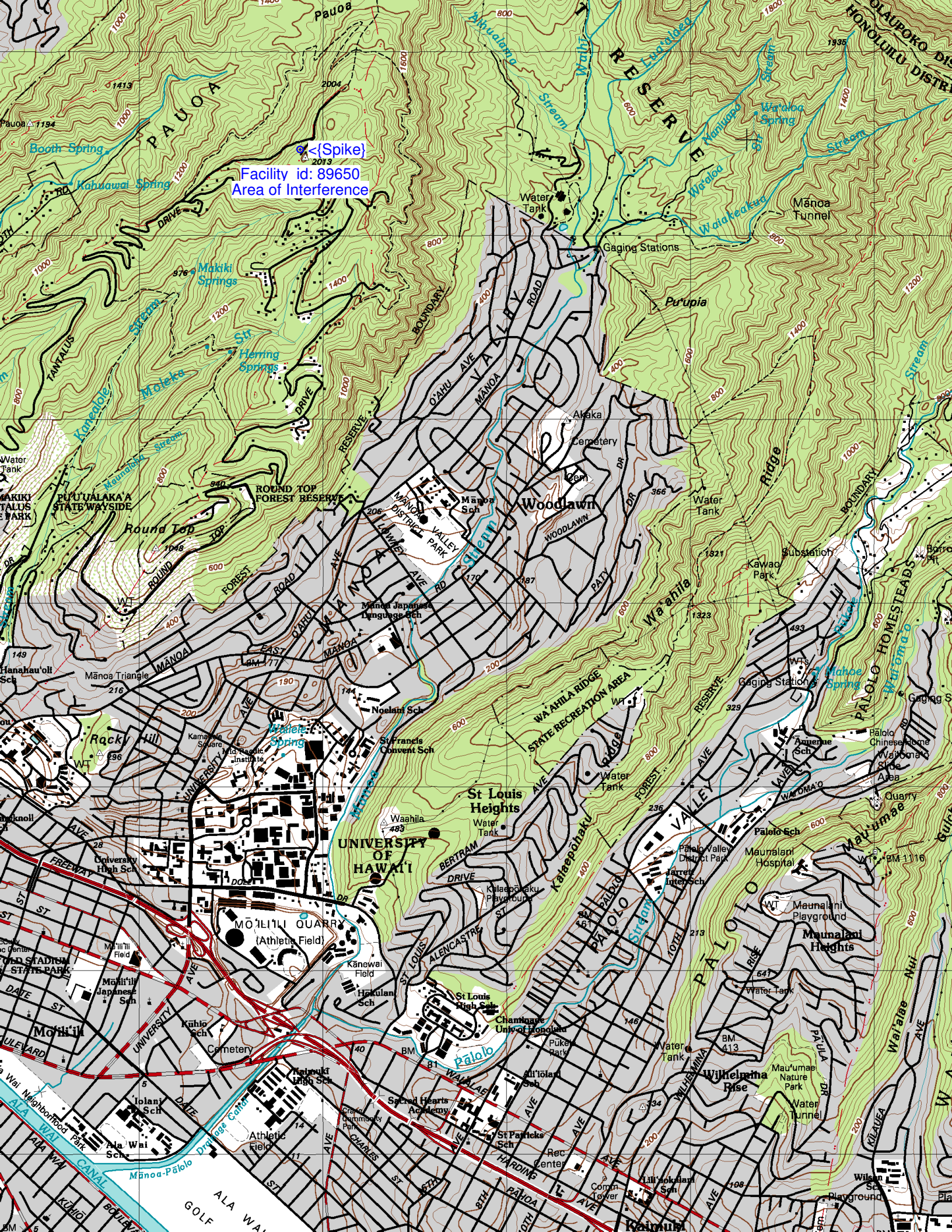
Note: The only structure within the zone of predicted interference is an unoccupied communications building, so in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	BEXT
Antenna Model:	TFC2K @ 140°
CORAGL:	33 m
Maximum ERP:	0.01 kW
Interfering Contour:	164 dBμ
Max Int. Contour Distance:	0.1 m

Adjacent Channel Study **For Station K215EH, Facility_id: 89650**

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Char	Adj	Dist	Overlap
1724589	66592	BLED-20160321AAC	KTUH	THE UNIVERSITY OF HAWAII	C1	HONOLULU	HI	LIC	7	619	211	3	0.1	0.0434
1242149	77051	BMLFT-20080404AAf	K216FI	CALVARY CHAPEL OF TWIN FAL	D	HONOLULU	HI	LIC	0.1	105	216	2	6.5	0
1532289	6905	BLFT-20121203AKM	K216GH	UNIVERSITY OF HAWAII	D	WAIALUA	HI	LIC	0.095	1170	216	2	39.5	0
1764897	26437	BLED-20170817AAY	KKUA	HAWAII PUBLIC RADIO, INC.	C	WAILUKU	HI	LIC	14.5	2986	214	0	175.7	0



<[Spike]
Facility id: 89650
Area of Interference

