

**Report
on**

Radio Frequency Radiation Measurements

made on

WFUV-FM3

**The Epic Building
125 W 31st Street
New York, NY**

WFUV-FM3 is an on-frequency booster system for WFUV, 90.7 MHz, New York, NY. WFUV-FM3 is located on the Epic building, a nominally 60 story building located at 125 West 31st Street, Manhattan, New York. The nominal ERP for WFUV-FM3 is 2,500 watts.

The transmitter and associated equipment is contained in one rack in a mechanical room located two floors above the “Penthouse” floor.

The antenna system consists of three Aldena AST.05.02.335 Yagis in a stacked array. The antennas are mounted on a steel pole extending 37' above the roof over the mechanical room. The lowest antennas are mounted approximately 25' above the roof, on the southwesterly side, and oriented at 140° true.

The nearest buildings within 100' of the height above ground of the Epic building, in the direction of the major lobe of the antenna system, are 700' or more away from the Epic building location. The nearest tall building is the Eventi building, still under construction, but planned at 53 stories, and located approximately 450' away and 45° off the major lobe of the antenna system.

On April 9, 2010, while this system was under full power test, I measured the radiofrequency radiation levels on the mechanical room floor and on the roof.

The measurements were made using a Narda 8718B meter, and a Narda A8742D probe. This system measures from 300 kHz to 3 GHz, and reads in percentage of the occupational worker exposure limits.



WFUV-FM3 Antenna



Major lobe direction



Eventi building at right edge of picture

Most of the space on the mechanical room floor of the Epic building are locked and have limited public access. The mechanical room itself is behind a door normally kept locked. Access to the mechanical room roof is by means of a hatch in the roof, accessed by a vertical ladder. This hatch is normally padlocked shut.

The highest measured RFR level on the mechanical room floor of the Epic building was 0.3% of the occupational worker standard (1.5% of the general public exposure limit). This reading was within a few inches of the transmitting equipment itself; elsewhere on this floor the RFR level was near the threshold of the equipment used.

The roof over the mechanical room is roughly 100' x 40'. It is surrounded by a brick wall of varying height. The antenna system support pole is attached to a concrete pillar located near the middle of one long side of the roof. The access hatch to the roof is in the more westerly portion of the roof, on the "back" side of the antenna system.

The RFR levels on this more westerly portion of the roof, approximately half of the roof area, ranged from 0.5% to 1.5% of the occupational worker limit, or 2.5% to 7.5% of the general public exposure limit.

There is a large water tank located near the eastern end of the roof. There are several vents in the southeasternmost corner of the roof, near this water tank. In the area of these vents, which are just in front of the WFUV FM3 antenna, RFR levels reached a maximum of 15% of the occupational worker limit, or 75% of the general public exposure limit. These were the highest readings anywhere on the roof itself. There is therefore nowhere standing on a floor or flat roof of the building where the general public exposure limit is exceeded.

There is a vertical inspection ladder on side of the water tank, at nearly its closest approach to the WFUV FM3 antenna system, that extends to very near the center of the main lobe of the antenna system. Well up this ladder, the RFR levels reach 75% of the occupational worker limit, or 375% of the general public exposure limit.

This inspection ladder is accessed at regular but infrequent intervals. It will be necessary for WFUV FM3 to reduce power or cease operation for these inspections.

A standard notice sign should be posted at the ladder to *Water tank, inspection ladder, HVAC vents* the roof access hatch, with the approved symbol and with text such as "Notice: Radio frequency fields beyond this point may exceed the FCC general public exposure limit. Obey all posted signs and site guidelines for working in radio frequency environments."

A standard caution sign should be posted at the ladder to the water tank, with the approved symbol and with text such as "Caution: beyond this point radio frequency fields at this site may exceed FCC rules for human exposure. For your safety, obey all posted signs and site guidelines for working in radio frequency environments."

