

Technical Statement
In support of application for
Construction Permit
WKXW Ch-268-B
Facility I.D. 53458
19 kW 245 Meters HAAT
Trenton, New Jersey

This instant application simply requests a change in status of its auxiliary¹ antenna to that of main antenna.

Figure 1 is a vertical sketch of the subject tower showing antenna elevations.

Figure 2 is map showing the predicted 70 dbμ and 54 dbμ contours.

Figure 3 is a Vertical Plane Relative Field Pattern for the subject antenna.

Environmental Considerations

Since this application only affects an existing antenna on an existing tower, the only environmental consideration is that of human exposure to non-ionizing radiation (RFR).

In the original application for this antenna for auxiliary purposes, an extensive RFR study was conducted by Carl T. Jones Corporation, Consulting Engineers. A copy of the report submitted at that time is included herein as Exhibit 1.

There have been no known changes in the RF environment at this site since the above referenced study was conducted.

The licensee in cooperation with other users of the site will either reduce radiated power or cease operation altogether in order to protect workers while on the tower.

The tower is fenced and locked with appropriate signs warning station personnel and the public as well as any other workers of potential RFR exposure.

Signed: Fred W. Greaves Jr.
Technical Consultant

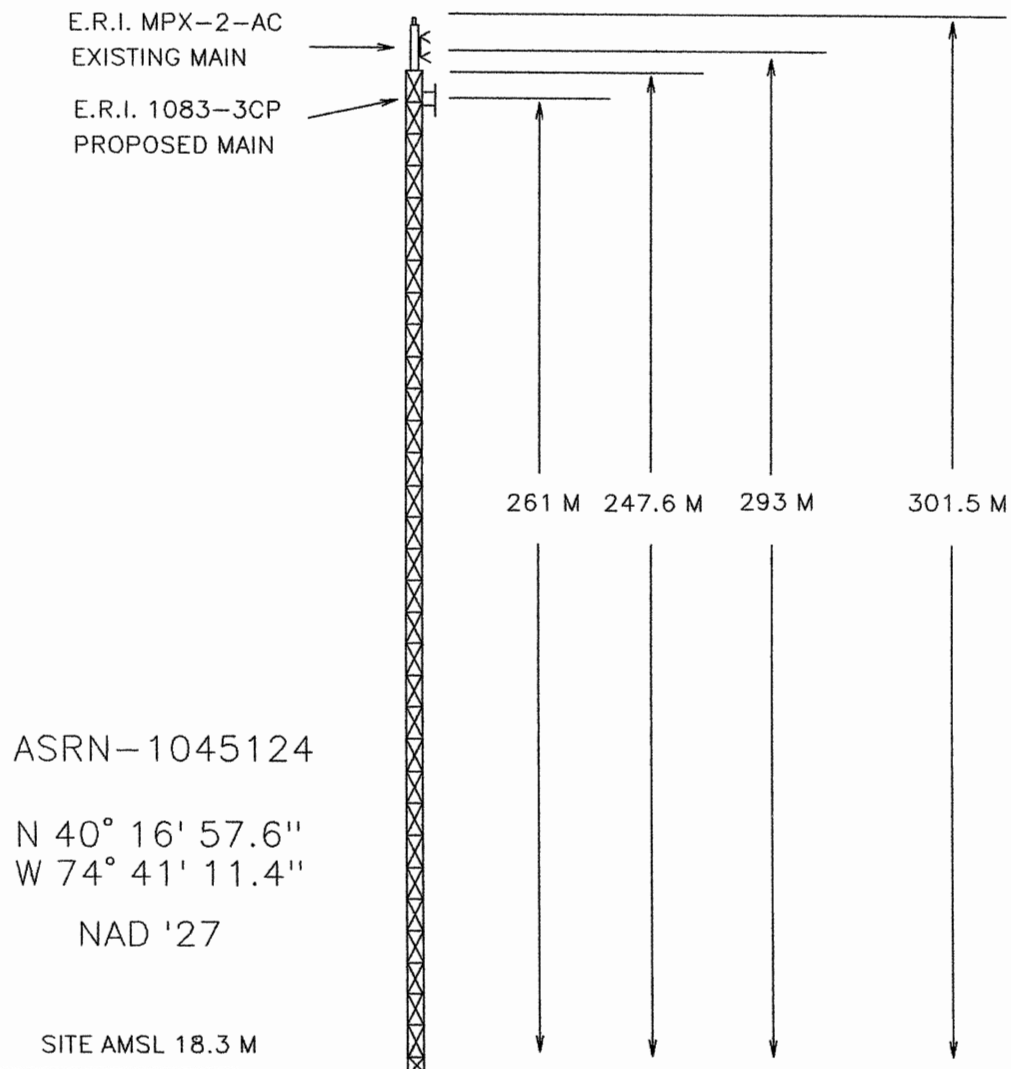
Date: April 18, 2013

¹ See BXMLH-20060627AAZ

April 2013

Figure 1

NOT TO SCALE



ANTENNA AND SUPPORTING STRUCTURE

WKXW CHANNEL 268B TRENTON NEW JERSEY

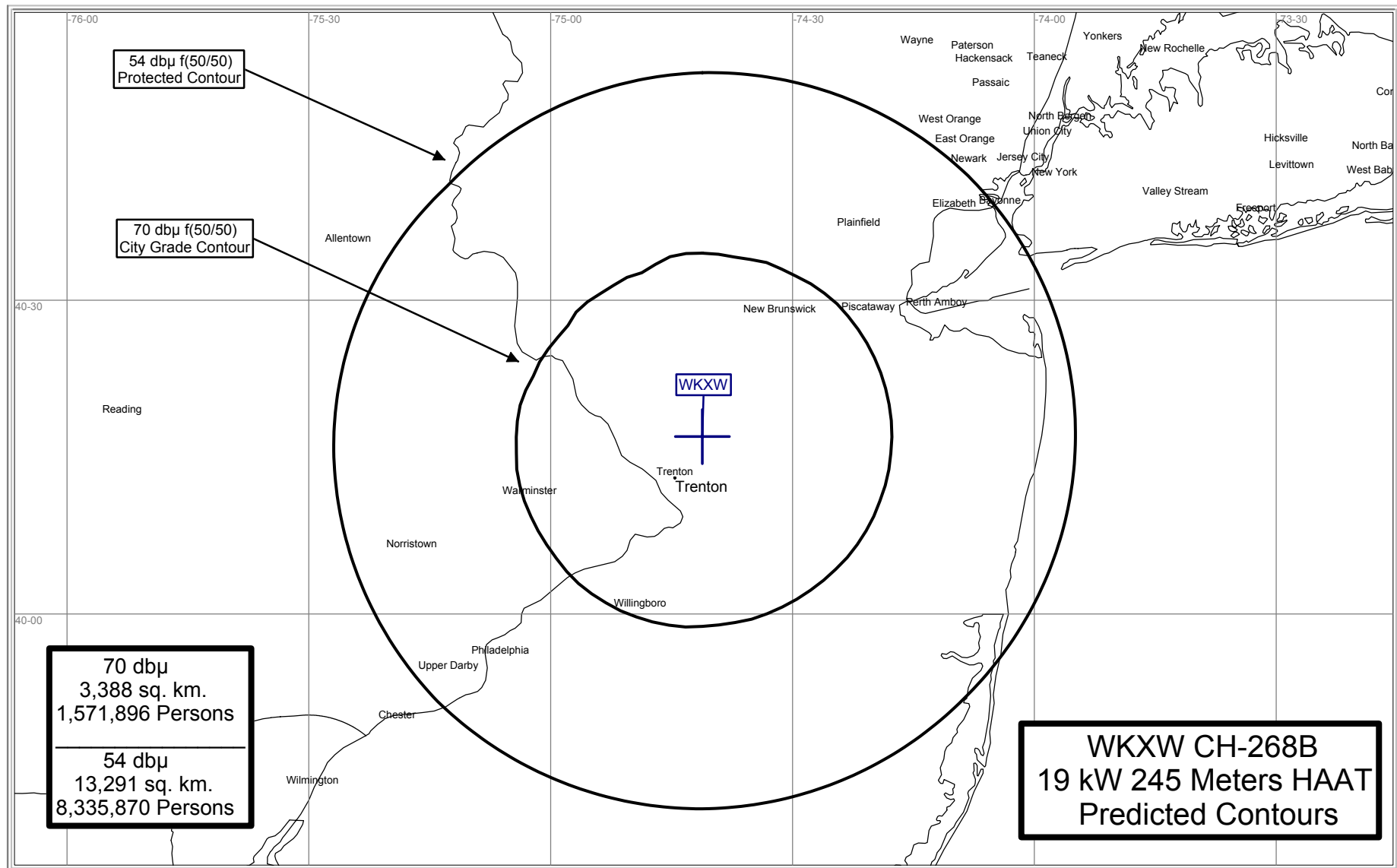


FIGURE 2

ELECTRONICS RESEARCH, INC.
108 MARKET STREET
NEWBURGH, IN. 47630

(812) 853-3318

----THEORETICAL----
VERTICAL PLANE RELATIVE FIELD

3 TYPE 1080 ELEMENTS UNIFORMLY SPACED
120.00 INCHES CENTER TO CENTER VERTICALLY
+0.00 DEGREE(S) BEAM TILT
0 PERCENT FIRST NULL FILL

