

AM BROADCAST STATION LICENSE

LICENSEE: CRUSADE BROADCASTING CORPORATION

- 1. Community of License... : Ewing, NJ
- 2. Transmitter location.... : 0.72 km SW of intersection of Rts. 32 & 532, near Washington Crossing, PA

North Latitude..... : 40° 17' 16"
West Longitude..... : 74° 52' 23"
- 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)
1842 South Broad Street
Trenton, NJ
- 5. Remote control location
1842 South Broad Steet
Trenton, NJ
- 6. Antenna and ground system:
Attached.
- 7. Obstruction marking and lighting specifications - FCC Form 715, paragraphs: 1, 3, 12, 21 & 22.
- 8. Frequency..... : 1300 kHz
- 9. Nominal power (kW)..... : 3.2 Day 1.3 Night
Antenna input power (kW) :
5.16 Day Non-directional antenna: current 9.96 amperes: resistance 52.0 ohms
 Directional antenna :
2.26 Night Non-directional antenna: current 6.59 amperes: resistance 52.0 ohms
 Directional antenna :
- 10. Hours of operation : BP-20,451, BMP-830531AF & BMP-871231AA
- 11. Conditions..... : BS-931216: This is to reflect a change in the Main Studi & Remote Control Locations.

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

June 1, 1998

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.
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 control by the Government of the United States conferred by section 606 of the Communications Act of 1934, as amended.

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¹ This license consists of this page and pages 2, 3, 4, 5 &

Dated:

FEB 03 1994

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CALL: WXVI

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: 689.5mV/m @ 1km (day); 457mV/m @ 1 km (night); Augmented RMS 725mV/m @ 1 km (day); 480.28 mV/m @ 1 km (night). Q = 21.06 day; 15.24 night.

Height above Insulators: 91.5 m (142.6° + 71.3° top loading)

Overall Height: 92.4 m

Spacing and Orientation: Using Twr. #4(W) as a reference, Tower #2(S) is spaced 90° at a bearing of 132.5° T; Twr. #3(N) is spaced 184° at a bearing of 52.5° T and Tower #4(E) is spaced 218.4° at a bearing of 76.4° T.

Non-Directional Antenna: None authorized.

Ground System consists of 120 equally spaced, buried, copper radials about the base of each tower 57.9 m in length except where intersecting radials are shortened and bonded, plus 120 interspersed radials 15.2 m in length about the base of each tower.

2. THEORETICAL SPECIFICATIONS

Tower	#1(W)	#2(S)	#3(N)	#4(E)
Phasing:				
Night	-117°	79°	164°	0°
Day	117.3°	13.2°	104.1°	0°
Field Ratio:				
Night	0.81	0.9	0.9	1.0
Day	0.66	0.83	0.80	1.0

3. OPERATING SPECIFICATIONS

Antenna Base Current Ratio:				
<u>1/</u> Night	0.721°	0.820°	0.820°	1.00
Day	0.433°	0.793°	0.610°	1.00

Phase Indication

<u>2/</u> Night	-117.2°	73.5°	164.5°	0°
Day	112.7°	7.3°	108.9°	0°

Antenna Monitor Sample

Current Ratio:				
Night	0.874	0.912	0.908	1.00
Day	0.677	0.856	0.858	1.00

Antenna sampling system approved under section 73.68(b) rules.

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Sample Current Deviation *
3/ Night

0% 0% 0% 0%

Precision Adaptor
Attenuator Values:

7.68 7.4 7.28 6.64

As indicated by Potomac Instruments AM-19(204) with PMA-19 Adaptor antenna monitor.

- 1/ Permissible deviations from these values shall not exceed: $\pm 5\%$
- 2/ Permissible deviations from these values shall not exceed: $\pm 1.1^\circ$
- 3/ Permissible deviations from these values shall not exceed: $\pm 1.9\%$

DESCRIPTION OF FIELD STRENGTH AT MONITORING POINTS

Direction of 13.5 degrees true north. From the transmitter site, drive left (N) on General Hamilton Road 0.05 miles to Lord Sterling Road and drive right (NE) for 0.15 miles to River Road. Turn left (NW) 0.1 miles to Route 532. Drive right (NE) on 532 across the Delaware River bridge into New Jersey 1.1 miles to the George Washington State Park entrance on the left (W) side of the road. Drive left (W) into the park for 0.2 miles to the first intersection in the woods. Turn right and drive North 0.4 miles onto dirt road. Drive left (NW) on dirt road 0.8 miles to Nature Center sign at the road T. The 13.5 degree day monitor point is on the grass just beyond this sign, 3.25 KM from the transmitter site. This is measurement point #13 on this radial. The field intensity measured at this point should not exceed 25.4 mV/m Daytime.

