

**ENGINEERING REPORT
RF Radiation Study**

Auxiliary Facility of

**WJYE(FM) – Buffalo, NY
Channel 241B – 96.1 MHz**

June, 2005

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The data utilized in this report was taken from the FCC Secondary Database and data on file. While this information is believed accurate, errors or omissions in the database and file data are possible. This firm may not be held liable for damages as a result of such data errors or omissions.

The report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission.

I declare under penalty of the laws of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

June 16, 2005

MUNN-REESE, INC.

By



Wayne S. Reese, President

By



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RADIOFREQUENCY RADIATION GUIDELINES COMPLIANCE STUDY

The auxiliary facility for station WJYE (FM), Buffalo, NY has been evaluated for human exposure to non-ionizing radiofrequency radiation at the multiple source transmitter site. The guidelines set forth in §1.1310 Table 1 have been used for actual RF measurements taken on site.

The WJYE (FM) auxiliary facility operates on FM Channel 241B, 96.1 MHz, with 11.5 kW ERP. In addition to the auxiliary facility, two other full service FM facilities are collocated on the premises. WYRK (FM) operates on FM Channel 293B, 106.5 MHz, with 50.0 kW ERP. WBLK (FM) operates on FM Channel 229B, 93.7 MHz, with 47 kW ERP. There are no other broadcast sources of RF radiation within 315 meters of this multiple source site.

For purposes of this study, measurements were conducted with the WJYE (FM) auxiliary facility operating in conjunction with the full licensed facilities of WYRK (FM) and WBLK (FM).

On June 14, 2004, Donald J. Baad, a Staff Engineer with this office, was sent to the site to perform the required measurements. Measurements were made with a Narda Model 8718 Electromagnetic Survey Meter Serial Number 1453, connected to a Narda Model 8742 Isotropic Shaped Electric Field Probe. This probe is designed to measure electromagnetic fields within the frequency range of 300 kHz to 2.7 GHz. The frequency response of the probe is based on IEEE/ANSI Standard C95.1-1991, which is also the basis for the current guidelines of human exposure to radio frequency radiation established by the Federal Communications Commission. These guidelines specify Maximum Permissible Exposure (MPE) levels that vary with the frequency of the source of radio frequency energy. Thus, the response of the probe has been shaped to reflect these frequency dependent MPE parameters. This allows the survey meter to read directly in percent of the limit without the necessity to measure each frequency independently. Since most telecommunication sites involve multiple transmitters operating on several different frequencies, this also allows an evaluation to be made of the combined exposure from all transmitters with a single measurement.

For calibration purposes, the probe was placed inside the case supplied by the manufacturer. This case is lined with material designed to block the penetration of radio frequency radiation. While the probe was in this shielded environment, the self-calibration routine for the meter was successfully executed.

Calibration was performed in the transmitter room on the 27th floor of the Rand Building in downtown Buffalo, NY. Following calibration, the meter was carried up the spiral staircase, past the 28th floor, to the rooftop access. A walking inspection was made of the entire rooftop area searching for areas of maximum exposure. The highest exposure was found near the northeast corner of the rooftop area where the exposure level registered 65 % on the meter. Two areas measuring approximately 50 % of the occupational limit were found. One was located near the north vent pipe between the enclosure around the base of the tower and the incinerator grill. The other was found along the cinder blocks capping the brick wall near the southwest corner of the rooftop.

Access to the 27th floor is through a locked door. In accordance with the existing RF Safety plan, access requires permission of the licensee's engineering staff and/or the building manager. Access to the 28th floor, which contains mechanical equipment for the elevators, etc., is made through the spiral staircase on the 27th floor. The locked access door to the spiral staircase is posted with a sign warning of the danger of RF exposure. Everything on the 27th floor and above is restricted access and therefore, qualifies for occupational exposure limits.

It is anticipated the auxiliary antenna will only be used for analog service on very rare occasions. During these times of operation, access will be limited to the 27th floor. No one will be allowed to proceed up the spiral staircase where levels of exposure increase. Exposure was measured in the transmitter room, but levels never exceeded 20 % and most locations were less than 10 % of the occupational limit.

To clarify the locations described above, a diagram of the rooftop area has been attached.

Plat of Rand Building Roof Complex 14 Lafayette Sq., Buffalo, NY

