

ENGINEERING STATEMENT

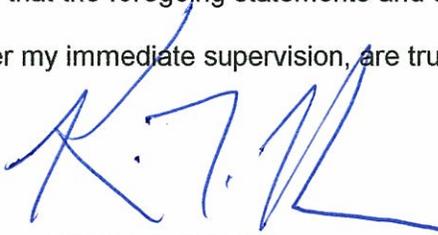
The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of WNYW-DT, Channel 44 in New York, New York, in support of its Application for Construction Permit to operate with a maximized post-transition DTV facility.

It is proposed to mount an ERI circularly polarized directional antenna at the 422-meter level of the Empire State Building, site of the present WNYW-DT facility. Exhibit B provides elevation and azimuth pattern data for the proposed antenna. 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 it is important to note that the study utilized a cell size of 1.0 kilometers and an increment spacing of 0.1 kilometers. A power density calculation is provided in Exhibit E.

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 WNYW-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. The Commission issued Antenna Structure Registration Number 1007048 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.



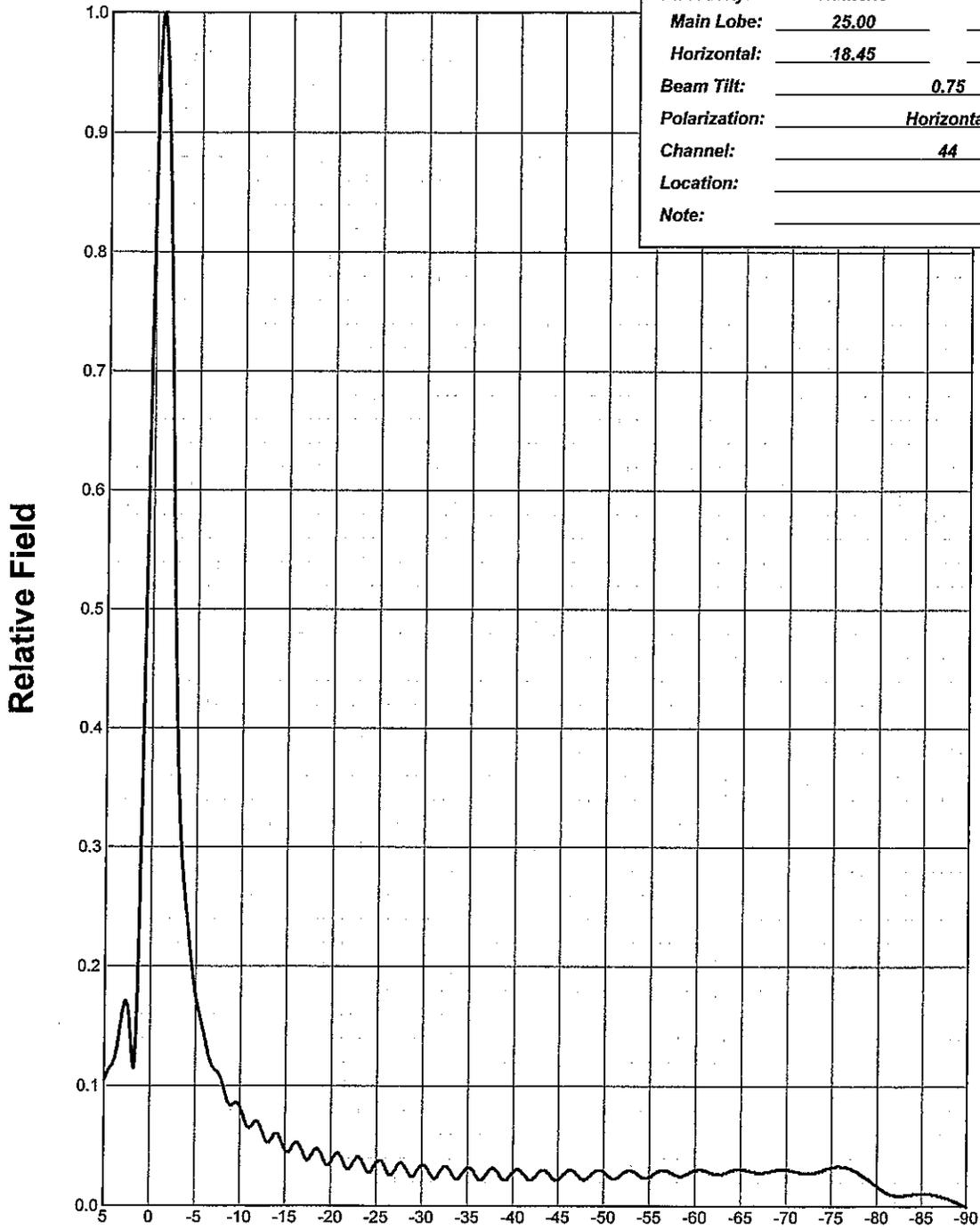
KEVIN T. FISHER

June 10, 2008



### ELEVATION PATTERN

Type:	ATW25HS3H	
Directivity:	Numeric	dBd
Main Lobe:	25.00	13.98
Horizontal:	18.45	12.66
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	44	
Location:		
Note:		



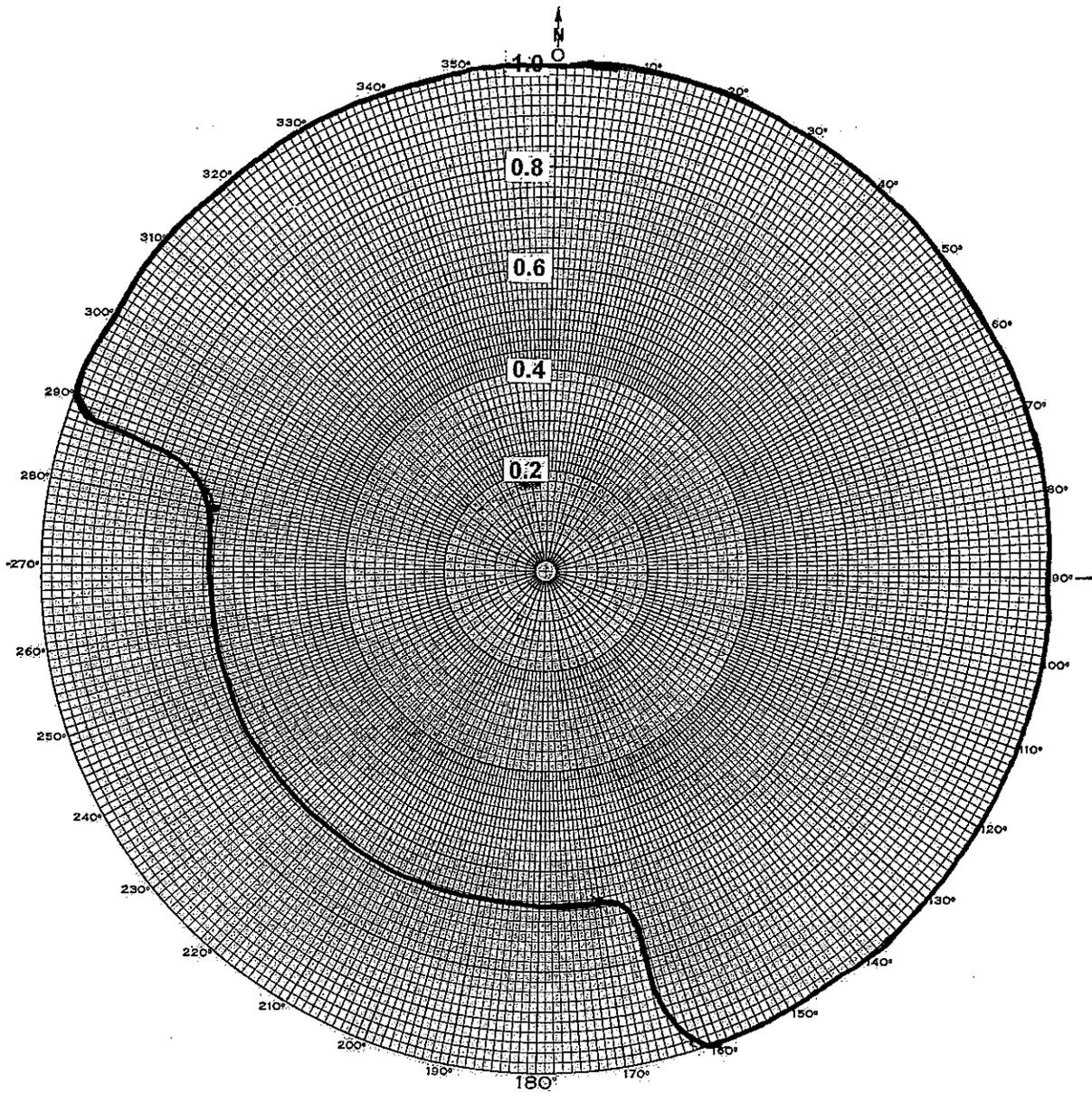
Electronics Research, Inc.  
7777 Gardner Road  
Chandler, Indiana U.S.A 47610

