



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

RELEVANT RADIO, INC.

1496 BELLEVUE STREET

SUITE 202

GREEN BAY WI 54307

Son Nguyen

Supervisory Engineer

Audio Division

Media Bureau

Facility Id: 57235

Call Sign: WHKZ

License File Number: BML-20201014ABD

Grant Date: November 27, 2020

This license expires 3:00 a.m.
local time, October 01, 2028.

This license modifies license no.: BL-9320
to change from commercial to non-commercial, with no other changes

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

| | | | | | |
|------|---------|---------|------|---------|---------|
| Jan. | 7:45 AM | 5:15 PM | Jul. | 5:00 AM | 8:00 PM |
| Feb. | 7:15 AM | 6:00 PM | Aug. | 5:30 AM | 7:30 PM |
| Mar. | 6:30 AM | 6:30 PM | Sep. | 6:00 AM | 6:30 PM |
| Apr. | 5:45 AM | 7:00 PM | Oct. | 6:30 AM | 5:45 PM |
| May | 5:00 AM | 7:30 PM | Nov. | 7:15 AM | 5:00 PM |
| Jun. | 4:45 AM | 8:00 PM | Dec. | 7:45 AM | 5:00 PM |

Name of Licensee: RELEVANT RADIO, INC.

Station Location: WARREN, OH

Frequency (kHz): 1440

Station Class: B

Antenna Coordinates:

Day

Latitude: N 41 Deg 09 Min 52 Sec
Longitude: W 80 Deg 50 Min 47 Sec

Night

Latitude: N 41 Deg 09 Min 52 Sec
Longitude: W 80 Deg 50 Min 47 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 5.0 Night: 5.0

Antenna Input Power (kW): Day: 5.4 Night: 5.4

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 10.4 Night: 10.4

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

| Tower No. | ASRN | Overall Height (m) |
|-----------|---------|--------------------|
| 1 | 1014409 | |
| 2 | 1014410 | |

Night:

| Tower No. | ASRN | Overall Height (m) |
|-----------|---------|--------------------|
| 1 | 1014408 | |
| 2 | 1014409 | |
| 3 | 1014410 | |
| 4 | 1014411 | |
| 5 | 1014412 | |
| 6 | 1014413 | |

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 724.2 Night: 692.02

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Day: 763.13 Night: 733.21

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

| Tower No. | Field Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref Switch * | Height (Deg.) |
|-----------|-------------|----------------|----------------|--------------------|--------------------|---------------|
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 111.0 |
| 2 | 1.0000 | 90.000 | 75.0000 | 250.000 | 0 | 111.0 |

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

| Aug No. | Central Azimuth (Deg. T) | Span (Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|---------|--------------------------|-------------|--|
| 1 | 39.0 | 77.0 | 1062.17 |
| 2 | 208.0 | 84.0 | 318.65 |
| 3 | 250.0 | 66.0 | 156.11 |
| 4 | 250.0 | 10.0 | 177.03 |

Theoretical Parameters:

Night Directional Antenna:

| Tower No. | Field Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref Switch * | Height (Deg.) |
|-----------|-------------|----------------|----------------|--------------------|--------------------|---------------|
| 1 | 0.5100 | -84.000 | 0.0000 | 0.000 | 0 | 111.0 |
| 2 | 1.0000 | 56.000 | 75.0000 | 250.000 | 0 | 111.0 |
| 3 | 0.5100 | 196.000 | 75.0000 | 250.000 | 1 | 111.0 |
| 4 | 0.5100 | 140.000 | 252.0000 | 198.500 | 1 | 111.0 |
| 5 | 1.0000 | 0.000 | 75.0000 | 70.000 | 1 | 111.0 |
| 6 | 0.5100 | -140.000 | 75.0000 | 70.000 | 1 | 111.0 |

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

| Aug No. | Central Azimuth (Deg. T) | Span (Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|---------|--------------------------|-------------|--|
| 1 | 77.5 | 10.0 | 128.75 |

