

REASON FOR ERP REDUCTION, COMPLIANCE WITH SPECIAL OPERATING  
CONDITIONS AND CALCULATION OF TRANSMITTER POWER OUTPUT

Reason for ERP Reduction: WEZN-FM's outstanding auxiliary CP authorizes an ERP of 31 kW. However, it was determined that the existing transmitter would only permit an ERP of 20.5 kW to be achieved.

Special Operating Condition #1: Attached is a statement from Shively Labs, the manufacturer of the directional antenna for WPKN, Bridgeport, CT indicating that the proposed WEZN-FM antenna will have no adverse effect on WPKN's directional antenna pattern.

Special Operating Condition #3: The attached radiofrequency electromagnetic (RFR) field strength measurement report, prepared by Fred A. Francis, Jr. of Xenirad Broadcast Engineering, indicates that there are no areas that exceed the FCC guidelines for human exposure to RF fields. It is noted that this RFR measurement report is being used for this application as well as the license application for WEBE's authorized auxiliary operation (BXPB-20190816AAF) and the application for WEBE's authorized main operation from this location (BPH-20190628AAH).

Calculation of Transmitter Power Output (TPO): The 23.711 kW (13.749 dBk) figure is based on consideration of total transmission system attenuation of 0.676 dB (85.6%). Given an antenna power gain of 1.01 (0.044 dB), a TPO of 23.711 kW produces an ERP of 20.5 kW (13.117 dBk).

May 18, 2020

Reference: Condition #1 for WEZN CP

To Whom It May Concern:

This letter will provide verification that WEZN at 99.9 in Bridgeport, CT., will have no adverse effect for the existing pattern for WPKN at 89.5 in Bridgeport, CT. The spacing of the two antennas is approximately 45 feet and that is sufficient distance for WPKN's pattern.

If you have any questions, please contact Shively Labs at 207-647-3327 or by email at [agillespie@shively.com](mailto:agillespie@shively.com).

Best Regards,



Angela Gillespie

Vice President

Shively Labs

Bridgton, ME

MEMBER:



RF Safety Survey for Connoisseur Media  
WEBE WEZN (Booth Hill) tower site.  
Survey conducted on September 3, 2020

This study was conducted as a condition of the construction permit to move the WEBE transmitting facilities to the Booth Hill tower site and combine with WEZN.

Survey was conducted using a Narda 8712 Survey Meter fitted with an A8742D Probe.  
The probe utilized for this survey is an FCC shaped probe and reads 0-600% of occupational/controlled environment exposure.

The Booth Hill tower site has no public access and is gated.



This is the approximate walk path for the outdoor portion of the survey.

Initially this path was measured in order to identify any (HOT SPOTS) that need to be spatially averaged.

The peak hold function was utilized on the meter and cleared after each peak was recorded in order to determine the next lower or higher peak.

The survey was conducted twice. One survey was performed with WEZN and WEBE operating on their Main Antenna. The second survey was performed with WEZN and WEBE operating into their backup antenna.



