United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
KOVAS COMMUNICATIONS OF INDIANA, INC.
6349 CONSTITUTION DRIVE
FT. WAYNE IN 46804

Facility Id: 72077
Call Sign: DWKKD
License File Number: BZ-20010416ABO

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau
Grant Date: September 21, 2001
This license expires 3:00 a.m.
local time, December 01, 2004.

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. | $7: 15 \mathrm{AM}$ | $4: 45 \mathrm{PM}$ | Jul. | $4: 30 \mathrm{AM}$ | $7: 30 \mathrm{PM}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feb. | $6: 45 \mathrm{AM}$ | $5: 30 \mathrm{PM}$ | Aug. $5: 00 \mathrm{AM}$ | $7: 00 \mathrm{PM}$ |  |
| Mar. | $6: 00 \mathrm{AM}$ | $6: 00 \mathrm{PM}$ | Sep. $5: 30 \mathrm{AM}$ | $6: 00 \mathrm{PM}$ |  |
| Apr. | $5: 15 \mathrm{AM}$ | $6: 30 \mathrm{PM}$ | Oct. $6: 00 \mathrm{AM}$ | $5: 15 \mathrm{PM}$ |  |
| May | $4: 30 \mathrm{AM}$ | $7: 00 \mathrm{PM}$ | Nov. $6: 45 \mathrm{AM}$ | $4: 30 \mathrm{PM}$ |  |
| Jun. | $4: 15 \mathrm{AM}$ | $7: 30 \mathrm{PM}$ | Dec. $7: 15 \mathrm{AM}$ | $4: 30 \mathrm{PM}$ |  |

Station Location: AURORA, IL
Frequency (kHz): 1580
Station Class: B
Antenna Coordinates:

## Day

| Latitude: | N | 41 Deg | 46 Min | 12 Sec |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Longitude: | W | 88 Deg | 16 Min | 03 Sec |

## Night

| Latitude: | N | 41 Deg | 46 Min | 12 Sec |
| :--- | :--- | :--- | :--- | :--- |
| Longitude: | W | 88 Deg | 16 Min | 03 Sec |

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

| Nominal Power (kW): | Day: 0.17 | Night: 0.2 |
| :--- | :--- | :--- |
| Antenna Input Power (kW) : Day: 0.184 | Night: 0.216 |  |
| Antenna Mode: | Day: DA | Night: DA |
| (DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours) |  |  |


| Current (amperes): | Day: 1.92 | Night: 2.08 |
| :--- | :--- | :--- |
| Resistance (ohms): | Day: 50 | Night: 50 |

Antenna Registration Number(s):
Day:
Tower No. ASRN Overall Height (m)
11056653
21008322
31056651

Night:
Tower No. ASRN Overall Height (m)
11056654
21008322
31056652

Augmented RMS (mV/m/km) :
Q Factor: Day: 10 Night: 10

Theoretical Parameters:
Day Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 110.000 | 0.0000 | 0.000 | 0 | 80.9 |
| 2 | 1.6000 | 0.000 | 130.0000 | 266.000 | 0 | 202.3 |
| 3 | 1.0000 | -110.000 | 260.0000 | 266.000 | 0 | 80.9 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower
$1=$ Spacing and orientation from previous tower

Augmentation Parameters:

| Aug | Central <br> Azimuth <br> (Deg. T) | Span <br> (Deg.) | Radiation <br> at Central Azimuth <br> (mV/m @ |
| :--- | :--- | :--- | :--- |
| 1 | 11.0 | 10.0 | 22.70 |
| 2 | 51.5 | 10.0 | 20.00 |
| 3 | 120.5 | 10.0 | 22.50 |
| 4 | 161.0 | 10.0 | 25.80 |
| 5 | 245.0 | 30.0 | 245.00 |
| 6 | 266.0 | 30.0 | 240.00 |
| 7 | 335.0 | 10.0 | 177.20 |

Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 90.000 | 0.0000 | 0.000 | 0 | 80.9 |
| 2 | 2.0000 | 0.000 | 90.0000 | 200.000 | 0 | 202.3 |
| 3 | 1.0000 | -90.000 | 180.0000 | 200.000 | 0 | 80.9 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Augmentation Parameters:

| Aug | Central <br> Azimuth <br> (Deg. T) | Span <br> (Deg.) | Radiation <br> at Central Azimuth <br> $(\mathrm{mV} / \mathrm{m} @ 1 \mathrm{~km})$ |
| :--- | :--- | :--- | :--- |
| No. | 0.0 | 20.0 | 22.00 |
| 1 | 20.0 | 20.0 | 15.50 |
| 2 | 40.0 | 20.0 | 22.00 |
| 3 | 60.0 | 20.0 | 19.00 |

Day Directional Operation:

| Twr. Phase <br> No. | Antenna Monitor <br> (Deg.) | Sample Current Ratio |
| :--- | :--- | :--- |
| 1 | -143 | 0.225 |
| 2 | 0 | 1 |
| 3 | 26.5 | 0.265 |

Night Directional Operation:

| Twr. Phase | Antenn |  |
| :--- | :--- | :--- |
| No. | (Deg.) | Sample |
| 2 | 0 | 1 |
| 4 | -50 | 0.22 |
| 5 | 39 | 0.135 |

Antenna Monitor: POTOMAC INSTRUMENTS AM-19(204)
Sampling System Approved Under Section 73.68 of the Rules.
Monitoring Points:

Day Operation:

