

EXHIBIT A

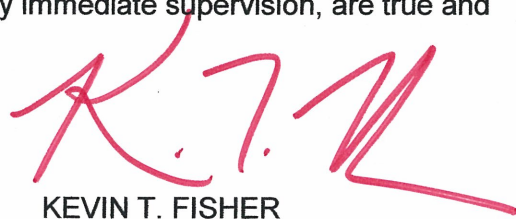
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV BAND SERVICE, LLC, licensee of digital Low Power Television Station W51CW-D, Channel 51 in Wilmington, North Carolina, in support of its Application for Construction Permit to operate with an increase in effective radiated power. No change in site location, antenna height or antenna type is proposed herein.

It is proposed to utilize the authorized omnidirectional antenna, which is mounted at the 77-meter level of an existing 82-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 51 dBu contour completely encompasses that presently licensed to W51CW-D. 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 1208239 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

November 3, 2010



**CONTOUR POPULATION**  
**51 DBU : 229,556**  
**41 DBU : 260,626**





EXHIBIT C

## PROPOSED OPERATING PARAMETERS

PROPOSED W51CW-D  
CHANNEL 51 – WILMINGTON, NORTH CAROLINA

Transmitter Power Output:	1.6 kw
Transmission Line Efficiency:	65.8%
Antenna Power Gain – Toward Horizon:	14.06
Antenna Power Gain – Main Lobe:	14.06
Effective Radiated Power – Toward Horizon:	15.0 kw
Effective Radiated Power – Main Lobe:	15.0 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Andrew LDF7-50A
Size and Type:	1-5/8" foam heliax
Length:	275 feet*
Antenna Make and Model:	Scala SL-8
Orientation	Omnidirectional
Beam Tilt	1.75 degrees
Radiation Center Above Ground:	77 meters
Radiation Center Above Mean Sea Level:	84.6 meters

\*Estimated

LONGLEY-RICE INTERFERENCE STUDY  
PROPOSED W51CW-D  
CHANNEL 51 – WILMINGTON, NORTH CAROLINA

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 W51CW-D facility) 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 digital W51CW-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 W51CW-D  
CHANNEL 51 – WILMINGTON, NORTH CAROLINA

<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>
WFMY-DT BLCDT-20050628AAB	Lic.	Greensboro, NC	51	4,013,438	303	<0.1

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED W51CW-D  
CHANNEL 51 – WILMINGTON, NORTH CAROLINA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Wilmington facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kw, an antenna radiation center 77 meters above ground, and the specific elevation pattern of a Scala SL-8 cylinder antenna, maximum power density two meters above ground of  $0.0048 \text{ mw/cm}^2$  is calculated to occur 30 meters from the base of the tower. Since this is only 1.0 percent of the  $0.46 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 51 (692-698 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.