#### EXHIBIT B-1

#### ANTENNA ELEVATION PATTERN

PROPOSED WNYW-DT  
CHANNEL 44 – NEW YORK, NEW YORK

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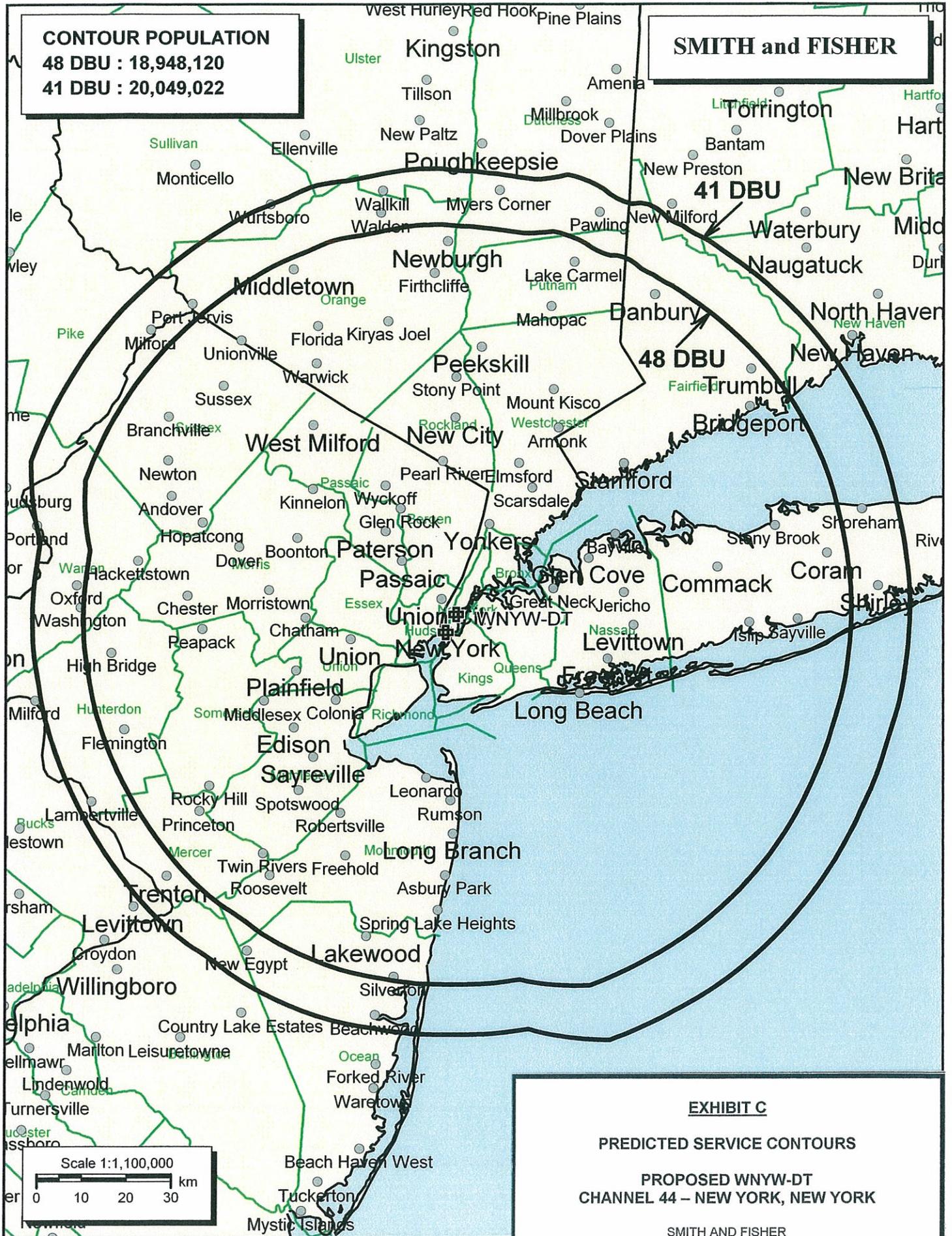