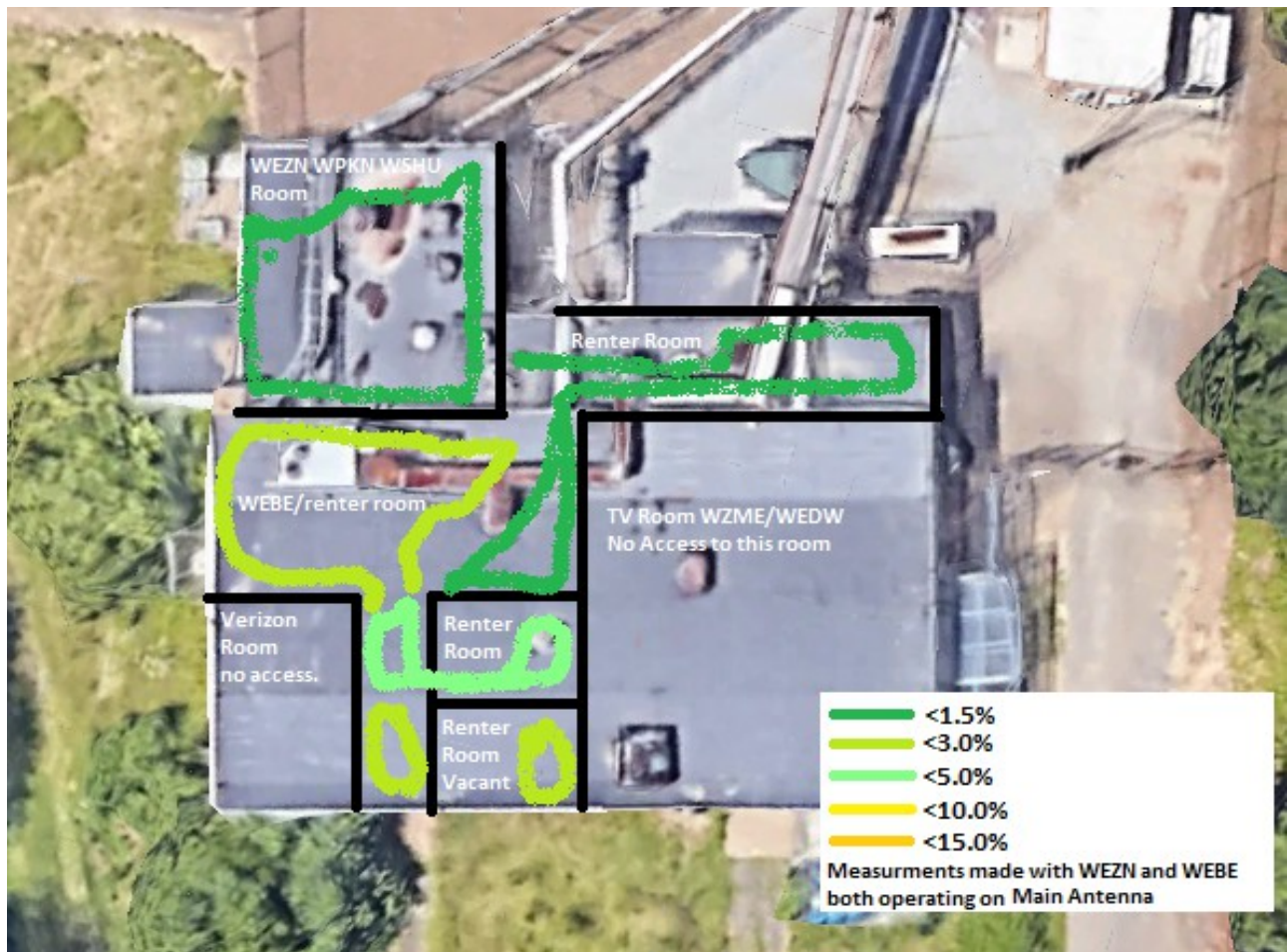


Main antenna survey.

No reading during this survey exceeded 2.8% of MPE for controlled/occupational environment.

No spatial averaging required.





Main antenna survey.

Measurements made in the building where access was provided.

Maximum reading in the building was 4.9% of MPE for occupational/controlled environment.

No spatial averaging required.



