

ENGINEERING STATEMENT

This engineering data contained herein have been prepared on behalf of SOUND OF HOPE RADIO NETWORK, INC., licensee of Low Power FM radio station KQEB-LP, which operates on Channel 245L1 in San Francisco, CA, in support of this request for Special Temporary Authority to operate at a lower height on the structure while tower renovation occurs. The renovation work is scheduled to commence on February 29, 2016, and continue until June, 2016. During this time, the tower owner requests that the licensed one-bay KQEB-LP antenna be moved from its present location 92 meters above ground to a temporary location 78.6 meters above ground while renovation work on the tower occurs. No change in site location is proposed herein.

The predicted service contour of the newly proposed facility is plotted in Exhibit B. A revised second-adjacent-channel waiver request with respect to stations KOIT and KLLC is provided in Exhibit C. Proposed operating parameters are provided in Exhibit D, and a new power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the supporting structure is proposed herein, the Federal Aviation Administration has not been notified of this request for Special Temporary Authority. In addition, the FCC has issued Antenna Structure Registration Number 1023253 to this structure.

EXHIBIT A

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher". The signature is stylized with a large "K" and "F".

KEVIN T. FISHER

January 28, 2016

**CONTOUR POPULATION
2010 U.S. CENSUS DATA
362,593**



KQEB-LP Site
Latitude: 37-47-36.30 N
Longitude: 122-24-47.10 W
ERP: 0.005 kW
Channel: 245
Frequency: 96.9 MHz
AMSL Height: 157.6 m
Horiz. Pattern: Omni