| ```Radial Distance (Deg. T)``` | From Transmitter Maximum (kM) | ```Field Strength (mV/m)``` |
| :---: | :---: | :---: |
| 11 | 5.39 | 2.4 |
| 51.5 | 4.06 | 1.4 |
| 120.5 | 3.59 | 2.8 |
| 161 | 4.34 | 3.8 |
| Night Operation: |  |  |
| Radial Distance (Deg. T) | From Transmitter Maximum (kM) | ```Field Strength (mV/m)``` |
| 0 | 5.07 | 1.8 |
| 20 | 4.22 | 2.2 |
| 40 | 5.79 | 2.1 |
| 60 | 4.79 | 2.25 |

```
Special operating conditions or restrictions:
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1 DIRECTION OF AND FIELD INTENSITY AT MONITORING POINTS:
Direction of $0^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Street and proceed 0.62 km to the "T". Turn left (south), go 0.08 km to Dearborn Street, turn right (west) and proceed 0.59 km to Farnsworth. Turn right (north) on Farnsworth and proceed 5.12 km to Highway 56 (aka Butterfield Road). Turn right (east) and proceed 1.05 km to the monitor point which is in front of a red brick home on the south side of the road marked by Fire Sign 3277. The monitor point is \#14 on the proof and is 5.07 km from the array. The field intensity measured at this point should not exceed $1.8 \mathrm{mV} / \mathrm{m}$, nighttime.

Direction of $11^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Street and proceed 0.62 km to the "T". Turn left (south), go 0.08 km to Dearborn Street, turn right (west) and proceed 0.59 km to Farnsworth. Turn right (north) on Farnsworth and proceed 5.12 km to Highway 56 (aka Butterfield Road), and turn right (east). Proceed 2.1 km to the monitor point which is opposite the DuPage Parkway Sign (north side of road). The monitor point is on the south side of the road. The monitor point is \#14 on the proof and is 5.39 km from the array. The field intensity measured at this point should not exceed $2.4 \mathrm{mV} / \mathrm{m}$, daytime.

Direction of $20^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Street and immediately turn left (south)on Sartor. Proceed 0.47 km to Liberty Street and turn left (east). Proceed 2.09 km on Liberty to Eola Road. Turn left (north) on Eola and proceed 4.31 km across I-88 to Bilter Road (aka Stanton). Turn left (west) on Bilter and proceed 0.84 km to the monitor point which is near a fire hydrant on the north side of the street just east of the intersection of Parkview and Stanton (aka Bilter). The monitor point is \#12 on the proof and is 4.22 km from the array. The field intensity measured at this point should not exceed $2.2 \mathrm{mV} / \mathrm{m}$, night.

Special operating conditions or restrictions:
2 Direction of $40^{\circ}$ True North. From the transmitter site, turn right (west) on Plain street and immediately turn left (south) on Sartor. Proceed 0.47 km to Liberty Street and turn left (east). Proceed 2.09 km on Liberty to Eola Road. Turn left (north) on Eola and proceed 4.98 km across I-88 to Ferry Road. Turn right (east) on Ferry and proceed 1.51 km to the monitor point located at the mailbox to the home on the south side of the road. The monitor point is \#12 on the proof and is 5.79 km from the array. The field intensity measured at this point should not exceed $2.1 \mathrm{mV} / \mathrm{m}$, nighttime.

Direction of $51.5^{\circ}$ True North. From the transmitter site, turn right (west) on Plain street and immediately turn left (south) on Sartor. Proceed 0.47 km to Liberty Street and turn left (east). Proceed 2.09 km on Liberty to Eola Road. Turn left (north) and proceed 1.66 km to Ogden Avenue. Turn right (east) and proceed 1.13 km to Frontenac. Turn left (north) and follow Frontenac through a jog left and right 0.11 km to the monitor point. The monitor point is of the southeast corner of the Stone Container Building by the fire hydrant. The monitor point is \#11 on the proof and is 4.06 km from the array. The field intensity measured at this point should not exceed $1.4 \mathrm{mV} / \mathrm{m}$, daytime.

Direction of $60^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Avenue and immediately turn left (south on Sartor. Proceed 0.47 km to Liberty Street and turn left (east) Proceed 2.09 km on Liberty to Eola Road. Turn left (north) and proceed 3.66 km to Diehl Road. Turn right (east) and proceed 1.66 km to Fairway Drive. Turn right on Fairway and follow the road 1.37 km through a right angle left, three jogs to the right and a jog to the left. The monitor point is at the northwest corner of the west parking lot of 1512 Fairway Drive. GPS coordinates: $41^{\circ} 477^{\prime \prime} 8^{\prime \prime}$; $88^{\circ} 13^{\prime \prime} 03^{\prime \prime}(N A D-83)$. This point is Point 12 on the 1989 proof and is 4.79 km from the array. The field intensity at this point should not exceed $2.25 \mathrm{mV} / \mathrm{m}$, day.

Direction of $120.5^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Street and immediately turn left (south) on Sartor. Proceed 0.47 km to Liberty Street and turn left (east). Proceed 2.09 km on Liberty to Eola Road. Turn right (south) on Eola and proceed 0.79 km south to New York Road. Turn left (east) and proceed 1.21 km to Frontenac. Turn right and follow Frontenac 1.17 km to the monitoring point which is on the west side of the street by the fire hydrant and the large boulder in the park. The monitor point is \#10 on the poof and is 3.59 km from the array. The field intensity at this point should not exceed $2.8 \mathrm{mV} / \mathrm{m}$, daytime.

Direction of $161^{\circ}$ True North. From the transmitter site, turn right (west) on Plain Street and proceed 0.62 km to the "T". Turn left (south), go 0.08 km to Dearborn Street, turn right (west) and proceed 0.59 km to Farnsworth. Turn left (south) and proceed 2.38 km to 5 th Avenue. Turn right (west) and go 0.58 km to Highway 30 . Turn left (south) and proceed 1.55 km to Montgomery Street. Turn left (east) and proceed 1.61 km on Montgomery. Turn left (south-southeast) and follow Montgomery for 1.21 km as it breaks left and goes east. The monitor point is at the driveway on the north side of the road opposite the intersection of Montgomery and Ridge. The monitor point is \#12 on the proof and is 4.34 km from the array. The field intensity at this point should not exceed $3.8 \mathrm{mV} / \mathrm{m}$, daytime.

Special operating conditions or restrictions:

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SGROUND SYSTEM DESCRIPTION:
Ground system consists of 120 equally spaced buried copper radials about the base of each tower 47.56 m eters in length except where terminated by property boundaries. Plus 120 interspersed radials 22.85 meters in length.

The permittee/licensee in coordination with other users of the site 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