FIGURE 3

OCTOBER 30, 1991

COMPUTED FOR
101.50 MHz

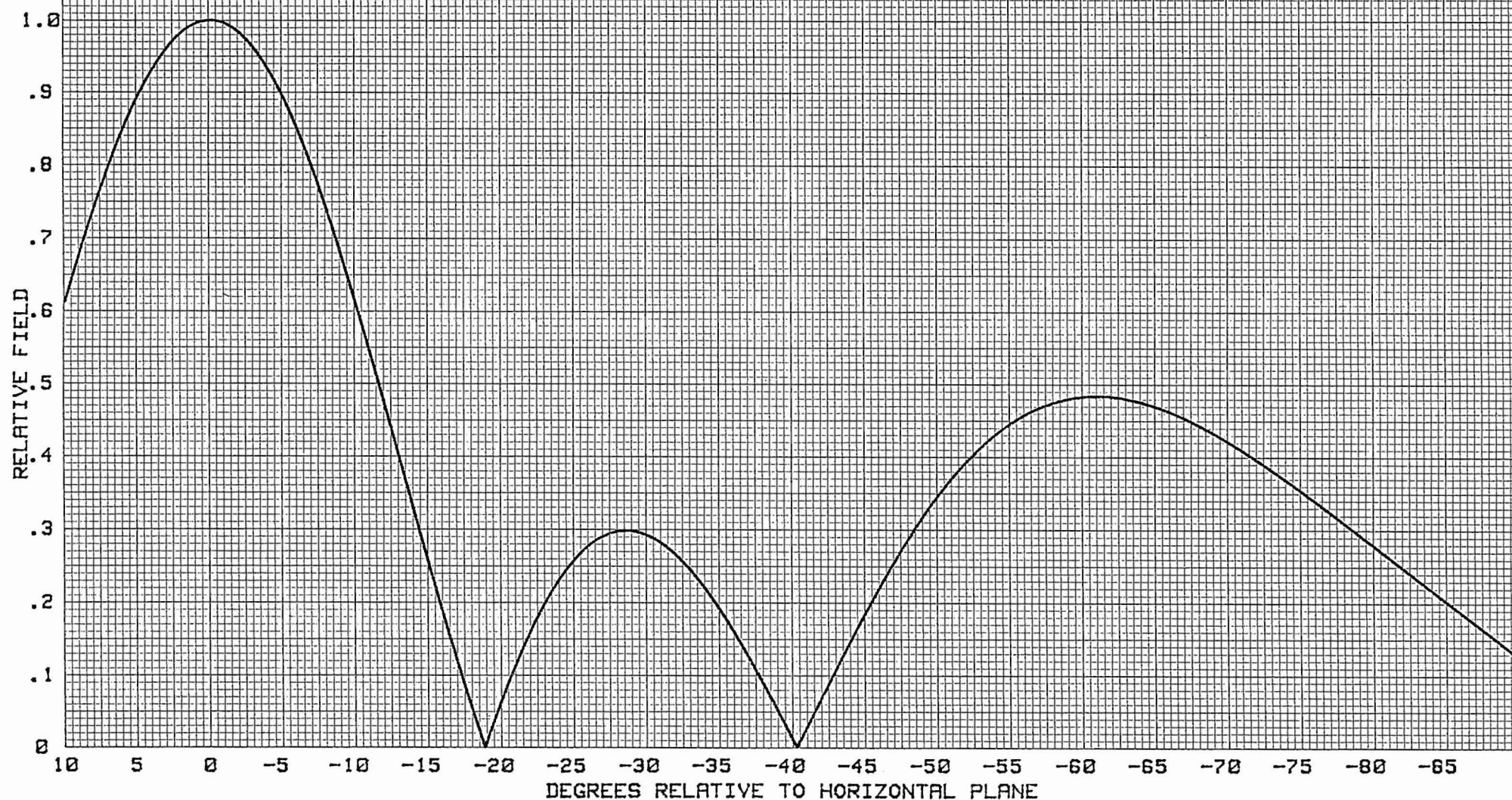


EXHIBIT 1



RADIOFREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted its current guidelines and procedures for evaluating environmental effects of radiofrequency emissions. The current guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, Inc. (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The FCC guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations, as well as "uncontrolled" situations that apply in cases that affect the general public. The FCC's Office of Engineering and Technology (OET) Commission issued a technical bulletin (OET Bulletin No. 65) entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields" (Edition 97-01, August 1997), to aid in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency electromagnetic fields as adopted by the Commission in 1996. The Bulletin contains updated and additional technical information for evaluating compliance with the current FCC policies and guidelines.

The current FCC MPE level for "uncontrolled" environments is 0.2 milliwatt per centimeter squared (mW/cm^2) or $200 \mu\text{W}/\text{cm}^2$ for FM facilities. The MPE level for FM facilities in a "controlled" environment is $1.0 \text{ mW}/\text{cm}^2$.

The WKXW-FM main antenna is also located on the tower specified herein. By definition, the WKXW-FM main facility will not be in operation during times the proposed WKXW-FM auxiliary facility is in use. Consequently, the instant analysis ignores the WKXW-FM main facility and considers only the proposed WKXW-FM auxiliary facility and the other colocated broadcast facilities listed on the attached Table. There are a number of stations located on the WKXW-FM tower and one other located within 315 meters of the WKXW-FM tower. For a multiple-use site such as this, the percentage of the FCC guideline value each facility contributes must be determined, and the sum of the individual contributions must not exceed 100% of the FCC guideline value.