Tiburon

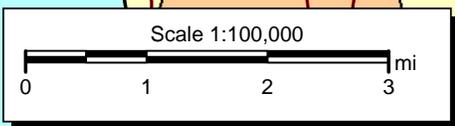
**60 DBU FCC
CONTOUR**

KQEB-LP Site

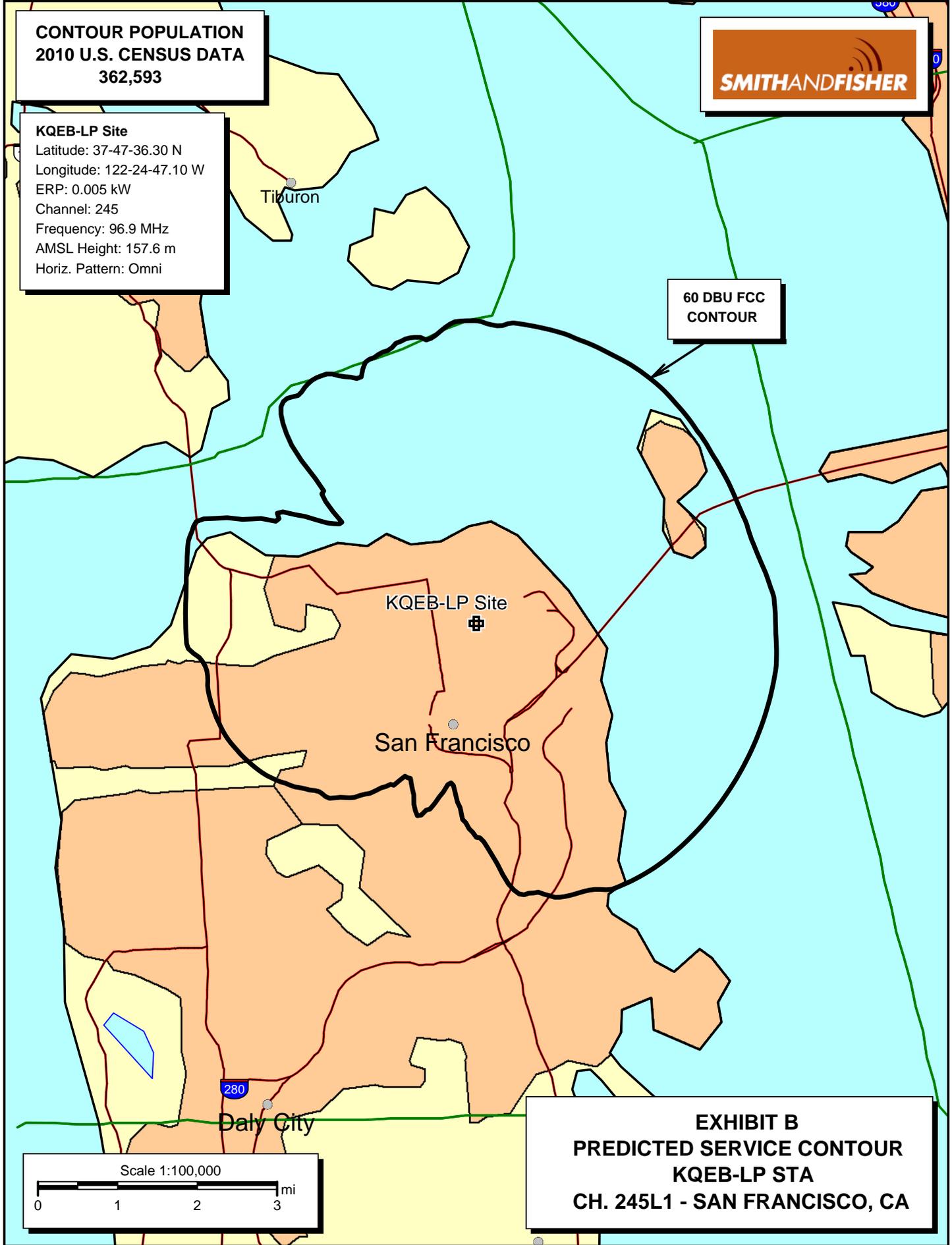
San Francisco

Daly City

280



**EXHIBIT B
PREDICTED SERVICE CONTOUR
KQEB-LP STA
CH. 245L1 - SAN FRANCISCO, CA**



SECOND-ADJACENT-CHANNEL WAIVER REQUEST
KQEB-LP SPECIAL TEMPORARY AUTHORITY
CHANNEL 245 – SAN FRANCISCO, CALIFORNIA

The proposed site is located 5.4 kilometers from that of KOIT(FM), Channel 243B in San Francisco, California. It is also located 9.8 kilometers from that of KLLC(FM), which operates on Channel 247B in San Francisco. Since the required spacing to these stations is 67 kilometers, a waiver of the Commission's spacing rules with regard to these stations is requested and believed to be justified for the reasons stated below.

Attached as Exhibit C-2 is a map upon which the proposed site is plotted. To that map, we have shown the 104.3 dBu contour of KOIT and the 101.0 dBu contour of KLLC, both of which pass very close to the proposed site. Based on the FCC's 40 dB desired-to-undesired ratio that applies to second-adjacent-channel situations such as these, the proposed interference contour to KLLC (the worst case situation) is 141.0 dBu. If one assumes a maximum effective radiated power of 5.0 watts in all depression angles for the LPFM antenna, the interference contour toward KOIT and KLLC would extend 1 meter from the proposed antenna. Since the antenna will be mounted more than 1 meter above the roof level of the building, it is clear that the interference contour will be located well above the building's roof and will not adversely affect the reception of KOIT or KLLC.

As a result, a waiver of the FCC's 2nd-adjacent-channel spacing Rule with regard to KOIT(FM) and KLLC(FM) is respectfully requested and believed to be justified.



Sausalito

KLLC

KLLC 101.0 DBU
FCC CONTOUR

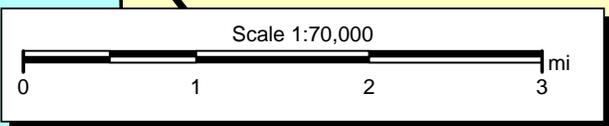
KOIT 104.3 DBU
FCC CONTOUR

Proposed Site

San Francisco

KOIT

EXHIBIT C-2
SECOND-ADJACENT-CHANNEL
WAIVER REQUEST TO KLLC/KOIT
KQEB-LP STA
CH. 245L1 - SAN FRANCISCO, CA



PROPOSED OPERATING PARAMETERS

KQEB-LP STA REQUEST
CHANNEL 245L1 – SAN FRANCISCO, CALIFORNIA

Station Call Sign:	KQEB-LP
Channel:	245L1
Frequency:	96.9 MHz
City of License:	San Francisco, CA
Site Coordinates (NAD27):	37-47-36.3 N 122-24-47.1 W
FCC ASRN:	1023253
Site Elevation:	105.3 meters AMSL
Overall Height:	109.2 meters AGL
Antenna Radiation Center:	78.6 meters AGL 183.9 meters AMSL
Effective Radiated Power (H,V):	5 watts (approx.)
Antenna Type:	1-Bay, Circularly Polarized
Orientation	Omnidirectional
Beam Tilt	none

POWER DENSITY CALCULATION
KQEB-LP STA REQUEST
CH. 245L1 – SAN FRANCISCO, CALIFORNIA

Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 5 watts (H,V), an antenna radiation center 7.3 meters above roof level, and assuming a vertical relative field value of 40 percent at the steeper elevation angles for the proposed antenna, maximum power density two meters above ground of 0.0019 mW/cm^2 is calculated to near the base of the tower on the roof. Since this is only 0.95 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.