**EXHIBIT B-2**  
**ANTENNA AZIMUTH PATTERN**  
**PROPOSED WNYW-DT**  
**CHANNEL 44 – NEW YORK, NEW YORK**  
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## ANTENNA AZIMUTH PATTERN DATA

PROPOSED WNYW-DT  
CHANNEL 44 – NEW YORK, NEW YORK

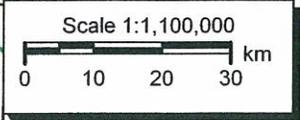
<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	1.00	27.0	180	0.67	23.5
10	1.00	27.0	190	0.67	23.5
20	1.00	27.0	200	0.67	23.5
30	1.00	27.0	210	0.67	23.5
40	1.00	27.0	220	0.67	23.5
50	1.00	27.0	230	0.67	23.5
60	1.00	27.0	240	0.67	23.5
70	1.00	27.0	250	0.67	23.5
80	1.00	27.0	260	0.67	23.5
90	1.00	27.0	270	0.67	23.5
100	1.00	27.0	280	0.67	23.5
110	1.00	27.0	290	1.00	27.0
120	1.00	27.0	300	1.00	27.0
130	1.00	27.0	310	1.00	27.0
140	1.00	27.0	320	1.00	27.0
150	1.00	27.0	330	1.00	27.0
160	1.00	27.0	340	1.00	27.0
170	0.67	23.5	350	1.00	27.0



**CONTOUR POPULATION**  
**48 DBU : 18,948,120**  
**41 DBU : 20,049,022**

**SMITH and FISHER**

**EXHIBIT C**  
**PREDICTED SERVICE CONTOURS**  
**PROPOSED WNYW-DT**  
**CHANNEL 44 - NEW YORK, NEW YORK**  
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INTERFERENCE STUDY  
PROPOSED WNYW-DT  
CHANNEL 44 – NEW YORK, NEW YORK

The instant application specifies an ERP of 500 kw (directional) at 424 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various post-transition 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 1.0 kilometer and an increment spacing of 0.1 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WNYW-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WNYW-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WNYW-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed WNYW-DT facility does not cause significant (0.5%) interference within the protected service 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 WNYW-DT  
 CHANNEL 44 – NEW YORK, NEW YORK

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WNYW-DT*</u>	<u>%</u>
WMCN-DT (CP)	Atlantic City, NJ	44	5,545,285	41,267	<0.1
WMCN-DT (Allot.)	Atlantic City, NJ	44	5,946,212	3,772	<0.1
WNJT-DT (Lic.)	Trenton, NJ	43	9,558,306	48,488	0.5
WNJT-DT (Allot.)	Trenton, NJ	43	9,636,374	40,511	0.4
WMBQ-CA	Manhattan, NY	46	5,526,456	0**	0
WEDH-DT (CP)	Hartford, CT	45	4,328,152	21,187	0.5
WWPB-DT	Hagerstown, MD	44	1,003,939	47	<0.1

\*Above that caused by the allotment facility.

\*\*Interference is completely masked by present WNYW-DT facility.

Note: This study utilized a cell size of 1.0 km and an increment spacing of 0.1 km.

POWER DENSITY CALCULATION  
PROPOSED WNYW-DT  
CHANNEL 44 – NEW YORK, 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 New York facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 500 kw (H, V), an antenna radiation center of 422 meters above ground, and the elevation pattern of the ERI antenna, maximum power density two meters above ground of  $0.00022 \text{ mw/cm}^2$  is calculated to occur near the base of the building. Since this is less than 0.1 percent of the  $0.43 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 44 (650-656 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.

Our firm will conduct power density measurements of the upper levels of the Empire State Building once the proposed WNYW-DT facility becomes operational. These measurements will be used to confirm that RF levels in all locations remain compliant with the FCC's human exposure guidelines.

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.