Signs should be posted at both ladders with text such as "Caution: contact WFUV at xxx-xxxx before climbing ladder on water tank. Transmitter power must be reduced before water tank ladder is



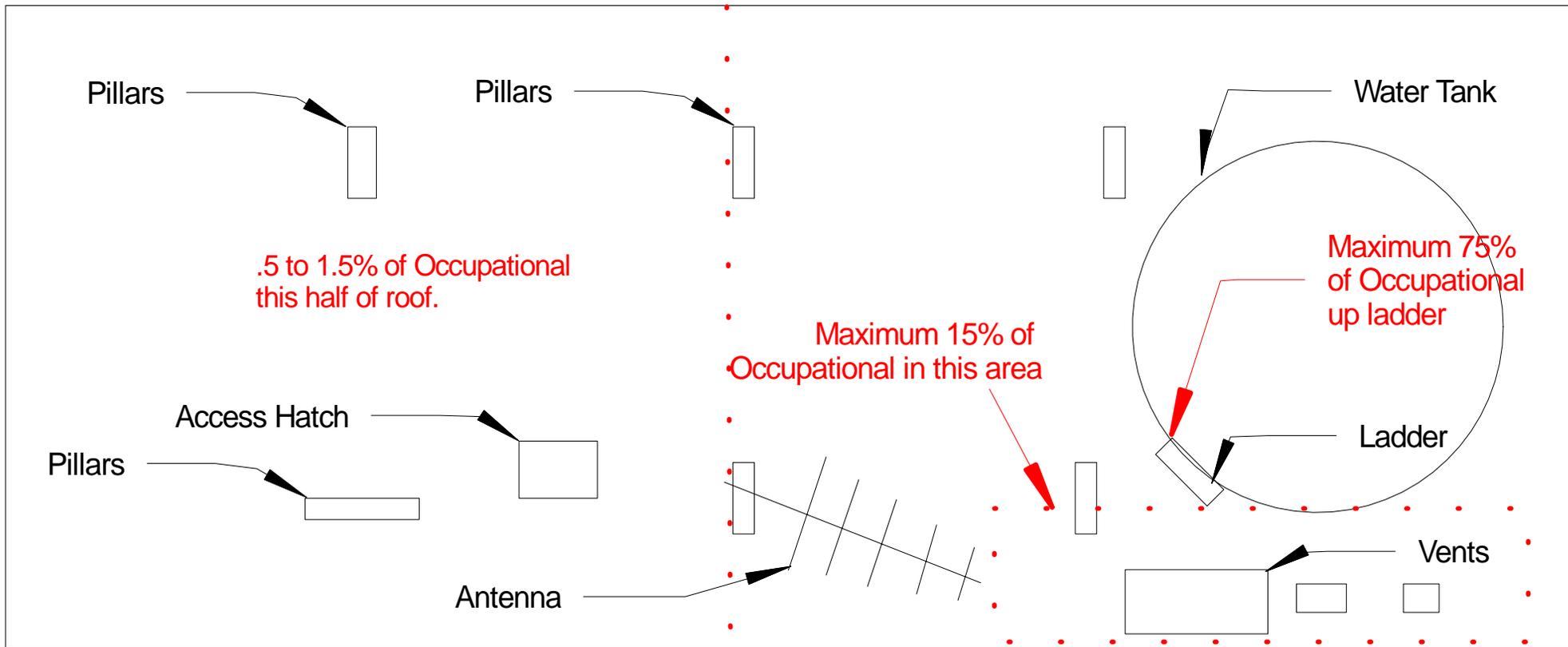
climbed.”

The building management must be informed of the necessity of protecting individuals who might climb the water tank ladder from exposure to excessive radio frequency fields.

This report was prepared by William Weeks. All statements made and measurements referenced herein were made by me, and are true and complete to the best of my knowledge and belief.



William Weeks
April 13, 2010



Epic Building
Upper Roof
(not to scale)

