

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of UHF TV, INC., licensee of television translator K28IF, Channel 28 in Willmar, Minnesota in support of this Application for Construction Permit to specify digital operation on Channel 28 from the licensed K28IF site, as a "flashcut" proposal.

It is proposed to mount a standard MCI omnidirectional antenna at the 144-meter level of an existing 153-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the proposed 51 dBu contour encompasses a significant portion of the Grade A contour that obtains from the licensed K28IF facility. Operating parameters for the proposed facility are tabulated in Exhibit C. An interference study is provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1040404 to this tower.

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.

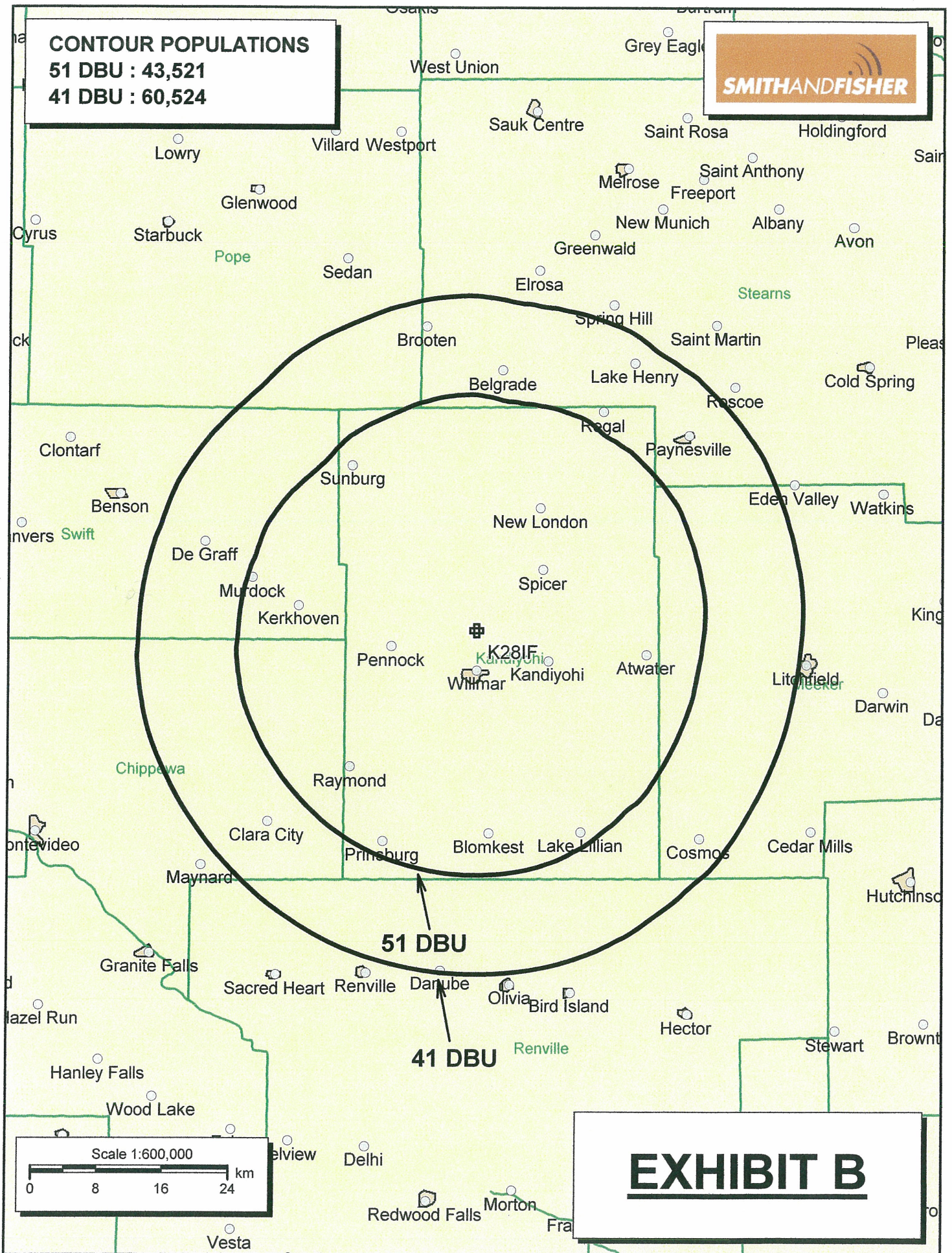


KYLE T. FISHER

December 7, 2010



**41 DBU : 60,524**



## EXHIBIT B



LONGLEY-RICE INTERFERENCE STUDY  
PROPOSED K28IF-D  
CHANNEL 28 – WILLMAR, MINNESOTA

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 proposed K28IF-D) already is predicted to exist (also known as "masking"). The results of this study are provided in Exhibit D-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 K28IF-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 K28IF-D  
CHANNEL 28 – WILLMAR, MINNESOTA

<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>
KRWF-D BLC DT-20080502ABG	Lic.	Redwood Falls, MN	27	88,963	6	<0.1

POWER DENSITY CALCULATION

PROPOSED K28IF-D  
CHANNEL 28 – WILLMAR, MINNESOTA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Willmar facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 0.467 kw, an antenna radiation center 144 meters above ground, and the vertical relative field value of 10 percent at the steeper elevation angles of the MCI antenna, maximum power density two meters above ground of  $0.0000077 \text{ mw/cm}^2$  is calculated to occur near the base of the tower. Since this is less than 0.1 percent of the  $0.37 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 28 (554-560 MHz), this proposal may be excluded from consideration 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.