Augmentation Parameters:

| Aug No. | Central Azimuth (Deg. T) | Span (Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|------------|--------------------------------|----------------|--|
| 2 | 140.0 | 30.0 | 716.16 |
| 3 | 169.0 | 26.0 | 86.90 |
| 4 | 186.0 | 30.0 | 82.08 |
| 5 | 211.0 | 50.0 | 168.98 |
| 6 | 230.0 | 20.0 | 130.36 |
| 7 | 240.0 | 20.0 | 138.40 |
| 8 | 263.0 | 60.0 | 210.82 |
| 9 | 278.0 | 25.0 | 135.18 |
| 10 | 292.5 | 19.0 | 122.31 |
| 11 | 302.0 | 18.0 | 117.48 |
| 12 | 311.0 | 17.0 | 114.26 |
| 13 | 321.0 | 17.0 | 112.65 |
| 14 | 332.0 | 25.0 | 136.79 |

Day Directional Operation:

| Twr. Phase No. (Deg.) | Antenna Monitor Sample Current Ratio |
|--------------------------|---|
| 1 0 | 1 |
| 2 94.6 | 1.001 |

Night Directional Operation:

| Twr. Phase No. (Deg.) | Antenna Monitor Sample Current Ratio |
|--------------------------|---|
| 1 -86.7 | 0.542 |
| 2 49.4 | 1.009 |
| 3 -169.2 | 0.53 |
| 4 140.5 | 0.511 |
| 5 0 | 1 |
| 6 -141.3 | 0.528 |

Antenna Monitor: POTOMAC INSTRUMENTS MODEL 1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

| Radial (Deg. T) | Distance From Transmitter (kM) | Maximum Field Strength (mV/m) |
|--------------------|-----------------------------------|----------------------------------|
| 165 | 5.34 | 109.9 |
| 250 | 6.08 | 22.2 |
| 283 | 3.48 | 53 |

Night Operation:

| Radial (Deg. T) | Distance From Transmitter (kM) | Maximum Field Strength (mV/m) |
|--------------------|-----------------------------------|----------------------------------|
| 77.5 | 5.47 | 17 |
| 184 | 5.2 | 18 |
| 208 | 4.59 | 7.3 |
| 260 | 6.77 | 33 |
| 283 | 3.48 | 26 |
| 302 | 3.86 | 20.5 |
| 319.5 | 6.18 | 19 |

Special operating conditions or restrictions:

1 MONITOR POINT DESCRIPTIONS

77.5° - On West 3rd Street, 0.16 km west from intersection of West 3rd Street and Indiana Avenue, 5.47 km from site, max 17 mV/m nighttime.

165° - On north side of Silica Road, in farm lane in front of metal gate, 2.3 km east from intersection of Silica and State Route 45, 5.34 km from site, max 109.9 mV/m daytime.

184° - In middle of Silica Road next to Ohio Bell pole #1077, 0.55 km east from intersection of Silica and State Route 45, 5.2 km from site, max 18 mV/m nighttime.

208° - On Gladstone Road, 1.27 km west from intersection of Gladstone and State Route 45, 4.59 km from site, max 7.3 mV/m nighttime.

250° - On Hallock-Young Road, 0.69 km west from intersection of Hallock-Young Road and Lintz-Townline Road, 6.08 km from site, max 22.2 mV/m daytime.

260° - In center of road in front of 3290 Newton-Tomlinson Road near Ohio Edison pole #58AB44, 6.77 km from site, max 33 mV/m nighttime.

283° - In front of driveway to 1229 Ellsworth-Bailey Road, 3.48 km from site, max 53 mV/m daytime, max 26 mV/m nighttime.

302° - On Newton Falls-Bailey Road, in front of first house west of Layer Road, 0.77 km west from intersection of Newton Falls-Bailey Road and Palmyrs, 4.89 km west of intersection with Knoxville, 3.86 km from site, max 20.5 nighttime.

319.5° - On top of concrete slab on east side of road across from 2800 Layer Road, 6.18 km from site, max 19 mV/m nighttime.

- 2 The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

*** END OF AUTHORIZATION ***