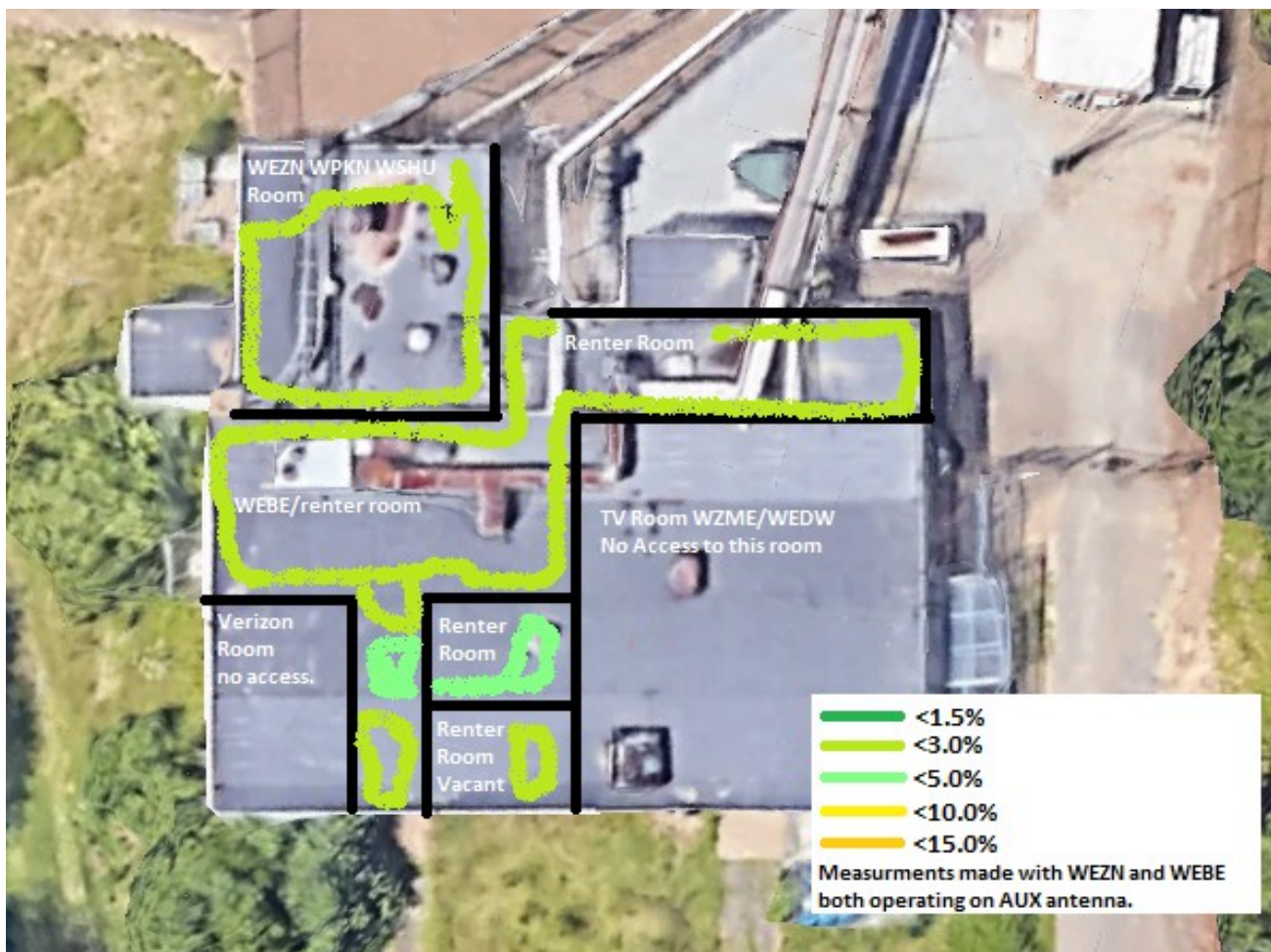


AUX antenna survey.

No reading exceeded 9.9% of MPE for occupational/controlled environment.

No spatial averaging required.





AUX antenna survey.

Measurements made in the building where access was provided.

Maximum reading in the building was 4.9% of MPE for occupational/controlled environment.

No spatial averaging required.



## **Conclusions.**

Measurements were made with two operating conditions in mind both transmitters on Main and both transmitters on AUX. This method was used to create the (normal) condition and both station on AUX to create the (worst case) scenarios in regard to RFR.

In either state the MPE levels on peak hold were low enough that no spatial averaging was required 9.9% of MPE.

In my opinion there are no rf safety issues at this site with regards to ground work. Tower work is another matter and transmitters will need to reduce power or turn off when personnel are working on the tower.

A handwritten signature in black ink, appearing to read "Fred A. Francis Jr.", with a stylized, flowing script.

Fred A. Francis Jr.  
Owner Xenirad Broadcast Engineering.