

TECHNICAL SUMMARY
AMENDMENT TO AUXILIARY APPLICATION
FM STATION KPHW
KANEEOHE, HAWAII
CH 282C (104.3 MHZ) 2.5 KW (ND) 638 M

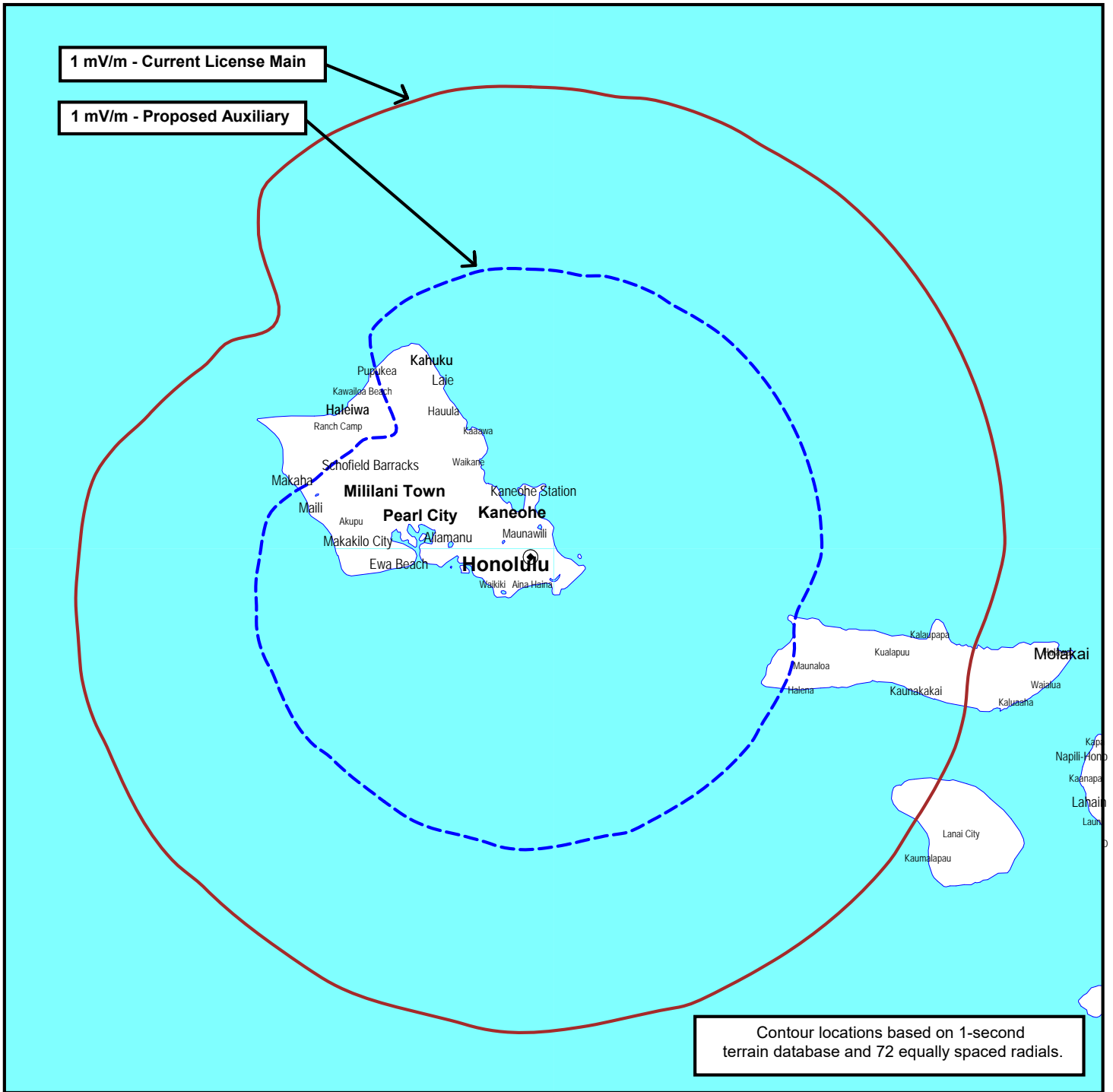
1. Proposed Auxiliary Operation: It is proposed to side-mount a Bext model TFC-2K, 3-bay half wavelength (HW) spaced nondirectional antenna on the existing tower located at the Wiliwilinui Ridge transmitter site which will result in an antenna center of radiation height of 19.8 meters above ground level and 763.8 meters above mean sea level. The ERP will be 2.5 kW. The existing 35 meter, unregistered supporting structure is currently used by KPHW and KRTR-FM (Ch. 242C/96.3 MHz, Kailua).

2. Compliance with Section 73.1675(a): Figure 1 demonstrates that the 1 mV/m contour of the KPHW auxiliary facility is located entirely within the 1 mV/m contour of the currently licensed (BMLH-20130125AEB) KPHW main facility in accordance with Section 73.1675(a), except for a small area of extension over the Pacific Ocean which is permitted by the FCC.

