United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

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HUNDLEY BATTS, SR. \& VIRGINIA CAPLES
PO BOX 920
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(2509 JORDAN LANE NW)
HUNTSVILLE AL 35804

Facility Id: 28118
Call Sign: WHIY
License File Number: BZ-20121127BDH

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau
Grant Date: May 15, 2013
This license expires 3:00 a.m. local time, April 01, 2020.

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

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Callsign: WHIY
    License No.: BZ-20121127BDH
    Name of Licensee: HUNDLEY BATTS, SR. & VIRGINIA CAPLES
    Station Location: HUNTSVILLE, AL
    Frequency (kHz): 1600
Station Class: B
Antenna Coordinates:
                Day
\begin{tabular}{lllll} 
Latitude: & N & 34 Deg & 45 Min & 32 Sec \\
Longitude: & W & 86 Deg & 38 Min & 35 Sec
\end{tabular}
                Night
    Latitude: N 34 Deg 45 Min 32 Sec
    Longitude: W 86 Deg 38 Min 35 Sec
Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and
73.1670 of the Commission's Rules.
\begin{tabular}{lll} 
Nominal Power (kW): & Day: 5.0 & Night: 0.50 \\
Antenna Input Power (kW): Day: 5.0 & Night: 0.54 \\
Antenna Mode: & Day: ND & Night: DA
\end{tabular}
(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)
Current (amperes): Day: 10 Night: 3.35
Resistance (ohms): Day: 50 Night: 48
    Non-Directional Antenna: Day
    Radiator Height: meters;
    Top-Loaded/Sectionalized Tower Parameters: (See 47 CFR 73.160)
    Tower No. A B
    1 149.0 70.70
    Theoretical Efficiency: 426.48 mV/m/kw at 1km
Antenna Registration Number(s):
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| Day: |  |
| :---: | :---: |
| Tower No. | ASRN |
| 1 | None |
| Night : |  |
| Tower No. | ASRN |
| 1 | None |
| 2 | None |
| 3 | None |
| 4 | None |
| 5 | None |
| 6 | None |

Theoretical RMS (mV/m/km): Night: 206
Standard RMS (mV/m/km) :
Augmented RMS (mV/m/km): Night:224.4
Q Factor:
Night:
Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | Height <br> (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 105.4 |
| 2 | 1.0257 | 225.600 | 115.0000 | 172.500 | 1 | 105.4 |
| 3 | 0.5400 | -243.700 | 115.0000 | 172.500 | 1 | 105.4 |
| 4 | 1.1110 | 180.000 | 130.0000 | 262.500 | 0 | 105.4 |
| 5 | 1.1390 | 45.600 | 115.0000 | 172.500 | 1 | 105.4 |
| 6 | 0.6001 | -63.700 | 115.0000 | 172.500 | 1 | 105.4 |

* 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 km$)$ |
| :--- | :--- | :--- | :--- |
| 1 | 20.0 | 55.0 | 82.08 |
| 2 | 52.5 | 50.0 | 142.64 |
| 3 | 77.5 | 45.0 | 51.82 |
| 4 | 100.0 | 45.0 | 262.32 |
| 5 | 125.0 | 40.0 | 421.57 |
| 6 | 145.0 | 40.0 | 340.18 |
| 7 | 172.5 | 35.0 | 50.28 |
| 8 | 190.0 | 35.0 | 248.34 |
| 9 | 220.0 | 40.0 | 420.01 |
| 10 | 240.0 | 40.0 | 317.76 |
| 11 | 267.5 | 50.0 | 51.82 |
| 12 | 292.5 | 45.0 | 142.25 |
| 13 | 315.0 | 45.0 | 96.21 |
| 14 | 352.5 | 55.0 | 30.42 |

Night Directional Operation:

| Twr. Phase | Antenna Monitor <br> No. (Deg.) | Sample Current Ratio |
| :--- | :--- | :--- |
| 1 | -51.4 | 0.975 |
| 2 | 178 | 1.017 |

Night Directional Operation:

| Twr. Phase <br> No. | Antenna Monitor <br> (Deg.) | Sample Current Ratio |
| :--- | :--- | :--- |
| 3 | 68.3 | 0.529 |
| 4 | 128.8 | 0.973 |
| 5 | 0 | 1 |
| 6 | -113.5 | 0.534 |

