United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
IHM LICENSES, LLC
7136 S. YALE AVENUE
SUITE 501
TULSA OK 74136

Facility Id: 22099
Call Sign: KWHN
License File Number: BL-20120907AEI
This license covers permit no.: BP-20091214AGE

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

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Name of Licensee: IHM LICENSES, LLC
Station Location: FORT SMITH, AR
Frequency (kHz): 1320
Station Class: B
Antenna Coordinates:
Day
    Latitude: N }35\mathrm{ Deg 25 Min 01 Sec
    Longitude: W 94 Deg 21 Min 54 Sec
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## Night

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\begin{tabular}{lllll} 
Latitude: & N & 35 Deg & 25 Min & 01 Sec \\
Longitude: & W & 94 Deg & 21 Min & 54 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: 5.0 | Night: 5.0 |
| :--- | :--- | :--- |
| Antenna Input Power $(\mathrm{kW}):$ Day: 5.0 | Night: 5.4 |  |
| Antenna Mode: | Day: ND | Night: DA |
| (DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours) |  |  |


| Current (amperes): | Day: 9.21 | Night: 10.4 |
| :--- | :--- | :--- |
| Resistance (ohms): | Day: 59 | Night: 50 |

    Non-Directional Antenna: Day
    Radiator Height: 60.98 meters; 96.6 deg
    Theoretical Efficiency: \(310.6 \mathrm{mV} / \mathrm{m} / \mathrm{kw}\) at 1 km
    Antenna Registration Number(s):
Day:
Tower No. ASRN Overall Height (m)
21039966
Night:
Tower No. ASRN Overall Height (m)
11039968
21039967
31039966
41039965
Augmented RMS (mV/m/km): Night:750.76

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Q Factor:
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Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 1.0000 | 48.300 | 0.0000 | 0.000 | 0 | 96.6 |
| 2 | 1.7650 | -92.400 | 90.0000 | 247.000 | 0 | 96.6 |
| 3 | 1.9680 | 103.100 | 90.0000 | 247.000 | 1 | 96.6 |
| 4 | 1.0000 | -48.300 | 90.0000 | 247.000 | 1 | 96.6 |

* 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. | 62.0 | 10.0 | 286.46 |
| 1 | 67.0 | 10.0 | 273.59 |
| 2 | 189.0 | 10.0 | 96.56 |
| 3 | 220.0 | 40.0 | 1416.22 |
| 4 |  |  |  |

Night Directional Operation:

| Twr.Phase <br> No. | Antenna Monitor <br> (Deg.) | Sample Current Ratio |
| :--- | :--- | :--- |
| 1 | 43.2 | 0.607 |
| 2 | -167 | 1.072 |
| 3 | 0 | 1 |
| 4 | 135.6 | 0.632 |

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

Night Operation:

Radial Distance From Transmitter Maximum Field Strength
(Deg. T)
8
67
111
189
297
315
(kM)
4.75
3.06
3.39
4.07
4.26
3.22
( $\mathrm{mV} / \mathrm{m}$ )
24.2 72 58
26.5

78
67

Special operating conditions or restrictions:
1 DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM
No. and Type of Elements: Four (4) vertical, guyed, series-excited steel radiators of uniform cross section.

Ground System consists of 120-170' equally spaced, buried copper wire radials about the base of each tower 61 m in length, plus an additional 57 radials 15.2 m in length at the base of tower \#1 and a 15.2 m by 15.2 m ground screen at the base of each tower.

DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:
Direction of $8^{\circ}$ true North. Leave the transmitter site and proceed west on Plum Street 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for .33 mile to the intersection of Midland Blvd. Hwy 64 and turn right onto Midland 64. Continue travel East, across the Arkansas River Bridge, into the City of Van Buren, Arkansas and turn left onto south 8th Street, 0.2 mile after the bridge, continuing on 8th Street for 0.2 mile until joining Hwy 59. Travel on Hwy 59 for 1.6 mile, until intersection of Pointer Trail West Street. Turn left onto Pointer Trail West Street and proceed for 0.1 mile west to the front of Pointer Trail Pharmacy. The monitor point is directly in front of the pharmacy, at the edge of the street adjoining the parking area to the pharmacy, and immediately North of the mailbox. This is point \#12 of the field proof and is 2.95 mile from the transmitter site. The measured field intensity at this point should not exceed $24.2 \mathrm{mV} / \mathrm{m}$.

Direction of $315^{\circ}$ true North. Leave the transmitter site and proceed West on Plum Street for 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for 0.33 mile to the intersection of Midland Blvd. Hwy 64 and turn right onto Midland 64. Continue travel East on Midland for 0.45 mile until the junction of Clayton Expressway and turn left onto Clayton Expressway, continuing back North-West for 1.63 mile. The point is on the centerline of the Expressway at this position and coincides with being in line with two metal gates that are on opposite sides of the Expressway, about 150 yards apart. There is also a rusted metal tag, attached in the fence to the North side of the roadway that is even with the monitor point. This point is \#10 of the field proof and is 2.00 mile from the transmitter site. The measured field intensity at this point should not exceed $67 \mathrm{mV} / \mathrm{m}$.

