

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRI-STATE CHRISTIAN TV, INC., licensee of television translator W42CO, Channel 42 in Rochester, New York, in support of this amendment to its application for Construction Permit BDFCDTT-20060331BDS, which seeks digital operation on Channel 42 from the licensed W42CO site, as a "flashcut" proposal. The purpose of this amendment is to reduce the proposed effective radiated power from 10 kw to 8 kw in order to alleviate predicted interference to WSKG-TV in Binghamton, New York. No change in site location or antenna height is proposed herein.

Exhibit B is a map upon which the revised service contours are plotted. It is important to note that the newly proposed 51 dBu contour continues to encompass a significant portion of the Grade A contour that obtains from the licensed W42CO facility. Operating parameters for the new 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 1061133 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.



KEVIN T. FISHER

August 22, 2006

**CONTOUR POPULATION**

51 DBU : 881,234

41 DBU : 963,886

**SMITH and FISHER**

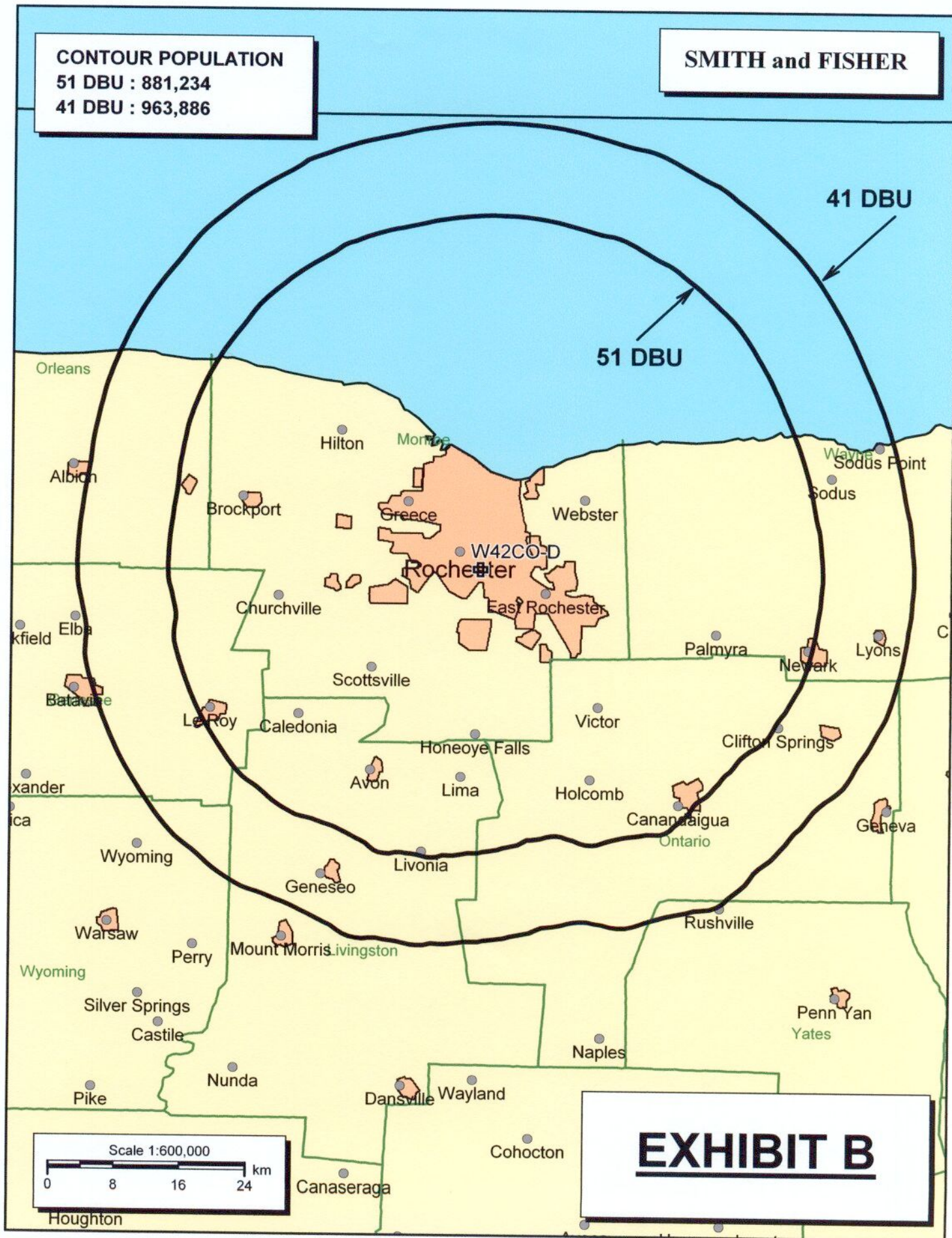




EXHIBIT C

## PROPOSED OPERATING PARAMETERS

PROPOSED W42CO-D  
CHANNEL 42 – ROCHESTER, NEW YORK  
[AMENDMENT TO BDFCDTT-20060331BDS]

Transmitter Power Output:	0.7 kw
Transmission Line Efficiency:	81.7%
Antenna Power Gain – Toward Horizon:	14.06
Antenna Power Gain – Main Lobe:	14.06
Effective Radiated Power – Toward Horizon:	8.0 kw
Effective Radiated Power – Main Lobe:	8.0 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	160 feet
Antenna Make and Model:	ERI AL8
Orientation	Omnidirectional
Beam Tilt	1.75 degrees
Radiation Center Above Ground:	35 meters
Radiation Center Above Mean Sea Level:	255 meters

LONGLEY-RICE INTERFERENCE STUDIES  
PROPOSED W42CO-D  
CHANNEL 42 – ROCHESTER, NEW YORK  
[AMENDMENT TO BDFCDTT-20060331BDS]

We conducted detailed interference studies 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 0.1 kilometer increments along each radial studied, and employs the 1990 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 W42CO-D) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-2. They conclude 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 W42CO-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 W42CO-D  
CHANNEL 42 – ROCHESTER, NEW YORK  
[AMENDMENT TO BDFCDTT-20060331BDS]

<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>
WNED-DT BLEDT-20030812AAJ	Lic.	Buffalo, NY	43	1,405,481	3,928	0.3
WSKG-DT BLEDT-20050526ACA	Lic.	Binghamton, NY	42	662,092	2,051	0.3
NEW-DT BPFS-20041026AAA	Appl.	Welland, ON	42	1,269,470	95	<0.1

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED W42CO-D  
CHANNEL 42 – ROCHESTER, NEW YORK  
[AMENDMENT TO BDFCDTT-20060331BDS]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Rochester facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 8 kw, an antenna radiation center 35 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of  $0.0023 \text{ mw/cm}^2$  is calculated to occur 30 meters from the base of the tower. Since this is only 0.5 percent of the  $0.43 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 42 (638-644 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.