

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FAITH BROADCASTING NETWORK, INC., licensee of WNYB-DT, Channel 27 in Jamestown, New York, in support of its Application for Construction Permit to operate on Channel 26 with a maximized post-transition DTV facility.

It is proposed to utilize the present analog directional antenna which is mounted at the 313-meter level of the existing 323-meter tower on which the WNYB-DT antenna is presently mounted. Exhibit B provides antenna elevation and azimuth pattern data. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. An interference study is included in Exhibit D, and a power density calculation is provided in Exhibit E.

It is important to note that, while the proposed effective radiated power of 1000 kw exceeds that allowable in Section 73.622(f)(8)(i) of the Commission's Rules, the coverage of the facility proposed herein does not exceed that of the largest station in the market (WIVB-DT, Channel 39 in Buffalo, New York), as allowed in Section 73.622(f)(5) of the Rules.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the WNYB-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1009129 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

June 11, 2008



ELEVATION PATTERN

Type:	ATW30H4H	
Directivity:	Numeric	dBd
Main Lobe:	30.00	14.77
Horizontal:	9.73	9.88
Beam Tilt:	1.00	
Polarization:	Horizontal	
Channel:	26	
Location:		
Note:		

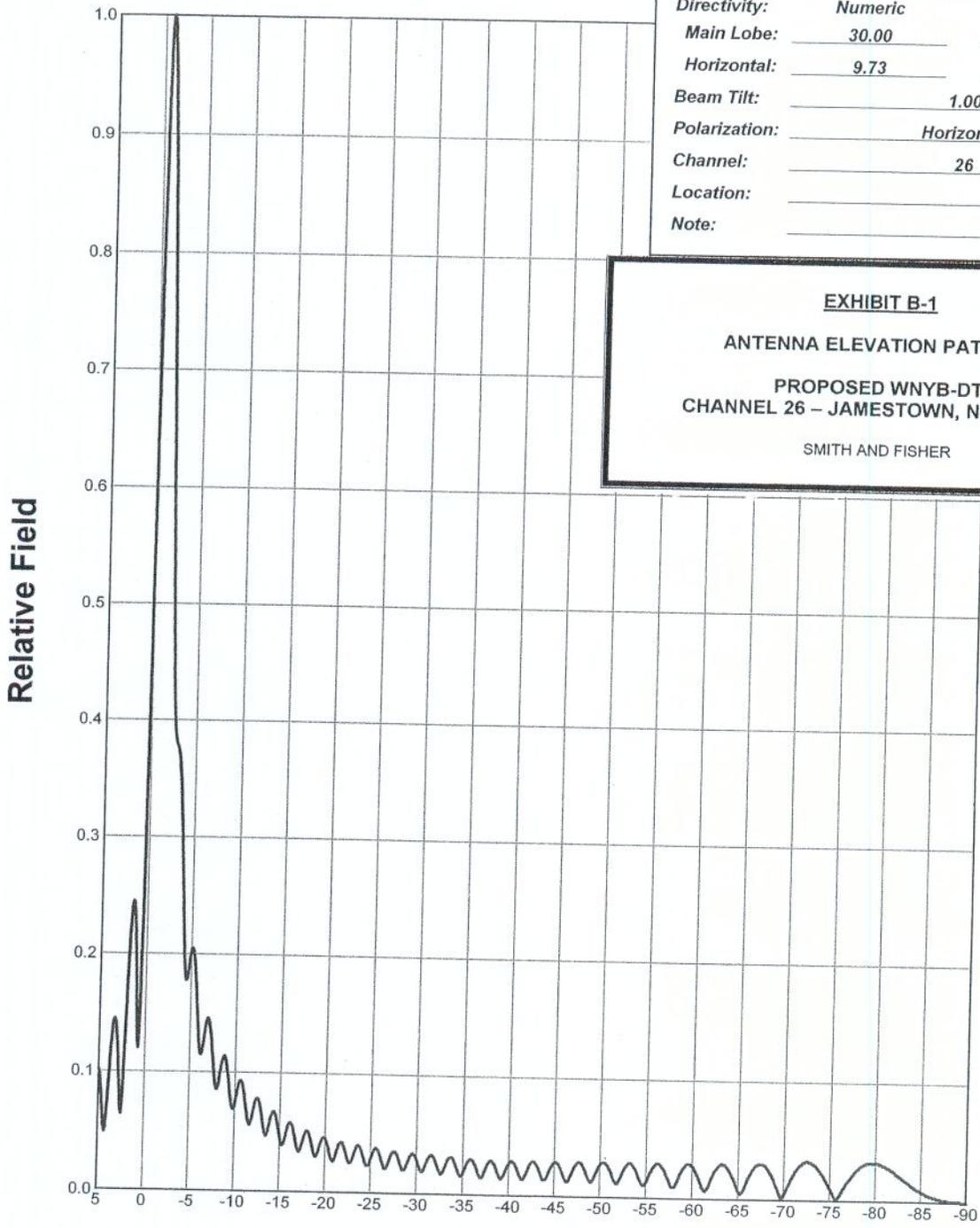


EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK
SMITH AND FISHER



Electronics Research, Inc.
7777 Gardner Road
Chandler, Indiana U.S.A 47610



**AZIMUTH PATTERN
FCC FILING FORMAT**

Type: ATW-C4

Polarization: Horizontal

Angle	Field	ERP (kW)	ERP (dBk)
0	1.000	1000.005	30.000
10	0.989	978.126	29.904
20	0.956	913.940	29.609
30	0.907	822.653	29.152
40	0.848	719.107	28.568
50	0.785	616.228	27.897
60	0.723	522.731	27.183
70	0.667	444.891	26.483
80	0.612	374.546	25.735
90	0.554	306.917	24.870
100	0.489	239.122	23.786
110	0.413	170.570	22.319
120	0.328	107.585	20.317
130	0.247	61.009	17.854
140	0.200	40.000	16.021
150	0.214	45.796	16.608
160	0.262	68.644	18.366
170	0.306	93.636	19.714
180	0.322	103.684	20.157
190	0.306	93.636	19.714
200	0.262	68.644	18.366
210	0.214	45.796	16.608
220	0.200	40.000	16.021
230	0.247	61.009	17.854
240	0.328	107.585	20.317
250	0.413	170.570	22.319
260	0.489	239.122	23.786
270	0.554	306.917	24.870
280	0.612	374.546	25.735
290	0.667	444.891	26.483
300	0.723	522.731	27.183
310	0.785	616.228	27.897
320	0.848	719.107	28.568
330	0.907	822.653	29.152
340	0.956	913.940	29.609
350	0.989	978.126	29.904



