

#### **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 AM	4:45 PM	Jul.	4:30 AM	7:30 PM
Feb.	6:45 AM	5:30 PM	Aug.	5:00 AM	7:00 PM
Mar.	6:00 AM	6:00 PM	Sep.	5:30 AM	6:00 PM
Apr.	5:15 AM	6:30 PM	Oct.	6:00 AM	5:15 PM
May	4:30 AM	7:00 PM	Nov.	6:45 AM	4:30 PM
Jun.	4:15 AM	7:30 PM	Dec.	7:15 AM	4:30 PM

Callsign: DWKKD License No.: BZ-20010416ABO

Name of Licensee: KOVAS COMMUNICATIONS OF INDIANA, INC.

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)

1 1056653
 2 1008322

3 1056651

Night:

Tower No. ASRN Overall Height (m)

1 1056654
 2 1008322

3 1056652

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DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 144.28 Night: 164.88

Standard RMS (mV/m/km): Day: Night:

Augmented RMS (mV/m/km):

Q Factor: Day: 10 Night: 10

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (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

<sup>\*</sup> 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	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 No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)		Height (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

<sup>\*</sup> Tower Reference Switch

0 = Spacing and orientation from reference tower

<sup>1 =</sup> Spacing and orientation from previous tower

## Callsign: DWKKD

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	0.0	20.0	22.00
2	20.0	20.0	15.50
3	40.0	20.0	22.00
4	60.0	20.0	19.00

### Day Directional Operation:

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

### Night Directional Operation:

	Phase	Antenna Monitor
NO.	(Deg.)	Sample Current Ratio
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

License No.: BZ-20010416ABO

Special operating conditions or restrictions:

Callsign: DWKKD

#### 1 DIRECTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 0° 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 mV/m, nighttime.

Direction of 11° 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 mV/m, daytime.

Direction of 20° 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 mV/m, night.

Special operating conditions or restrictions:

Direction of 40° 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 mV/m, nighttime.

Direction of 51.5° 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 mV/m, daytime.

Direction of 60° 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°47'28"; 88°13'03"(NAD-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 mV/m, day.

Direction of 120.5° 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 mV/m, daytime.

Direction of 161° 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 5th 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 mV/m, daytime.

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Special operating conditions or restrictions:

3 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 \*\*\*