

ENGINEERING STATEMENT

This engineering data contained herein have been prepared on behalf of HOPE FM RADIO GROUP, in support of its Application for Construction Permit for a new LPFM station on Channel 238L1 (95.5 MHz) in Ilili, Tualauta County, American Samoa.

It is proposed to mount a one-bay circularly polarized antenna 6-meters above the existing 10.7-meter lakina SDA church. The antenna radiation center will be 5.5 meters above the church roof level, 16.2 meters above ground, and 42.2 meters above mean sea level. The coordinates of the transmitter site are: 14-20-32.6 S, 170-44-05.5 W (NAD83). The proposed studio site on Ilili Road, lakina, American Samoa, is located approximately 1 kilometer (less than one mile) southwest of the proposed transmitter site.

The predicted 60 dBu service contour of the proposed facility is plotted in Exhibit B and a power density calculation is provided in Exhibit C. It is important to note that there are no co-channel, first-adjacent-channel or second-adjacent-channel stations located within 75-kilometers of the required FCC spacings to such stations.

Since the proposed increase in the overall height of the existing building is no more than 20 feet, FAA notification is not required, nor is FCC antenna structure registration.

I declare under penalty of perjury that the foregoing statements and the attached exhibits are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read 'K. T. Fisher', is written over the signature line.

December 1, 2023

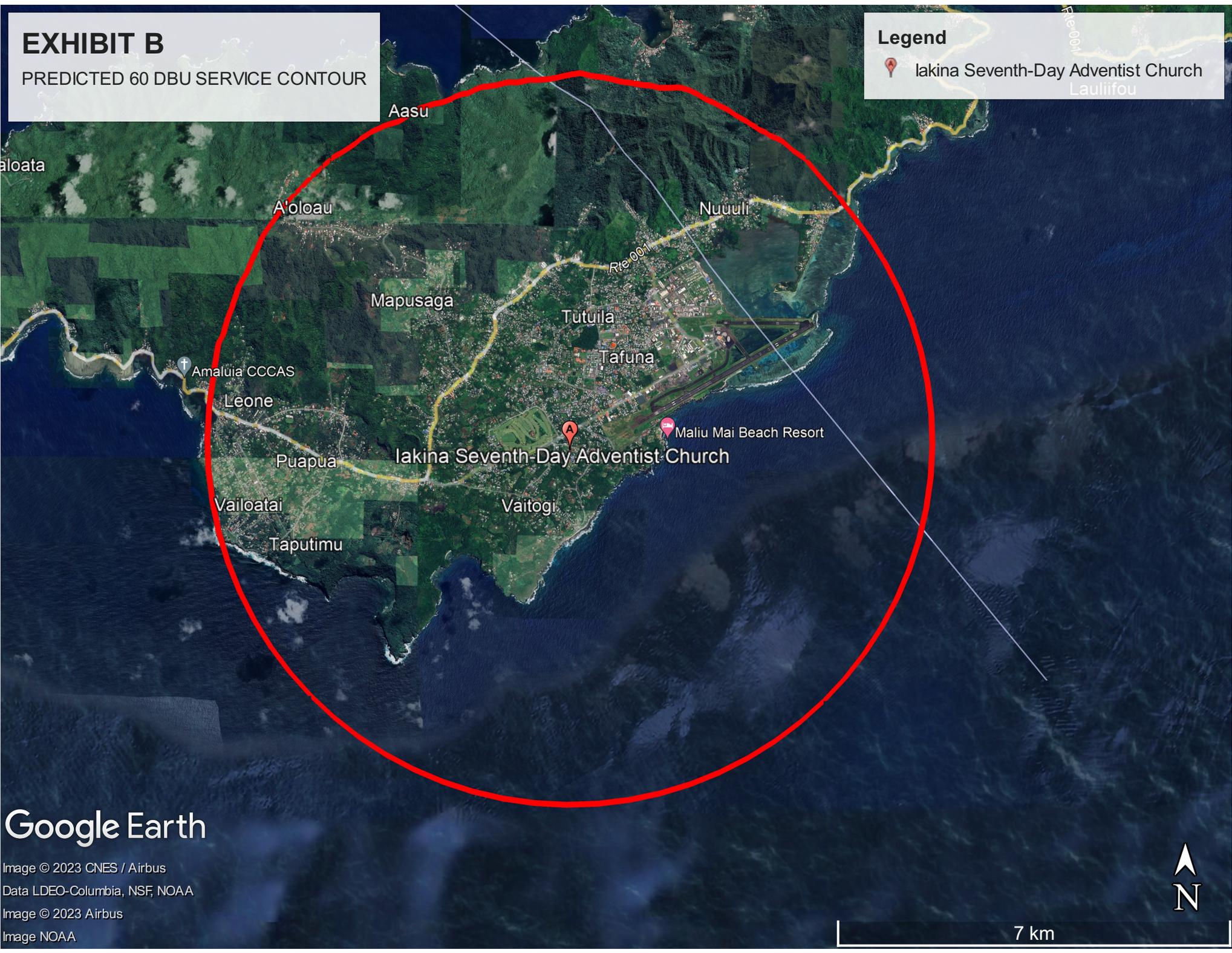
KEVIN T. FISHER

EXHIBIT B

PREDICTED 60 DBU SERVICE CONTOUR

Legend

-  lakina Seventh-Day Adventist Church
-  Lauiliifou



Google Earth

Image © 2023 CNES / Airbus
Data LDEO-Columbia, NSF, NOAA
Image © 2023 Airbus
Image NOAA



7 km

POWER DENSITY CALCULATION
PROPOSED LPFM STATION
CHANNEL 238L1 – ILIILI, AMERICAN SAMOA

Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 100 watts (H,V), an antenna radiation center 16.2 meters above ground level and the elevation pattern for a typical 1-bay FM antenna, maximum power density two meters above ground of 0.0093 mW/cm^2 is calculated to occur approximately 5 meters from the base of the supporting structure. Since this value is only 4.7 percent of the 0.20 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating in the FM band, a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing electromagnetic radiation.