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EXHIBIT B-2

ANTENNA AZIMUTH PATTERN

**PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK**

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EXHIBIT B-3

ANTENNA RELATIVE FIELD VALUES

**PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK**

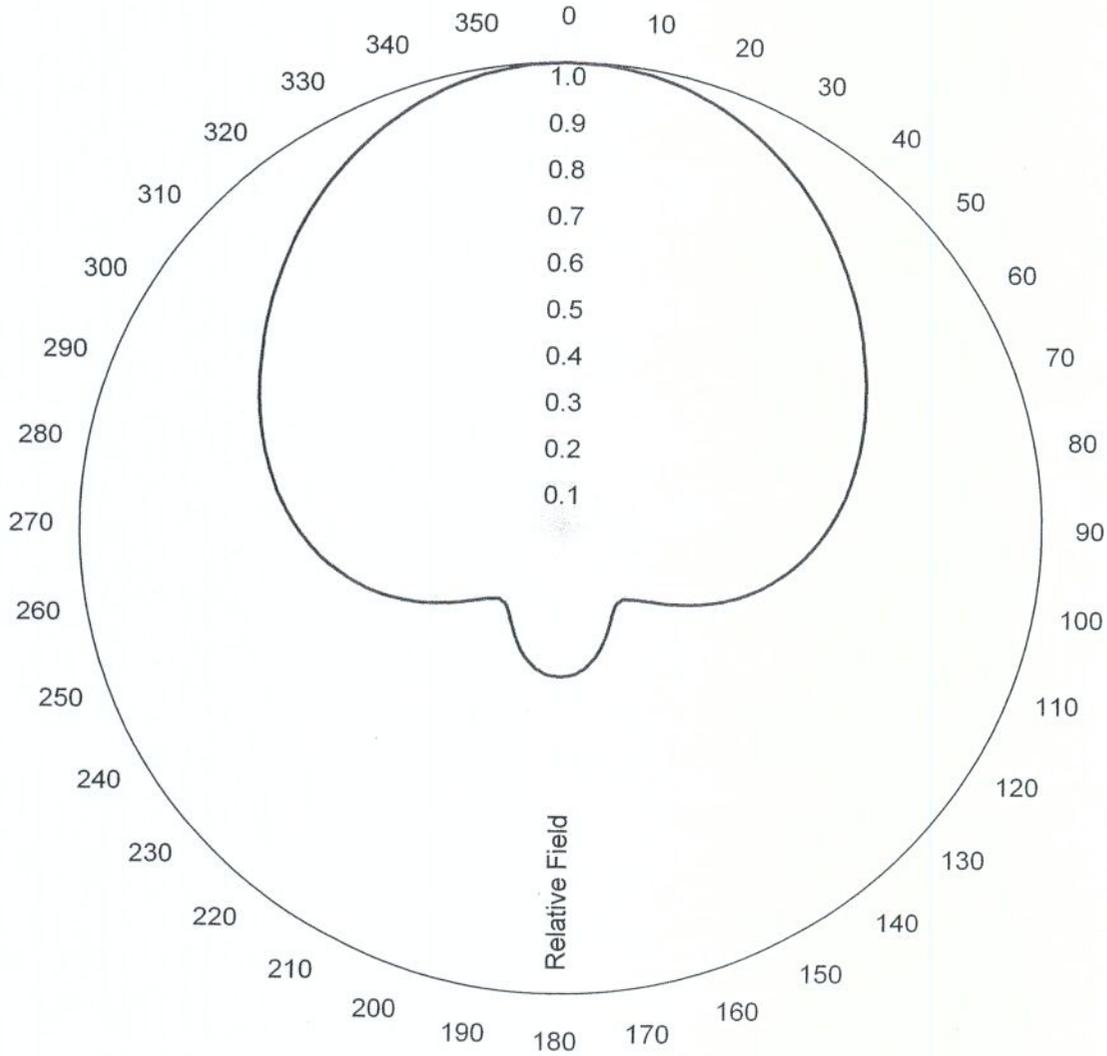
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AZIMUTH PATTERN

Type: ATW-C4

	Numeric	dBd
Directivity:	<u>2.54</u>	<u>4.05</u>
Peak(s) at:		
Polarization:	<u>Horizontal</u>	
Channel:	<u>26</u>	
Location:		
Note:		



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CONTOUR POPULATION
48 DBU : 2,216,349
41 DBU : 2,839,297

