

**Exhibit to WAMZ Application  
Minor Change  
Louisville, Kentucky  
Facility ID: 11921**

---

This exhibit presents the technical details of a minor modification for change in antenna location of the station. No change in principal regulator class, assigned community or channel of operation is proposed.

**Proposed Antenna Location**

The proposal is for WAMZ to co-locate by "diplex" operation into the existing antenna of co-owned FM station WNRW. This license antenna is located 137 meters above ground on the tower identified by antenna structure registration number 1045578, which is an element in the WKRD (AM) directional array. The licensee anticipates undertaking required measures to ensure the WDRD facility continues proper operation.

**Class Compliance**

The FCC provided web tool has been used to determine the height above average terrain of 157 meters, see Figure 1; thus full C1 Class power of 100 kW is allowable at this location.

**Spacing Compliance**

Attached as Figure 2 is a spacing study from the proposed antenna location indicating this proposed location is in accordance with Section 73.207 of the Commission's rules as required to all facilities, applications, and allocations.

**Principal Community Signal Compliance**

The proposal will provide the required signal to the principal community as shown in Figure 3.

**Radio Frequency Radiation Study and Statement**

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The antenna system is an ERI "Roto-tiller" 4 bay full wave spaced array which has been evaluated using the program

"FM Model" as EPA type 3, "Rototiller " antenna, mounted with its center of radiation 137 meters above ground level, and operated with a **combined WAMZ + WNRW** effective radiated power of 142.5 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 56 meters from the base of the tower, this proposal will contribute worst case, 45.3 microwatts per square centimeter, or 4.53 percent of the allowable ANSI limit for controlled exposure, and 22.6 percent of the allowable limit for uncontrolled exposure.

It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower.

**Figures and Attachments**

Figure 1 - Antenna Location HAAT Calculation

Antenna Height Above Average Terrain (HAAT) Calculations (HAAT) Results Aud... Page 1 of 1

 Federal Communications Commission

FCC Home | Search | Updates | E-Filing | Initiatives | For Consumers | Find People

**Audio Division** Antenna Height Above Average Terrain (HAAT) / Contour Calculations

(202)-418-2700 [FCC > MB > Audio Division > HAAT/Contour Calculations](#) [FCC site map](#)

**Antenna Height Above Average Terrain Calculations -- Input**

Latitude **38 11 31.0 North**  
Longitude **85 31 11.0 West** (NAD 27)

Height of antenna radiation center above mean sea level [RCAMSL] = **353.0** meters

Number of Evenly Spaced Radials = 8 0° is referenced to True North

**Results:**

**Calculated HAAT= 157. meters**

(Antenna Height Above Average Terrain)  
using the 30 second FCC/NGDC terrain data)

**Antenna Radiation Center Heights Above Individual Radials:**

0.0°	139.0 meters
45.0°	146.9 meters
90.0°	139.3 meters
135.0°	153.3 meters
180.0°	169.6 meters
225.0°	158.8 meters
270.0°	182.7 meters
315.0°	169.5 meters

**[New Antenna Height Above Average Terrain \(HAAT\) calculation?](#)**

---

[FCC Home](#) | [Search](#) | [RSS](#) | [Updates](#) | [E-Filing](#) | [Initiatives](#) | [Consumers](#) | [Find People](#)

Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554  
[More FCC Contact Information...](#)

Phone: 1-888-CALL-FCC (1-888-225-5322) ( )  
TTY: 1-888-TELL-FCC (1-888-835-5322) ( )  
Fax: 1-866-418-0232 ( )  
E-mail: [fccinfo@fcc.gov](mailto:fccinfo@fcc.gov)

- [Privacy Policy](#)  
- [Website Policies & Notices](#)  
- [Required Browser Plug-ins](#)  
- [Freedom of Information Act](#)

[http://transition.fcc.gov/fcc-bin/haat\\_calculator?dlat=38&mplat=11&slat=31&ns=1&dlon=...](http://transition.fcc.gov/fcc-bin/haat_calculator?dlat=38&mplat=11&slat=31&ns=1&dlon=...) 4/16/2012



