United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
AMERICAN BROADCASTING OF TEXAS
1019 WASHINGTON
WACO TX 76701

Facility Id: 1322
Call Sign: KBBW
License File Number: BL-20090108API
This license covers permit no.: BMJP-20041029AJG
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. | $7: 30 \mathrm{AM}$ | $5: 45 \mathrm{PM}$ | Jul. $5: 30 \mathrm{AM}$ | $7: 30 \mathrm{PM}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feb. | $7: 15 \mathrm{AM}$ | $6: 15 \mathrm{PM}$ | Aug. $5: 45 \mathrm{AM}$ | $7: 15 \mathrm{PM}$ |
| Mar. | $6: 45 \mathrm{AM}$ | $6: 30 \mathrm{PM}$ | Sep. $6: 15 \mathrm{AM}$ | $6: 30 \mathrm{PM}$ |
| Apr. | $6: 00 \mathrm{AM}$ | $7: 00 \mathrm{PM}$ | Oct. $6: 30 \mathrm{AM}$ | $6: 00 \mathrm{PM}$ |
| May | $5: 30 \mathrm{AM}$ | $7: 15 \mathrm{PM}$ | Nov. $7: 00 \mathrm{AM}$ | $5: 30 \mathrm{PM}$ |
| Jun. | $5: 15 \mathrm{AM}$ | $7: 30 \mathrm{PM}$ | Dec. $7: 15 \mathrm{AM}$ | $5: 30 \mathrm{PM}$ |

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Name of Licensee: AMERICAN BROADCASTING OF TEXAS
Station Location: WACO, TX
Frequency (kHz): 1010
Station Class: B
Antenna Coordinates:
                    Day
\begin{tabular}{lllll} 
Latitude: & N & 31 Deg & 34 Min & 06 Sec \\
Longitude: & W & 97 Deg & 00 Min & 01 Sec
\end{tabular}
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## Night

| Latitude: | N | 31 Deg | 30 Min | 07 Sec |
| :--- | :--- | :--- | :--- | :--- |
| Longitude: | W | 96 Deg | 57 Min | 54 Sec |

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

| Nominal Power (kW): | Day: 10.0 | Night: 2.5 |
| :--- | :--- | :--- |
| Antenna Input Power (kW) : Day: 10.5 | Night: 2.7 |  |
| Antenna Mode: | Day: DA | Night: DA |
| (DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours) |  |  |

Current (amperes): Day: 15.2 Night: 7.35

Resistance (ohms): Day: 45.5 Night: 50
Antenna Registration Number(s):
Day:
Tower No. ASRN Overall Height (m)

| 1 | 1245719 |
| :--- | :--- |
| 2 | 1245718 |
| 3 | 1245720 |

Night :
Tower No. ASRN Overall Height (m)
$1 \quad 1245721$
21245722
31245723
$4 \quad 1245724$
51245725
$6 \quad 1245726$

Augmented RMS (mV/m/km): Day:1040.27

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Q Factor:
                    Day: 40.51
Night: 15.81
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Theoretical Parameters:
Day Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch | * | (Deg.) |
| 1 | 1.0000 | -29.000 | 0.0000 | 0.000 | 0 | 90.0 |  |
| 2 | 1.0620 | -176.100 | 90.0000 | 172.000 | 0 | 90.0 |  |
| 3 | 0.5600 | 29.000 | 180.0000 | 172.000 | 0 | 90.0 |  |

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

Augmentation Parameters:

| Aug | Central <br> Azimuth | Span <br> (Deg.) | Radiation <br> at Central Azimuth <br> $(\mathrm{mV} / \mathrm{m}$ @ 1 km$)$ |
| :--- | :--- | :--- | :--- |
| No. | (Deg. T) | 434.52 <br> 1 | 92.0 |

Theoretical Parameters:
Night Directional Antenna:

| Tower | Field |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | Phasing <br> (Deg.) | Spacing <br> (Deg.) | Orientation <br> (Deg.) | Tower Ref <br> Switch | Height <br> (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 99.8 |
| 2 | 1.7430 | 85.660 | 204.0000 | 45.000 | 0 | 99.8 |
| 3 | 2.5350 | 166.940 | 204.0000 | 45.000 | 1 | 99.8 |
| 4 | 2.4490 | 257.250 | 204.0000 | 45.000 | 1 | 99.8 |
| 5 | 1.6330 | 341.060 | 204.0000 | 45.000 | 1 | 99.8 |
| 6 | 1.3690 | 81.000 | 204.0000 | 45.000 | 1 | 99.8 |

