# United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE 

Authorizing Official:

Official Mailing Address:
M-10 BROADCASTING, INC.
PENTHOUSE
1205 YORK ROAD
LUTHERVILLE-TIMONIUM MD 21093

Facility Id: 27691
Call Sign: WQLL
License File Number: BMML-20110608ACO

Ann Gallagher
Senior Engineer
Audio Division
Media Bureau
Grant Date: September 27, 2011
This license expires 3:00 a.m. local time, October 01, 2019.

This license covers permit no.: BP-20100119ACG, which authorizes a new nighttime directional antenna system verified by a moment method proof.


#### Abstract

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

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Name of Licensee: M-10 BROADCASTING, INC.
Station Location: PIKESVILLE, MD
Frequency (kHz): 1370
Station Class: B
Antenna Coordinates:
Day
\begin{tabular}{lllll} 
Latitude: & N & 39 Deg & 26 Min & 23 Sec \\
Longitude: & W & 76 Deg & 21 Min & 20 Sec
\end{tabular}
            Night
\begin{tabular}{llllll} 
Latitude: & N & 39 Deg & 24 Min & 29 Sec \\
Longitude: & W & 76 Deg & 46 Min & 32 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: 50.0 | Night: 24.0 |
| :--- | :--- | :--- |
| Antenna Input Power (kW) : Day: 52.7 | Night: 25.3 |  |
| Antenna Mode: | Day: DA | Night: DA |
| (DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours) |  |  |


| Current (amperes): | Day: 32.4 | Night: 22.5 |
| :--- | :--- | :--- | :--- |
| Resistance (ohms): | Day: 50 | Night: 50 |

Antenna Registration Number(s) :
Day:
Tower No. ASRN

| 1 | None | 60 |
| :--- | :--- | :--- |
| 2 | None | 60 |
| 3 | None | 60 |
| 4 | None | 60 |
| 5 | None | 60 |
| 6 | None | 60 |

Night:
Tower No. ASRN

| 1 | None | 60.8 |
| :--- | :--- | :--- |
| 2 | None | 60.5 |
| 3 | None | 60.5 |
| 4 | None | 60.5 |
| 5 | None | 60.5 |
| 6 | None | 60.9 |

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM
Theoretical RMS (mV/m/km): Day: 2542.02 Night: 1723.3
Standard RMS (mV/m/km):
Night: 1810.19
Augmented RMS (mV/m/km): Day:2670.66
Q Factor: Day: Night:
Theoretical Parameters:
Day Directional Antenna:

| Tower | Field | Phasing | Spacing | Orientation | Tower Ref | Height |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | (Deg.) | Switch * | (Deg.) |
| 1 | 0.4000 | 133.500 | 0.0000 | 0.000 | 0 | 96.0 |
| 2 | 1.0000 | 0.000 | 89.4000 | 220.100 | 0 | 96.0 |
| 3 | 0.8930 | 246.000 | 167.9000 | 221.000 | 0 | 96.0 |
| 4 | 0.9050 | 171.600 | 245.4000 | 221.700 | 0 | 96.0 |
| 5 | 0.9220 | 56.200 | 335.8000 | 221.000 | 0 | 96.0 |
| 6 | 0.3700 | 281.100 | 422.9000 | 220.400 | 0 | 96.0 |

* 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> $(\mathrm{mV} / \mathrm{m} \mathrm{@} \mathrm{1} \mathrm{km)}$ |
| :--- | :--- | :--- | :--- |
| No. | 24.0 | 69.0 | 100.00 |
| 1 | 142.5 | 20.0 | 240.70 |
| 2 | 331.0 | 31.0 | 192.90 |
| 3 |  |  |  |

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 | 97.5 |
| 2 | 1.8010 | -141.100 | 73.5000 | 131.400 | 0 | 97.5 |
| 3 | 1.3450 | 89.900 | 180.5000 | 130.300 | 0 | 97.5 |
| 4 | 1.2930 | -2.000 | 360.0000 | 127.000 | 0 | 97.5 |
| 5 | 1.2680 | -138.300 | 446.9000 | 127.000 | 0 | 97.5 |
| 6 | 0.4800 | 91.300 | 540.0000 | 127.000 | 0 | 97.5 |

* 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 | -36 | 0.31 |
| 2 | -171 | 0.83 |
| 3 | 85 | 0.77 |
| 4 | 0 | 1 |
| 5 | -120 | 0.9 |
| 6 | 65 | 0.25 |

Night Directional Operation:

| Twr. Phase | Antenna Monitor <br> No. |  |
| :--- | :--- | :--- |
| (Deg.) | Sample Current Ratio |  |
| 1 | -10.7 | 0.813 |
| 2 | -150.4 | 1.272 |
| 3 | 86.6 | 0.698 |
| 4 | 0 | 1 |
| 5 | -135.9 | 0.678 |
| 6 | 46.1 | 0.063 |

Antenna Monitor: POTOMAC INSTRUMENTS 1901 (4188)
Sampling System Approved Under Section 73.68 of the Rules.

Special operating conditions or restrictions:
1 The licensee shall perform the measurements described in Section 73.155 on the nighttime antenna system at least once within each 24 -month period.

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Special operating conditions or restrictions:
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2 DESCRIPTION OF MONITORING POINTS (Daytime Site):
$24^{\circ}$ - Point located in center of Winters Run Road, 0.16 km south of Singer Road, 4.1 km from transmitter, maximum $6.8 \mathrm{mV} / \mathrm{m}$.
$58.5^{\circ}$ - Point located in center of Winters Run Road, at driveway to 2710 and 2712 Winters Run Road, 3.3 km from transmitter, maximum 10.16 $\mathrm{mV} / \mathrm{m}$.
$92^{\circ}$ - Point located in center of Chipper Drive, at driveway to 1207 Chipper Drive, 3.57 km from transmitter, maximum $23.5 \mathrm{mV} / \mathrm{m}$.
$114^{\circ}$ - Point located in center of intersection of Waltman Road and Ashby Square, 3.9 km from transmitter, maximum $12.27 \mathrm{mV} / \mathrm{m}$.
$142.5^{\circ}$ - Point located on southeast side of Fort Hoyle Road, 120 feet southwest of intersection with State Route 152, 4.65 km from transmitter, maximum $9.02 \mathrm{mV} / \mathrm{m}$.
$315.5^{\circ}$ - Point located in cul-de-sac at end of Valleybrook Court at driveway to 2909 Valleybrook Court, 3.93 km from transmitter, maximum $12.02 \mathrm{mV} / \mathrm{m}$.
$349.5^{\circ}$ - Point located on southwest side of Stockton Road, across from 1910 Stockton Road and opposite utility pole \#30197, 3.77 km from transmitter, maximum $9.0 \mathrm{mV} / \mathrm{m}$.