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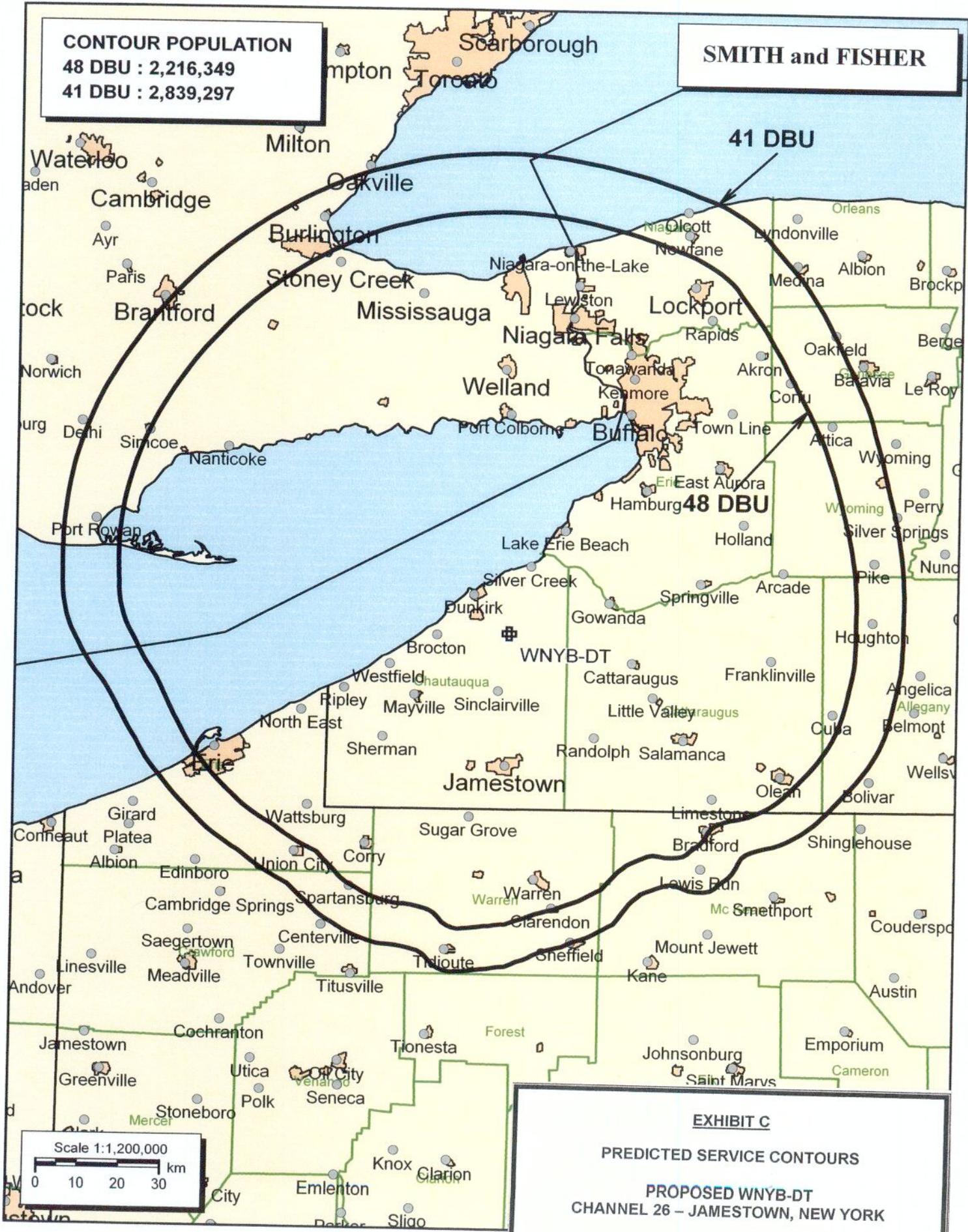


EXHIBIT C
PREDICTED SERVICE CONTOURS
PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK
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INTERFERENCE STUDY
PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK

The instant application specifies an ERP of 1000 kw (directional) at 463 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WNYB-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WNYB-DT facility would not contribute more than 0.5% interference to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed WNYB-DT facility does not cause significant (0.5%) interference within the protected 74 dBu contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

INTERFERENCE STUDY SUMMARY
 PROPOSED WNYB-DT
 CHANNEL 26 – JAMESTOWN, NEW YORK

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WNYB-DT</u>	<u>%</u>
WWIZ-DT (Allot.)	Cleveland, OH	26	3,494,107	15,378	0.4
WWIZ-DT (CP)	Cleveland, OH	26	3,362,308	10,367	0.3
WHAG-DT	Hagerstown, MD	26	1,903,718	365	<0.1
CBLFT	Toronto, ON	25	6,358,705	0*	0

*Unmasked interference from proposed WNYB-DT is 104,528 (based on Canadian and U.S. census population data) or 1.6 percent of CBLFT service population. Present analog WNYB on same channel causes interference to 374,879 people, or 5.9 percent of the CBLFT service population. Proposed WNYB-DT causes no new interference above that caused by analog WNYB and actually represents a reduction in interference by more than 270,000 people. Interference with other masking stations (including the WNYB-DT allotment facility) is only 0.8 percent of the CBLFT service population. It is also important to note that the vast majority of interference occurs on the U.S. side of the border with Canada.

POWER DENSITY CALCULATION

PROPOSED WNYB-DT
CHANNEL 26 – JAMESTOWN, NEW YORK

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Jamestown facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 1000 kw (H, V), an antenna radiation center 313 meters above ground, and the elevation pattern of the Andrew antenna, maximum power density two meters above ground of 0.00068 mw/cm^2 is calculated to occur 55 meters north of the base of the tower. Since this is only 0.2 percent of the 0.36 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 26 (542-548 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.