Direction of 46.5 degrees true north. From the 13.5 degrees day monitor point reverse direction and return to Route 532 at park entrance. Drive left (N) 0.55 miles on 532 to Bear Tavern Road. Turn right (S) on Bear Tavern Road and proceed 0.25 miles to the 46.5 degree Day Monitor Point on the right (W) side of the road in lane, 3.0 KM from the transmitter site. This is measurement point #11 on this radial. The field intensity measured at this point should not exceed 23.7 mV/m Daytime

Direction of 348.5 degrees true north. From the 46.5 degrees Day Monitor Point reverse direction and drive North on Bear Tavern Road, 2.1 miles to Pleasant Valley Road. Turn left (W) on Pleasant Valley Road for 2.2 miles to the 348.5' Monitor Point just past the T intersection with Barry Road to the North, 3.35 KM from the transmitter site. This is a newly designated monitor point. This is measurement point #11 on this radial. The field intensity measured at this point should not exceed 10.4 mV/m Daytime.

Direction of 289.5 degrees true north. From the 232.5 degree Night Monitor Point return to Linton Road. Turn right (N) on Linton Road and drive 0.6 miles, continuing straight ahead onto creamery Road for 2.0 miles to Woodhill Road. Turn right (E) on Woodhill Road and proceed 1.1 miles to Slack Road. Drive left (N) on Slack Road for 0.25 miles to the Night 289 degree Monitor point. This point is approximately 200 feet North of the green building on the road. This point is 3.3 KM from the transmitter site. This is measurement point #8 on this radial. This is a newly designated monitor point. The field intensity measured at this point should not exceed 14.6 mV/m Nighttime.

DESCRIPTION OF FIELD STRENGTH AT MONITORING POINTS

Direction of 208.5 degrees true north. From the 348.5 degrees Day Monitor Point continue straight ahead (W) for 2 miles on Pleasant Valley Road to Highway 29. Drive left (E) on Highway 29 3.5 miles to Highway 532 and turn right (SW) across the Delaware River Bridge 0.3 miles to River Road. Follow River Road 1.8 miles to the right (S) to Mount Eyre Road. Drive right (W) on Mount Eyre 1.7 miles to the 208.5 degree Day Monitor Point. The point is along side a row of large spruce trees, 2.75 KM from the transmitter site. This is measurement point #9 on this radial. The field intensity measured at this point should not exceed 31.2 mV/m Daytime.

Direction of 260 degrees true north. From the 208.5 degrees Day Monitor Point continue straight ahead, (W) on Mount Eyre Road to Route 532 0.4 miles. Continue on ahead on Route 532 for 0.5 miles to the T intersection with Highland Road. Drive right (N) on Highland Road for 1.4 miles to Wrightstown Road. Turn left (W) on Wrightstown Road for 0.75 miles to a tree nursery on the right (N) and drive right (N) 0.1 miles into this nursery to the 260° Day Monitor Point. This point is 4.7 KM from the transmitter site. This is measurement point #10A on this radial. This is a newly designated monitor point and is a new measurement location along this radial. The field intensity measured at this point should not exceed 14.9 mV/m Daytime.

Direction of 32.5 degrees true north. From the transmitter site drive left (W) for 0.05 miles General Hamilton Road to Lord Sterling Road. Turn right on Lord Sterling and drive 0.2 miles to River Road (Route 532). Turn right (N) on 532 and proceed 1.7 miles across the Delaware River Bridge into New Jersey to Bear tavern road (Route 579). Drive left (N) on Bear Tavern Road 0.35 miles to the Night monitor Point for 32.5 degrees on the left (W) side of the road opposite Pole # 65328HY. This point is 3.5 KM from the transmitter site. This is measurement point #15 on this radial. This is a newly designated monitor point. The field intensity measured at this point should not exceed 7.5 mV/m Nighttime.

Direction of 175.5 degrees true north. From the 32.5 degrees Night Monitor Point return to Route 532. Turn right (W) on route 532 proceeding 1.7 miles back across the Delaware River Bridge into Pennsylvania to River Road. Turn left (SE) on River Road and drive 2.8 miles to Woodside Road. Turn right (W) on Woodside road and continue 1.0 miles to the 175.5 degree Monitor Point. The Monitor point is on the left (S) of the road, opposite pole #25. This point is 3.45 KM from the transmitter site. This is measurement point #12 on this radial. This is a newly designated monitor point. The field intensity measured at this point should not exceed 18.3 mV/m Nighttime.

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DESCRIPTION OF FIELD STRENGTH AT MONITORING POINTS

Direction of 232.5 degrees true north. From the 175.5 degree Night Monitor Point continue straight ahead (W) on Woodside Road, 1.5 miles to Lindenhurst Road. Turn right (N) on Lindenhurst Road and proceed 0.8 miles to Washington Crossing Road (Route 532). Turn left (W) on Washington Crossing Road for 0.5 miles to the road fork at Dolington Road and Stoopville Road. Bear right (W) onto Stoopville Road, continuing 1.0 miles to Linton Road. Drive left (S) on Linton Road 0.6 miles to Wrights Road. Turn left (E) on Wrights Road 0.1 mile to Winding Lane. Go left (N) on Winding Lane onto a Cul-de-Sac. The 232.5 degree Night Monitor Point is before the mailbox #215 in this de-Sac. This point is 5.54 KM from the transmitter site. This is measurement point #15 on this radial. This is a newly designated monitor point. The field intensity measured at this point should not exceed 8.2 mV/m Nighttime