Special operating conditions or restrictions:
4 Direction of $67^{\circ}$ true North. Leave the transmitter site and proceed West on Plum Street for 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for 0.33 mile to the intersection of Midland Blvd. Hwy 64 and turn right onto Midland 64. Continue travel East, across the Arkansas River Bridge, into the City of Van Buren and turn right at the foot of the bridge onto South 4 th Street Hwy 59 and proceed for $3 / 4$ mile to the Interstate 540 bridge and pass under the bridge for another 0.6 mile, following the Industrial Park road. Turn left between two brick pillars and follow the gravel road for 0.4 mile North passing the Gasahol plant. The monitor point is in the center of the road, North of the Gasahol plant, 20 feet West of a group of pipes on the East edge of the road. The towers can be visually lined up at this point and will coincide with lining up the North side of a long steel building that is located to the East of the point. This is point \#5 of the field proof and is 1.9 mile from the transmitter site. The measured field intensity at this point should not exceed 72 $\mathrm{mv} / \mathrm{m}$.

Direction of $111^{\circ}$ true North. Leave the transmitter site and proceed West on Plum Street for 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for 0.33 mile to the intersection of Midland Blvd., Hwy 64 and turn right onto Midland 64. Continue travel East, across the Arkansas River
Bridge, into the City of Van Buren and turn right at the foot of the bridge onto South 4 th Street, Hwy 59 and proceed for $3 / 4$ mile to the Interstate 540 bridge. Pass under the 540 bridge and continue on Hwy 59 for another 1.7 mile, until a junction of pavement that crosses Hwy 59 to the river levee, one direction, and proceeds East to a dead-end, the other direction. (this crossing is not shown of the current map, at this time, nor is partial leg of Hwy. 59 that will be used following these directions) The monitor point is in the center of the road East (East edge of Hwy 59), and 10' from the stop sign on the North edge of the road. This is point \#7 of the field proof and is 2.11 mile from the transmitter site. The measured field intensity at this point should not exceed $58.0 \mathrm{mV} / \mathrm{m}$.

Direction of $189^{\circ}$ true North. Leave the transmitter site and proceed West on Plum Street for 0.5 mile to Waldron Avenue. Turn left on Waldron Avenue and continue following its course for 2.75 mile until the intersection of Kinkead Street. Turn left on Kinkead Street and proceed East for 0.1 mile, to the edge of the schoolyard at Echols School. Turn right and enter the bus-lane of the Echols school for nearly 0.1 mile arriving at the traffic turn-a-round on the North side of the school building. The monitor point is in the center of the turn-a-round at Echols School, 50 feet North of the flagpole. This is point \#8 of the field proof and is 2.53 miles from the transmitter site. The measured field intensity at this point should not exceed 26.5 $\mathrm{mV} / \mathrm{m}$.

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Special operating conditions or restrictions:
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5 Direction of $297^{\circ}$ true North. Leave the transmitter site and proceed Weston Plum Str.eetfor 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for 0.33 mile to the intersection of Midland Blvd. Hwy 64 and turn right onto Midland 64. Continue travel East on Midland for 0.45 mile until the junction of Clayton Expressway and turn left onto Clayton Expressway and continue back West for 2.6 mile until approaching a wooded area where the river levee makes a sharp bend away from the Expressway. This spot in the expressway is also 0.3 mile East of a small dirt crossroads which goes to a sand-plant if followed to the North and there is a small yellow sign on the expressway that makes reference to the sand-plant. The monitor point is on the centerline of the expressway at the point where the levee bends, 50 yards West of a small culvert under pavement, and even with a set of double braces in the fence to the North. This point is \#9 of the field proof and is 2.65 miles from the transmitter site. The measured field intensity at this point should not exceed $78 \mathrm{mV} / \mathrm{m}$.

Direction of $315^{\circ}$ true North. Leave the transmitter site and proceed West on Plum Street for 0.5 mile to Waldron Avenue. Turn right on Waldron Avenue and travel North for 0.33 mile to the intersection of Midland Blvd. Hwy 64 and turn right onto Midland 64. Continue travel East on Midland for 0.45 mile until the junction of Clayton Expressway and turn left onto Clayton Expressway, continuing back North-West for 1.63 mile. The point is on the centerline of the Expressway at this position and coincides with being in line with two metal gates that are on opposite sides of the Expressway, about 150 yards apart. There is also a rusted metal tag, attached in the fence to the North side of the roadway that is even with the monitor point. This point is \#10 of the field proof and is 2.00 mile from the transmitter site. The measured field intensity at this point should not exceed $67 \mathrm{mV} / \mathrm{m}$.
*** END OF AUTHORIZATION ***