* Tower Reference Switch

0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Day Directional Operation:
Twr. Phase Antenna Monitor
No. (Deg.) Sample Current Ratio
$1 \quad 145 \quad 0.96$
201

Day Directional Operation:

| Twr. Phase No. (Deg.) |  | Antenna Monitor |
| :---: | :---: | :---: |
|  |  | Sample Current Ratio |
| 3 | -146 | 0.51 |
| Night Directional Operation: |  |  |
| Twr. Phase <br> No. (Deg.) |  | Antenna Monitor |
|  |  | Sample Current Ratio |
| 1 | -170.5 | 0.429 |
| 2 | -77 | 0.728 |
| 3 | 0 | 1 |
| 4 | 87 | 0.982 |
| 5 | 175.5 | 0.602 |
| 6 | -92 | 0.492 |

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

| Radial <br> (Deg. T) | Distance |  |
| :--- | :---: | :---: |
| 22 | From Transmitter Maximum <br> $(\mathrm{kM})$ | Field <br> $(\mathrm{mV} / \mathrm{m})$ |
| 92 | 3.22 | 95.5 |
| 280 | 6.76 | 56.2 |
| 352 | 7.24 | 74.5 |
|  | 7 | 65.1 |

Night Operation:

| Radial <br> $($ Deg. T) | DistanceFrom Transmitter Maximum <br> $(\mathrm{kM})$ | Field <br> $(\mathrm{mV} / \mathrm{m})$ |
| :--- | :---: | :---: |
| 6 | 11.59 | 5.74 |
| 27.8 | 11.27 | 1.6 |
| 62.2 | 8.53 | 3.6 |
| 84 | 8.37 | 6.3 |
| 189 | 15.29 | 1.95 |
| 234.2 | 8.29 | 5.3 |
| 256 | 12.56 | 8.4 |
| 323.4 | 4.76 | 11.5 |

1 DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM
No. and Type of Elements: Day Site: Three uniform cross section, vertical, guyed, series excited steel towers. Night site: Six uniform cross section, vertical, guyed, series excited steel towers.

Day site: Ground System consists of 120 equally spaced, buried copper wire radials 250' in length. Intersecting radials share shortened and bond to transverse copper straps midway between the adjacent towers. Night site: Ground System consists of 120 equally spaced, buried copper wire radials $250^{\prime}$ in length or to bonding straps or to property boundaries, about the base of each tower, plus a 48' square ground screen about each tower.

DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:
Direction of $22^{\circ}$ True North: From the transmitter, proceed right from the transmitter building for 0.4 miles to Farm Road \#2491. Turn right onto Farm Road \#2491 and proceed for 1.6 miles to gravel road. Turn left onto gravel road and proceed for 0.45 miles to entrance Mt. Carmel Center. Turn right into Mt. Carmel Center and proceed for 0.15 miles. Check point is on left at end of hedge, opposite sign, which says, "Mt. Carmel Adm. Bldg.". This is point number 19 and is 2.0 miles from the center of the array. The field intensity measured at this point should not exceed $95.5 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of $92^{\circ}$ True North: From the transmitter, proceed right from the transmitter building for 0.4 miles to Farm Road \#2491. Turn right onto Farm Road \#2491 and proceed for 0.85 miles. Then turn right onto gravel road \#2957 and proceed for 3.6 miles to gravel road (gaved for 0.1 mile). Turn right onto gravel road and proceed 0.34 miles to gravel road. Then turn right onto gravel road and proceed 1.75 miles to the intersection on 3 gravel roads driving between Lake Mart on the left and Trading-House Lake on the right. Check point is in center of intersectin of the 3 joining roads. This is point number 21 and is 4.2 miles from the center of the array. The field intensity measured at this point should not exceed $56.2 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of $280^{\circ}$ True North: From the transmitter, proceed right from the transmitter building for 0.4 miles to Farm Road \#2491. Turn left onto Farm Road \#2491 and proceed for 3.8 miles to Loop Road 232. Turn right onto Loop Road 232 and proceed for 2.1 miles. Check point is on right shoulder of road, fifty feet from center of road, opposite entrance to house number 1419 Hannah Drive. This is point number 21 and is 4.5 miles from the center of the array. The field intensity measured at this point should not exceed $74.5 \mathrm{mV} / \mathrm{m}$, Daytime.

