United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
IHM LICENSES, LLC
7136 S. YALE AVENUE
TULSA OK 74136

Facility Id: 68293
Call Sign: KTBZ
License File Number: BL-20030905ACQ

This License Covers Permit No.: BP-20011105AAA

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

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Name of Licensee: IHM LICENSES, LLC
Station Location: TULSA, OK
Frequency (kHz): 1430
Station Class: B
Antenna Coordinates:
Day
\begin{tabular}{lllll} 
Latitude: & N & 36 Deg & 14 Min & 12 Sec \\
Longitude: & W & 95 Deg & 57 Min & 19 Sec
\end{tabular}
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## Night

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\begin{tabular}{lllll} 
Latitude: & N & 36 Deg & 14 Min & 12 Sec \\
Longitude: & W & 95 Deg & 57 Min & 19 Sec
\end{tabular}
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Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and
73.1670 of the Commission's Rules.

| Nominal Power (kW): | Day: 25.0 | Night: 5.0 |
| :--- | :--- | :--- |
| Antenna Input Power (kW) : Day: 26.2 | Night: 5.4 |  |
| Antenna Mode: | Day: DA | Night: DA |
| (DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours) |  |  |

Current (amperes): Day: 22.9 Night: 10.39
Resistance (ohms): Day: 50 Night: 50
Antenna Registration Number(s):
Day:
Tower No. ASRN Overall Height (m)
1 None 56.1
21011430
3 None 56.1

Night :
Tower No. ASRN Overall Height (m)
1011429
21011430
Theoretical RMS (mV/m/km): Day: 1575.5 Night: 746.74
Standard RMS (mV/m/km): Day: 1655.1 Night: 784.44

Augmented RMS (mV/m/km) :

| Q Factor |  | Day: 50 |  | Night: 22.8 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theoretical Parameters: |  |  |  |  |  |  |
| Day Directional Antenna: |  |  |  |  |  |  |
| Tower | Field <br> Ratio | Phasing | Spacing | Orientation | Tower Ref Switch * | Height |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 94.2 |
| 2 | 0.8380 | -103.000 | 150.0000 | 171.000 | 0 | 112.5 |
| 3 | 0.4130 | 160.500 | 282.3000 | 171.000 | 0 | 94.2 |

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

Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 112.5 |
| 2 | 0.8560 | 137.000 | 91.6000 | 0.000 | 0 | 112.5 |

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

Day Directional Operation:

| Twr. Phase |  |  |
| :--- | :--- | :--- |
| No. | (Deg.) | Antenna <br> Sample |
| 1 | 38.8 | 1.362 |
| 2 | 0 | 1 |
| 3 | -112.6 | 0.975 |

Night Directional Operation:
Twr. Phase Antenna Monitor
No. (Deg.) Sample Current Ratio

| 1 | 0 | 1 |
| :--- | :--- | :--- |
| 2 | 135 | 0.77 |

Antenna Monitor: POTOMAC INSTRUMENTS 1901-5
Sampling System Approved Under Section 73.68 of the Rules.
Monitoring Points:

Day Operation:

| Radial <br> (Deg. T) | Distance |  |
| :--- | :---: | :---: |
| 25.5 | From Transmitter Maximum <br> $(\mathrm{kM})$ | Field <br> $(\mathrm{mV} / \mathrm{m})$ |
| 67 | 3.4 | 191.62 |
| 171 | 4.7 | 42.4 |
| 275 | 3.13 | 399.6 |
| 316.5 | 3.75 | 93.67 |
|  | 7.28 | 49.87 |
| Night Operation: |  |  |
|  |  |  |
| Radial Distance | From Transmitter Maximum | Field Strength |
| (Deg. T) | $(\mathrm{kM})$ | $(\mathrm{mV} / \mathrm{m})$ |
| 62 | 3.22 | 32.24 |
| 298 | 3.78 | 18.91 |

Special operating conditions or restrictions:

1
Monitor point readings shall be taken at the following location:
25.5 degrees $T$ : Point is located on the south edge of 76 th Street North, approximately 0.1 mile west of $N$. Harvard Avenue and 5 yards west of "Stop Ahead" sign.
DISTANCE: 3.4 km . LIMIT: $191.62 \mathrm{mV} / \mathrm{m}$ DAYTIME.
67 degrees T: Point is located on 66th Street, 1.5 miles from the intersection. Street will curve north and the point is located approximately 0.1 mile past the curve. Point is located on the east side of the street in the middle of the lane closest to the curb. DISTANCE: 4.7 km . LIMIT: $42.4 \mathrm{mV} / \mathrm{m}$ DAYTIME.

171 degrees $\mathrm{T}:$ Point is on the south side of Mohawk Blvd, approximately 55 yards east of a fire hydrant located on the south side of the street. DISTANCE: 3.13 km . LIMIT: $399.6 \mathrm{mV} / \mathrm{m}$ DAYTIME.

275 degrees $T$ : Point is located 5 paces east of pasture gate at end of E. 59th Street North. DISTANCE: 3.75 km . LIMIT: $93.67 \mathrm{mV} / \mathrm{m}$ DAYTIME.
316.5 degrees $T:$ Point is located in the middle of Timberlane Street, perpendicular to the center of the driveway for home at 8807 Timberlane.
DISTANCE: 7.28 km . LIMIT: $49.87 \mathrm{mV} / \mathrm{m}$ DAYTIME.

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Special operating conditions or restrictions:
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262 degrees $T:$ From transmitter driveway turn right on 56 th Street North and proceed west 0.15 miles to Lewis Avenue. Turn right and proceed north 1.0 Miles to 66 th Street North. Turn right and proceed east 1.92 miles to the point. Point is on the road, 0.1 miles past the west entrance to Crown Hill Cemetary and lies 2.00 miles from the antenna.
DISTANCE: 3.22 km . LIMIT: $32.24 \mathrm{mV} / \mathrm{m}$ NIGHTTIME.
298 degrees T: From transmitter driveway turn right on 56th Street North and proceed west 0.15 miles to Lewis Avenue. Turn right and proceed north one mile to 66th Street North. Turn left and proceed west 2.1 miles to Cincinnati Avenue. Turn right and proceed north and east 0.4 miles to point. Point is on the road 0.1 miles past the trun to the right.
DISTANCE: 3.78 km . LIMIT: $18.91 \mathrm{mV} / \mathrm{m}$ NIGHTTIME.

