



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

CARON BROADCASTING, INC.
 4880 SANTA ROSA RD
 CAMARILLO CA 93012

Susan N. Crawford
 Senior Engineer
 Audio Division
 Media Bureau

Grant Date: June 28, 1988

Facility Id: 14772

Call Sign: WHKW

This license expires 3:00 a.m.
 local time, October 01, 2020.

License File Number:

License re-issued June 2, 2014, by SNC, to add a Special Operating Condition authorizing the use of modulation dependent carrier level (MDCL) control technology.

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.	7:45 AM	5:15 PM	Jul.	5:00 AM	8:00 PM
Feb.	7:30 AM	6:00 PM	Aug.	5:30 AM	7:30 PM
Mar.	6:45 AM	6:30 PM	Sep.	6:00 AM	6:45 PM
Apr.	5:45 AM	7:00 PM	Oct.	6:45 AM	5:45 PM
May	5:15 AM	7:45 PM	Nov.	7:15 AM	5:15 PM
Jun	4:45 AM	8:00 PM	Dec	7:45 AM	5:00 PM

Call sign: WHKW

License No.:

9:00 AM 1:00 PM

9:00 AM

DEC. 7:45 AM

9:00 PM

Name of Licensee: CARON BROADCASTING, INC.

Station Location: CLEVELAND, OH

Frequency (kHz): 1220

Station Class: B

Antenna Coordinates:

Unlimited

Latitude: N 41 Deg 18 Min 26 Sec

Longitude: W 81 Deg 41 Min 21 Sec

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

Nominal Power (kW): Unlimited: 50.0

Antenna Input Power (kW): Unlimited: 52.6

Antenna Mode: Unlimited: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Unlimited: 32.43

Resistance (ohms): Unlimited: 50

Antenna Registration Number(s):

Unlimited:

Tower No.	ASRN	Overall Height (m)
1	1023871	
2	1023872	
3	1023873	
4	1023874	
5	1023875	

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DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Unlimited: 2275.6:

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Unlimited: 2404.8

Q Factor: Unlimited:

Theoretical Parameters:

Unlimited Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	-170.000	105.0000	350.000	0	88.9
2	1.0000	170.000	105.7000	170.000	0	88.9
3	1.0000	-70.000	201.4000	73.000	0	83.1
4	1.0000	70.000	201.8000	253.000	0	88.9
5	2.1000	-17.000	15.3000	212.000	0	88.9

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	50.0	20.0	1350.00
2	80.0	30.0	1982.71
3	95.0	30.0	1609.34
4	107.0	14.0	1118.98
5	194.0	12.0	281.64
6	199.0	10.0	257.50
7	204.0	10.0	236.57
8	210.0	12.0	223.70
9	215.0	10.0	220.48
10	220.0	10.0	218.87
11	225.0	10.0	220.48
12	230.0	10.0	223.70
13	235.0	10.0	226.92
14	240.0	10.0	231.42
15	245.0	10.0	245.26
16	250.0	10.0	256.53
17	255.0	10.0	270.69
18	260.0	10.0	290.33
19	317.0	10.0	965.61

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Unlimited Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	-160.2	0.439
2	176	0.452
3	-48.2	0.369
4	84.2	0.512
5	0	1

Antenna Monitor: POTOMAC INSTRUMENTS AM-19 (204)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Unlimited Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
50	4.62	225
107	2.9	490
194	3.54	115
204	3.38	73
220	3.94	48
317	2.14	390

Special operating conditions or restrictions:

- 1 The ground system consists of 120 buried copper wire radials about the base of each tower. The radials about towers 1, 2, 4 and 5 are 61 meters in length. The radials about tower 3 are 91 meters in length.

Special operating conditions or restrictions:

2 Description of Monitoring Points

Direction 50 Degrees True North. From the transmitter go north on Broadview Road to the intersection of Broadview and Wallings Roads, turn east on Wallings and proceed to Mill Road, turn south on Mill Road and proceed to Broad Mill Road, turn west on Broad Mill approx. 7.6 meters (25 feet) in first driveway on south side of Broad Mill. Monitor point is on the west side of the driveway where it intersects the sidewalk.

Direction 107 Degrees True North. From transmitter go east on Oaks Road to Barr Road, turn right on Barr Road and proceed to cemetery on west side of road. Measuring point is located 1.5 meters (5 feet) beyond the end of the driveway into the cemetery.

Direction 194 Degrees True North. From transmitter go south on Broadview Road to Boston Road, turn west on Boston Road and proceed to 392 West Boston Road. House is on the south side of road. Measuring point is located at edge of road facing the front door of home.

Direction 204 Degrees True North. From transmitter, go south on Broadview Road to Boston Road, turn west on Boston Road, (Boston Road becomes Wiltshire Road to the west), approx. 1.85 kilometers (1.15 miles) to a large stone marker used as a sign (Beechwood Farms) on west side of the road. Measuring point is located directly in front of this stone.

Direction 220 Degrees True North. From transmitter go south on Broadview Road to Boston Road, turn west on Boston Road (Boston Road becomes Wiltshire Road on west) to 4835 Wiltshire Road. House is on south side of road. Monitor point is at side of road approx. 4.6 meters (15 feet) west of driveway.

Direction 317 Degrees True North. From transmitter go north on Broadview Road to Memorial Drive, turn west (left) on Memorial Drive and proceed to Royalwood Road, turn west (right) on Royalwood Road and proceed approx. 1.8 kilometers (1.1 miles) to Anthena Drive, turn north on Anthena Drive and proceed to 12477 Anthena Drive. Measuring point is on the east side of the road near the fire plug.

- 3 Waiver of 47 C.F.R. Section 73.1560(a) is granted to permit the licensee to operate with modulation dependent carrier level (MDCL) control technology, which reduces transmitter power at certain modulation levels.
- 4 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

*** END OF AUTHORIZATION ***