Direction of $352^{\circ}$ True North: From the transmitter, proceed right from the transmitter building for 0.4 miles to Farm Road \#2491. Turn left onto Farm Road \#2491 and proceed for 3.8 miles to Loop Road 232. Turn right onto Loop Road 232 and proceed for 3.7 miles to U.S. Highway 84. Turn right onto U.S. Highway 84 and proceed for 5.1 miles to check point. Check point is no left side of road on shoulder between two white top posts. This is point number 22 and is 4.35 miles from the center of the array. The field intensity measured at this point should not exceed $65.1 \mathrm{mV} / \mathrm{m}$, Daytime.

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Special operating conditions or restrictions:
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3 Direction of $6^{\circ}$ True North: To reach this point proceed to the rural community of Elk which is approximately 12 miles northeast of Waco on Highway 2491. Go southwest from Elk approximately one mile on Highway 2491 to a stake driven in the fence line on the south side of this highway. The monitor point is 60 paces south of the road in an open field through a gate. The field intensity measured at this point should not exceed $5.74 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $27.8^{\circ}$ True North: To reach this point proceed to the rural community of Elk which is approximately 12 miles northeast of Waco on Highway 2491. Go southeast on a straight road from Elk to its junction with Highway 2957 - a distance of 2.2 miles. Turn left on Highway 2957 and go 0.4 mile to a stake driven in the fence line on the south side of this highway. The monitor point is on the grass shoulder of the highway opposite the stake on the south side. The field
intensity measured at this point should not exceed $1.6 \mathrm{mV} / \mathrm{m}$, Nighttime.

Special operating conditions or restrictions:
4 Direction of $62.2^{\circ}$ True North: To reach this point proceed to the intersection of Highway 6 and 164 which is approximately one miles north of the antenna array. Go east on this intersection on Highway 164 for 4.2 miles to a cross-road. Turn left on this country road and go 0.6 mile to a stake driven in the fence line on east side of road. The monitor point is in the center of the road opposite the stake. The field intensity measured at this point should not exceed $3.6 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $84^{\circ}$ True North: To reach this point proceed to the town of Riesel on Highway 6 which is approximately three miles southeast of the antenna array. Go east on Highway 1860 from Riesel 3.6 miles to a county road turning left. Turn left on this county road and go 0.9 mile to a stake driven in fence line on east side of the road. The monitor point is on the edge of an open field on the west side of this road. The field intensity measured at this point should not exceed 6.3 $\mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $189^{\circ}$ True North: To reach this point proceed to the town of Satin which is approximately 17 miles southeast of Waco on Highway 434. Go 2.6 miles on the only road leading out of satin in a northeast direction to a stake driven in the fence line on the north side of a private driveway. The monitor point is on the edge of an open field on the south side of this driveway opposite the stake. The field intensity measured at this point should not exceed $1.95 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $234.2^{\circ}$ True North: To reach this point proceed to the rural community of Dowsville which is 9.0 miles southeast of Waco on Highway 434. A county road leaves Highway 434 in a northeast direction immediately in front of the Dowsville Baptist Church. Go down this road 1.95 miles to a stake driven in the ground beside an irrigation ditch beside this road. This stake is on the south side of the road. The monitor point is in the center of the road opposite the stake. The field intensity measured at this point should not exceed $5.3 \mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $256^{\circ}$ True North: To reach this point proceed to the town of Robinson on Highway 77 approximately 7 miles south of Waco. Near downtown Robinson turn on a road running in northeast direction and passing between two large churches in the town. Go 1.7 miles down this road which has numerous curves until it dead ends into a road running north and south. Turn right on this road and go south 0.35 mile to a stake driven in a fence line on west side of road near a wood gate. The monitor point is on west edge of this north-south road opposite the stake. The field intensity measured at this point should not exceed 8.4 $\mathrm{mV} / \mathrm{m}$, Nighttime.

Direction of $323.4^{\circ}$ True North: To reach this point proceed to the intersection of Highway 6 and 164 which is approximately one miles north of the antenna array. Go west from this intersection on Highway 6 and 164 for 2.5 miles to a cross-road. Turn right on this cross road and go north for 1.0 miles to a stake driven in the fence line on the north side of the road. The monitor point is on the south edge of the road apposite the stake. The field intensity measured at this point should not exceed $11.5 \mathrm{mV} / \mathrm{m}$, Nighttime.

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[^0]:    *** END OF AUTHORIZATION ***

