

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

File No. : BL-890825AF
FAC ID : 63777
Call Sign : WCAO

LICENSEE:

SUMMIT-BALTIMORE BROADCASTING CORP.

1. Community of License: Baltimore, Maryland
Garrison Forest Road, 1.3 km
2. Transmitter location: North of Caves Road, near
Owings Mills, Baltimore Md.

North latitude: 39° 25' 47"
West longitude: 76° 45' 42"

6. Antenna and ground system: ATTACHED

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

4. Main Studio location: (See Section 73.1125)
1829 Reisterstown Rd., Suite 420
Baltimore County
Baltimore Maryland

5. Remote control location:
(Same)

7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: 1, 3, 11, 21 and 22 for towers #1, #2, #3 & #4.

8. Frequency: 600 kHz

9. Nominal power (kW): 5.0 Day 5.0 Night

Antenna input power (kW):

5.4 Day Non-directional antenna: current 10.4 amperes; resistance 50 ohms.
 Directional antenna

5.4 Night Non-directional antenna: current 10.4 amperes; resistance 50 ohms.
 Directional antenna

10. Hours of operation: Specified in BP-87122AB and BMP-890208AC

11. Conditions: ATTACHED

Subject to the provisions of the Communications Act of 1934, as amended, subsequent Acts, Treaties, and Commission rules made thereunder, and further subject to conditions set forth in this license,¹ the LICENSEE is hereby authorized to use and operate the radio transmitting apparatus herein described for the purpose of broadcasting for the term ending 3 A.M. Local Time October 1, 1995.

The Commission reserves the right during said license period of terminating this license or making effective any change, or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

The license is issued on the licensee's representation that the statements contained in the 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, as amended. 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, as amended.

¹ This license consists of this page and pages 2, 3 and 4

Dated: **JAN 24 1990**

SKN/ed

FEDERAL
COMMUNICATIONS
COMMISSION



JAN 26 1990

File NO. BL-890825AF Call Sign: WCAO Date:

1. **DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM**

No. and Type of Elements: Four(4) vertical, guyed series-excited steel radiators of uniform cross section. Theoretical RMS 661.4 mV/m @ 1 km; Mod Std RMS 695.7 mV/m @ 1 km. $Q = 23.2$.

Height above Insulators: 104.3 m (75.1°) plus 7.5 m (5.4°) top loading.

Overall Height: 106.7 m.

Spacing and Orientation: With tower #1(N) as reference Tower #2(E) is spaced 79.1° on a line bearing 154° Tower #3(S) is spaced 229.6° on a line bearing 212.7° True. Tower #4 is spaced 192.9° bearing 232.4° True.

Non-Directional Antenna: None Used.

Ground System consists of 120 equally spaced, buried, copper radials about the base of each tower 125 m in length except where shortened or lengthened at copper strap midway between towers. Plus a 15 m square copper mesh ground screen.

2. **THEORETICAL SPECIFICATIONS**

Tower	#1(N)	#2(S)	#3(S)	#4(W)
Phasing: Day & Night	0°	-132.2°	-122.6°	2.4°
Field Ratio: Day & Night	1.0	0.885	0.789	0.792

3. **OPERATING SPECIFICATIONS**

Phase Indication*: Day & Night	129.1°	0°	9.0°	130.5°
Antenna Base				
Current Ratio: Day & Night	1.113	1.0	0.95	1.013
Antenna Monitor Sample				
Current Ratio: Day & Night	1.156	1.0	0.928	0.970

* As indicated by Potomac Instruments AM-19D (210) antenna Monitor.
 Antenna sampling system approved under section 73.68(b) rules.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 29.5 degree True North. From the WCAO transmitter building return to Garrison Forest Road. Turn north (right) onto Garrison Forest Road and proceed 3.22 kilometers to Walnut Avenue. Turn northeast (right) onto Walnut Avenue and proceed 2.01 kilometers to Green Spring Avenue. Turn southeast (right) onto Green Spring Avenue and proceed 0.64 kilometer to mailbox 12379 located on north side of Green Spring Avenue. Monitor point is on north shoulder of Green Spring Avenue even with mailbox 12379. Radial point number 2. Distance from transmitter 3.88 kilometers. The field intensity measured at this point should not exceed 11.4 mV/m.

Direction of 75.0 degree True North. From the WCAO transmitter building, return to Garrison Forest Road and proceed 3.22 kilometers to Walnut Avenue. Turn northeast (right) onto Walnut Avenue and proceed 2.01 kilometers to Green Spring Avenue. Turn southeast (right) onto Green Spring Avenue and proceed 5.63 Kilometers to Woodland Drive. Turn northeast (left) onto Woodland Drive and proceed 1.29 kilometers to driveway on west side, to house number 11522 Woodland Drive. Monitor point is on curb east side of Woodland Drive opposite middle of driveway to house number 11522 Woodland Drive. Radial point number 6. Distance from transmitter 5.30 kilometers. The field intensity measured at this point should not exceed 14.8 mV/m.

Direction of 207.0 degree True North. From the WCAO transmitter building, return to Garrison Forest Road. Turn south (left) onto Garrison Forest Road and proceed 0.80 kilometer to St. Thomas Lane. Turn southwest (right) onto St. Thomas Lane and proceed 1.29 kilometers to Reistertown Road. Turn northwest (right) onto Resistertown Road and proceed 0.16 kilometer to Painters Mill Road. Turn southwest (left) onto Painters Mill Road and proceed 3.22 kilometers to monitor point. The monitor point is on sidewalk on southwest side of Painters Mill Road, ten feet northwest of road intersection sign. Radial point number 10. Distance from transmitter 4.78 kilometers. The field intensity measured at this point should not exceed 21.2 mV/m.

Direction of 252.0 degree True North. From the WCAO transmitter building, return to Garrison Forest Road. Turn south (left) onto Garrison Forest Road and proceed 0.80 kilometer to St. Thomas Lane. Turn southwest (right) onto St. Thomas Lane and proceed 1.29 kilometers to Reistertown Road. Turn northwest (right) onto Reistertown Road and proceed 1.61 kilometers to Tollgate Road. Turn west (left) onto Tollgate Road and proceed 1.13 kilometers to Ritters S. Lane. Turn south (left) onto Ritters S. Lane and proceed 0.24 kilometer to monitor point. The monitor point is on sidewalk on southwest side of Ritters S. Lane, middle of driveway to house number 143 Ritters S. Lane. Radial point number 11. Distance from transmitter 3.10 kilometers. The field intensity measured at this point should not exceed 13.8 mV/m.

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DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 291.0 degree True North. From the WCAO transmitter building, return to Garrison Forest Road. Turn south (left) onto Garrison Forest Road and proceed 0.80 kilometer to St. Thomas Lane. Turn southwest (right) onto St. Thomas Lane and proceed 1.29 kilometers to Reistertown Road. Turn northwest (right) onto Reistertown Road and proceed 4.30 kilometers to Shetland Drive. Turn northeast (right) onto Shetland Drive and proceed 0.24 kilometer to monitor point. The monitor point is on the east side of Shetland Drive, middle of entrance into parking area, even with fire hydrant to the north. Radial point number 11. Distance from transmitter 4.00 kilometers. The filed intensity measured at this point should not exceed 24.7 mV/m.