The attached Table, entitled "Summary of Radiofrequency Radiation Study", shows the stations considered in the instant study and each station's distance from the WKXW-FM tower. As shown on the attached Table, the maximum cumulative predicted power density at the shared site represents only 22.2% of the FCC guideline value for "uncontrolled" environments.

EXHIBIT 1

STATEMENT OF WILLIAM J. GETZ
WKXW-FM, PITTSBURGH, PENNSYLVANIA
PAGE 2

OCCUPATIONAL SAFETY

Based on the calculations discussed above, the maximum cumulative predicted power density at the shared site is 4.44% of the FCC guideline value for “controlled” environments. The applicant will insure the protection of station personnel or tower contractors working in the vicinity of the proposed transmitting antenna. The applicant will reduce power and/or cease operation in cooperation with other site users during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel.

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
WKXW-FM, TRENTON, NEW JERSEY
AUX: CHANNEL 268B, 19 kW, 245 m HAAT
JUNE, 2006

EXHIBIT 1

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLARIZATION</u>	<u>ANTENNA HEIGHT **</u>	<u>SLANT DIST TO KLTY TOWER</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY (mW/cm²)</u>	<u>FCC UNCONTROLLED LIMIT (mW/cm²)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
-- Stations co-located with WKXW (dist = 0 meters):											
WKXWAUX	FM	225	92.9	H & V	259	N/A	19.000	1.000	0.01893	0.200	9.46%
WNJT	FM	201	88.1	V	223	N/A	0.110	1.000	0.00007	0.200	0.04%
W220AG	FM	220	91.9	H & V	136	N/A	0.009	1.000	0.00003	0.200	0.02%
WNJT	TV	52	701	H	279	N/A	1950.000	0.300	0.03766	0.467	8.06%
WNJT-DT	TV	43	647	H	279	N/A	46.000	0.300	0.00089	0.431	0.21%
-- Stations within 315 meters of WKXW -- Distance = 222 meters											
WPRB	FM	277	103.3	H & V	237	325	14.000	1.000	0.00887	0.200	4.44%
TOTAL PERCENTAGE OF ANSI VALUE=											22.22%

** The worst-case (highest) ground elevation at the 2 sites is 19 meters. The RCAGL indicated above considers this ground elevation minus 2 meters for the human height allowance.

*** For stations not co-located with the subject station, the slant distance was used to compute the predicted power density.

**** For TV stations, a very conservative relative field of 0.3 was assumed.