

United States of America

FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE FCC MAIL SECTION

Official Mailing Address: WN BROADCASTING CORP. 5380 WEBB RADIO AUSTINTOWN, OH 44515 Authorizing Official

Brb

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Son Nguyen Supervisory Engineer AM Branch Audio Services Division Mass Media Bureau

Call Sign: WNIO

License File No.: BL-10380

Grant Date: April 6, 1964

This license expires 3:00 a.m. Local time, October 1, 2004

This license covers Permit No.: BP-13,993

Revised License Authorization per Licensee Requested. 02/12/98 HKC.

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: Daytime

Average hours of sunrise and sunset: Local Standard Time (Non-Advanced)

Jan.7:45 a.m.5:15 p.m.Jul.5:00 a.m.8:00 p.m.Feb.7:15 a.m.6:00 p.m.Aug.5:30 a.m.7:30 p.m.Mar.6:30 a.m.6:30 p.m.Sep.6:00 a.m.6:30 p.m.Apr.5:45 a.m.7:00 p.m.Oct.6:30 a.m.5:45 p.m.May5:00 a.m.7:30 p.m.Nov.7:15 a.m.5:00 p.m.Jun.4:45 a.m.8:00 p.m.Dec.7:45 a.m.5:00 p.m.

FCC Form 352 August, 1997

Licensee: WN BROADCASTING CORP. Station Location: NILES, OH Frequency (kHz): 1540 Station Class: D Transmitter Location: OH - WEBB ROAD AND DAVIS LANE, MINERAL RIDGE Latitude: N 41° 7' 56" Longitude: W 80° 45' 40" Main Studio Location: (See Section 73.1125) OH - WEBB ROAD AND DAVIS LANE, MINERAL RIDGE Nominal Power (kW): Day: 0.50 Antenna Input Power (kW): Day: 0.5400 Antenna Mode: Day: DA (DA=Directional Antenna; ND=Non-directional Antenna; CH=Critical Hours) Current (amperes): Day: 3.19 Day: 53.00 Resistance (ohms): Antenna Description: Three (3) vertical, guyed, series-excited steel radiators of uniform cross section. Ground System Description: 120 equally spaced, buried, copper radials about the base of each tower, each 48.7 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers, plus a 7.3 meters square copper ground screen at the base of each tower. Painting and Lighting Specifications: Daytime: Twr No. Overall Height Marking and Lighting Specifications FCC Form 715, Paragraphs (m) 1 50.6 None Required 50.6 None Required 2

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None Required

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DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m @ 1km):	Day:	204.39
Augmented RMS (mV/m @ 1km):	Day:	221.60
Q Factor:	Day:	10.00

Theoretical Parameters:

Daytime Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref. Switch *	Height (Deg.)
1	1.0000	62.000	0.000	0.000	0	90.1
2	1.9000	5.000	158.000	75.000	0	90.1
3	1.0000	-62.000	316.000	75.000	0	90.1

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

Augmentation Parameters

Aug	Central		Radiation
No.	Azimuth	Span	at Central Azimuth
	(Deg. T)	(Deg.)	(mV/m @ 1 km)
1.	10.0	60.0	386.24
2.	143.0	66.0	402.34
3.	205.0	58.0	20.92
4.	255.0	10.0	39.43
5.	270.0	30.0	32.19
6.	285.0	10.0	20.44
7.	290.0	10.0	26.55
8.	295.0	10.0	22.21
9.	308.0	25.0	23.34

Operating Parameters:

Daytime Directional Operation:

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Twr.	Phase	Antenna Monitor	Antenna Base
No.	(Deg.)	Sample Current Ratio	Current Ratio
1	0.00	1.000	1.000
2	-63.50	0.540	0.583
3	41.50	0.468	0.491

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Antenna Monitor: Potomac Instruments AM-19 (204).

Sampling System Approved Under Section 73.68(b) of the Rules.

Monitoring Points:

Daytime Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
75.0	1.70	77.50
255.0	2.70	10.00
285.0	2.50	4.20
295.0	1.80	5.60

Special Operating Conditions or Restrictions:

None Required

Obstruction marking and lighting specifications for antenna structure(s):

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

None Required

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*** END OF AUTHORIZATION ***