3. RFR Compliance: The proposed KPHW auxiliary facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to mount a Bext model TFC-2K, 3-bay half wavelength (HW) spaced, circularly polarized nondirectional antenna at the 19.8 meter level on the existing tower. The proposed antenna will also be used for the auxiliary operations of KINE-FM, KRTR-FM and KCCN-FM which are also concurrently filing auxiliary applications. The ERP for KPHW and KRTR-FM will be 2.5 kW (H&V) and the ERP for KCCN-FM and KINE-FM will be 2.2 kW (H&V). Thus, the total ERP will be 9.4 kW (H&V). Figure 2 depicts the output of the FCC's FM Model program. As indicated, a maximum power density of 98.8 uW/cm^2 will occur at a point located 49.2 meters from the tower base. This is only 49.4% of the FCC's recommended limit of 200 uW/cm^2 for FM frequencies for an uncontrolled environment.

A protocol shall be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to RF energy exposure.

Figure 1



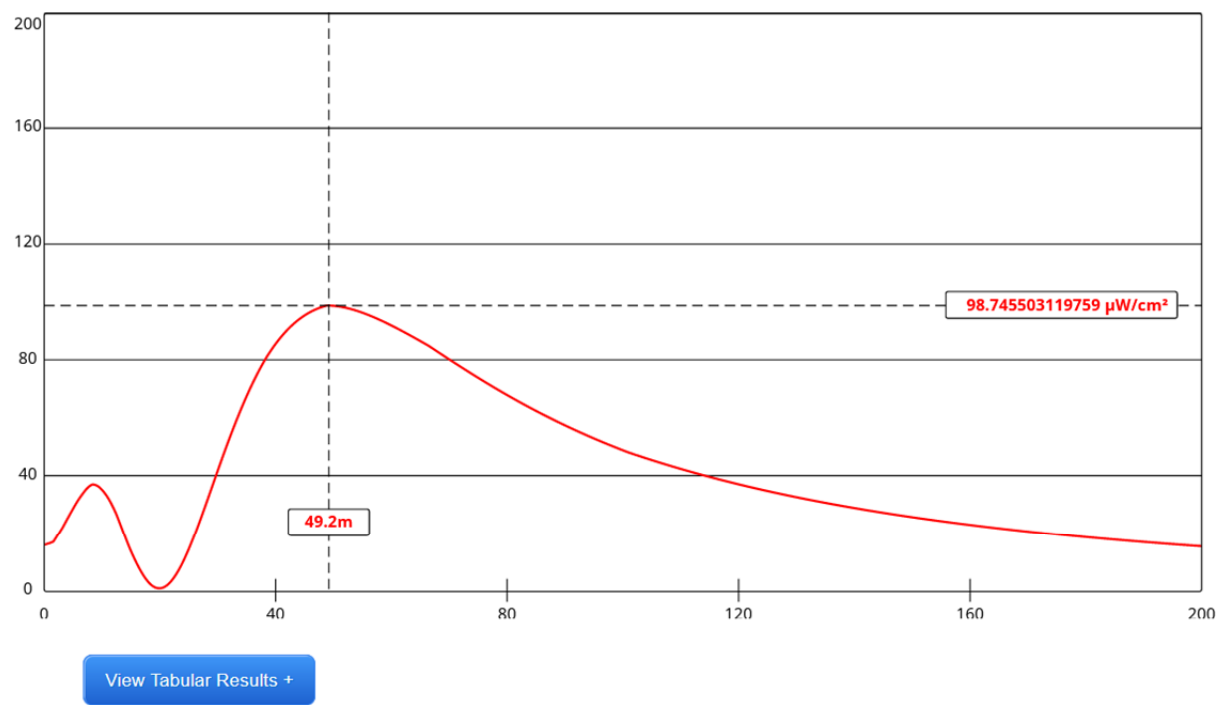
**COMPLIANCE WITH SECTION 73.1675(A)
PROPOSED AUXILIARY OPERATION**

STATION KPHW
KANEHOE, HAWAII
CH 282C (104.3 MHZ) 2.5 KW 638 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2

FM Model Output:



| | | | |
|-------------------|-----------------------------------|--------------------------------------|-----------------------------------|
| Channel Selection | Channel 282 (104.3 MHz) ▾ | | |
| Antenna Type + | EPA Type 2: Opposed V Dipole ▾ | | |
| Height (m) | <input type="text" value="19.8"/> | Distance (m) | <input type="text" value="200"/> |
| ERP-H (W) | <input type="text" value="9400"/> | ERP-V (W) | <input type="text" value="9400"/> |
| Num of Elements | <input type="text" value="3"/> | Element Spacing (λ) | <input type="text" value="0.5"/> |
| Num of Points | <input type="text" value="500"/> | <input type="button" value="Apply"/> | |