Antenna Monitor: POTOMAC INSTRUMENTS AM-19D(210)

Monitoring Points:
Night Operation:

| Radial <br> $($ Deg. T) | Distance | From Transmitter Maximum <br> $(\mathrm{kM})$ |
| :--- | :---: | :---: |
| 52.2 | 2.24 | Field <br> $(\mathrm{mV} / \mathrm{m})$ |
| 77.5 | 3.62 | 44 |
| 172.5 | 2.74 | 8.4 |
| 267.5 | 3.86 | 8 |
| 292.5 | 3.54 | 5.5 |
| 352.5 | 1.36 | 14 |
|  |  | 15 |

Special operating conditions or restrictions:

1 Ground System consists of 120-150' copper radials plus stub radial 25' about base of each tower. The long radials are connected to steel joists of roof of building Daytime (\#7) ground system contains 120-200' buried copper radials plus interspaced radials $35^{\prime}$ in length.

2 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the $1 \mathrm{~V} / \mathrm{m}$ contour as required by Section 73.88 of the Commission's rules.

3 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.

DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:
Direction of $52.2^{\circ}$ True North: Proceed left from station drive, on Jordan Lane 1.0 miles to Mastin Lake Road. At Mastin Lake Road, turn right and proceed 1.65 miles to Bartee Road. At Bartee Road turn right and proceed 0.05 miles to house \#3401. Monitor point is on West side of road at curb in front of house \#3401. The monitor point is 2.24 km from the antenna array. The field intensity measured at this point should not exceed $44 \mathrm{mV} / \mathrm{m}$.

Direction of $77.5^{\circ}$ True North: From station drive, turn right on Jordan Lane, proceed 0.15 miles to Oakwood Road. Turn left and proceed 0.05 miles on Oakwood to Sparkman Drive. Turn left on Sparkman Drive and proceed 1.5 miles to Pulaski Pike. At Pulaski Pike turn left and proceed 0.28 miles to Broadview Road. At Broadview, turn right and proceed 0.2 miles to Haven Street. Turn left, go one block to Brett Road and turn right. Proceed on Brett Road 0.45 miles to Donner. Turn left on Donner and proceed 0.05 miles to house \#3105. Point is on westside of road in front of house \#3105. The monitor point is 3.62 km from the antenna array. The field intensity measured at this point should not exceed $8.4 \mathrm{mV} / \mathrm{m}$.

Direction of $172.5^{\circ}$ True North: From station drive, proceed 1.86 miles south on Jordan Lane to University Drive. At university Drive turn right and proceed 0.67 miles to entrance to University of Alabama, Huntsville. Turn left into drive and proceed 0.05 miles to monitor point on top of manhole cover. The monitor point is 2.74 km from the antenna array. The field intensity measured at this point should not exceed $8.0 \mathrm{mV} / \mathrm{m}$.

Direction of $267.5^{\circ}$ True North: From station drive, turn right and proceed 0.15 mile to Jordan Lake to Oakwood Road. Turn right on Oakwood Road and proceed 2.2 miles to John Road. Turn left on John road and proceed 0.14 miles to Old Monrovia Road. Turn right, proceed 0.37 miles to entrance to field on north side of road. Enter field and point is 31 feet north of 2 nd tree on east side of drive. The monitor point is 3.86 km from the antenna array. The field intensity measured at this point should not exceed $5.5 \mathrm{mV} / \mathrm{m}$.

Direction of $292.5^{\circ}$ True North: From station drive, proceed south on Jordan Lane 0.15 miles to Oakwood Road. Proceed right on Oakwood Road for 2.2 miles to John Road. Turn right on John road and proceed 0.95 miles to drive of house on east side of road. Monitor point is on south side of drive 15.3 feet from road. The monitor point is 3.54 km from the antenna array. The field intensity measured at this point should not exceed $14.0 \mathrm{mV} / \mathrm{m}$.

Direction of $352.5^{\circ}$ True North: From station drive, proceed left on Jordan Lane, travel 1.0 miles to Mastin Lake Road. At Mastin Lake Road, turn right and travel 0.34 miles to American Service Station at Lodge Road. Behind service station is spot marked and reserved as Monitor point \#1. The monitor point is 1.36 km from the antenna array. The field intensity measured at this point should not exceed $15.0 \mathrm{mV} / \mathrm{m}$.

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*** END OF AUTHORIZATION ***
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