

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of television translator K18CB, Channel 18 in Bullhead City, AZ, in support of its Application for Construction Permit to specify digital operation on Channel 18 from the present site, as a "flashcut" application.

It is proposed to mount a Bogner B4UD directional antenna, at the 12-meter level of an existing 13-meter communications tower. A coverage map is provided in Exhibit B, and an interference study in Exhibit C. A power density calculation follows as Exhibit D.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. Due to the diminutive height of the tower and its proximity to the nearest airport runway, no FCC antenna structure registration number is required.

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.



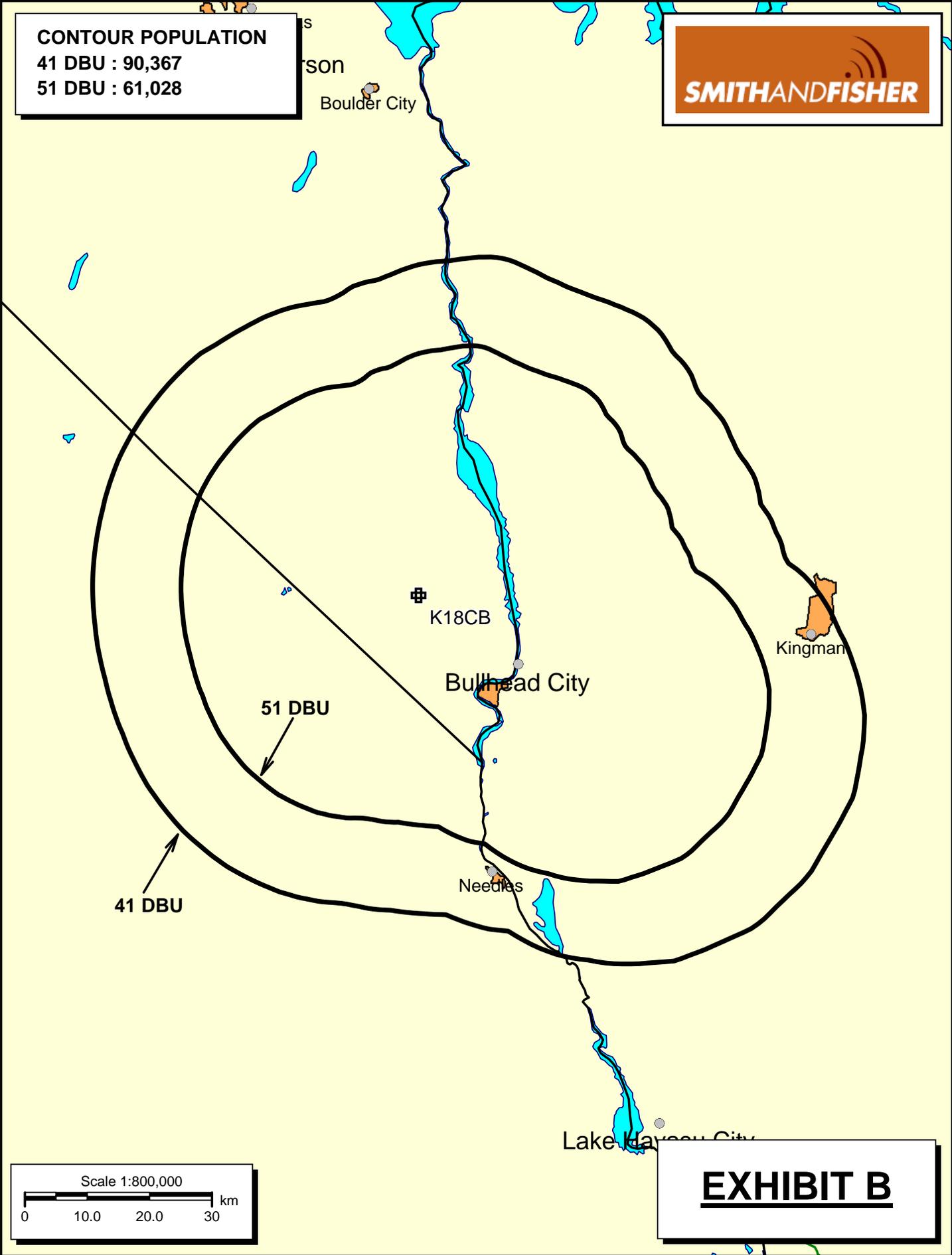
KYLE T. FISHER

May 7, 2013

CONTOUR POPULATION

41 DBU : 90,367

51 DBU : 61,028



41 DBU

51 DBU

K18CB

Bullhead City

Needles

Lake Havasu City

Kingman

son

Boulder City

EXHIBIT B

Scale 1:800,000



LONGLEY-RICE INTERFERENCE STUDY
PROPOSED K18CB-D
CHANNEL 18 – BULLHEAD CITY, ARIZONA

We conducted a detailed interference study using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 2000 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than the proposed K18CB-D facility) already is predicted to exist (also known as "masking"). The results of this study are provided in Exhibit B-2. It concludes that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, it is believed that the proposed digital K18CB-D facility complies with the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 of the Commission's Rules.

INTERFERENCE SUMMARY

PROPOSED K18CB-D
CHANNEL 18 – BULLHEAD CITY, ARIZONA

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
KMOH-DT BLCDT-20060707ABK	Lic.	Kingman, AZ	19	144,659	136	0.1
K17BN-D BLDTL-20130308ACD	Lic.	Needles, CA	17	64,098	7	<0.1
KHMP-LD BLDTL-20090904ADF	Lic.	Las Vegas, NV	18	1,345,938	2	<0.1

POWER DENSITY CALCULATION

PROPOSED K18CB-D
CHANNEL 18 – BULLHEAD CITY, ARIZONA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Bullhead City facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 2.54 kW, an antenna radiation center 12 meters above ground, and assuming an RF value of 0.2 at the steeper elevations angles, maximum power density two meters above ground of 0.03 mW/cm² is calculated to occur close to the base of the tower. Since this is 10.2 percent of the 0.33 mw/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 18 (494-500 MHz), this proposal may be considered a minor environmental action with respect to public exposure to nonionizing 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 nonionizing radiation.