United States of America

FEDERAL COMMUNICATIONS COMMISSION

AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

KZIA, INC.
1110 26TH AVENUE, SW
CEDAR RAPIDS IA 52404

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Grant Date: JUN 22 2018

This license expires 3:00 a.m. local time, February 01, 2021.

Facility Id: 9718

Call Sign: KGYM

License File Number: BZ-20180404AAY

This license is issued for the purpose of authorizing direct measurement of power and reflects adjustment of the antenna pattern.

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

Name of Licensee: KZIA, INC.

Station Location: CEDAR RAPIDS, IA

Frequency (kHz): 1600

Station Class: B

Antenna Coordinates:

		Day				
Latitude:	N	41	Deg	58	Min	15 Sec
Longitude:	W	91	Deg	32	Min	01 Sec

		Night				
Latitude:	N	41	Deg	58	Min	15 Sec
Longitude:	W	91	Deg	32	Min	01 Sec

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

Nominal Power (kW): Day: 5.0 Night: 5.0

Antenna Input Power (kW): Day: 5.0 Night: 5.4

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 16 Night: 10.4

Resistance (ohms): Day: 19.5 Night: 50

Non-Directional Antenna: Day
Radiator Height: 110.9 meters; 213 deg
Theoretical Efficiency: 431.3 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
2	1024395	

Night:

Tower No.	ASRN	Overall Height (m)
1	1024394	
2	1024395	
3	1024396	

Callsign: KGYM License No.: BZ-20180404AAY

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 989.75

Standard RMS (mV/m/km):

Augmented RMS (mV/m/km): Night: 1050.14

Q Factor: Night: 25.61

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4720	104.000	0.0000	0.000	0	203.0
2	1.0000	0.000	100.0000	315.500	0	213.0
3	0.3900	-113.800	100.0000	315.500	1	213.0

* 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	0.0	10.0	1600.40
2	77.0	14.0	201.33
3	116.0	14.0	204.39
4	116.0	10.0	225.31
5	123.0	14.0	238.18
6	135.5	10.0	241.40
7	147.3	14.4	228.53
8	154.5	11.0	217.26
9	214.0	10.0	439.80
10	272.0	10.0	1596.18
11	293.6	43.2	1690.29
12	315.5	43.7	1751.22
13	337.6	44.2	1692.45

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	99.9	0.518
2	0	1
3	-128.3	0.375

Antenna Monitor: POTOMAC INSTRUMENTS AM-1901

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
84	2.3	43.9
116	2.09	94.8
135.5	1.71	143
154.5	1.82	80
214	2.46	121

Special operating conditions or restrictions:

1 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.

2 The ground system consists of 120-ea., 40 m buried copper radials equally spaced, plus a 15 m by 15 m ground screen under each tower.

Special operating conditions or restrictions:

3 Monitor Point Descriptions:

84-deg: At the entrance of the transmitter site, turn left (north) and proceed for 0.31 miles to the intersection of Bertram Street with Mt. Vernon Road. Turn right (east) on Mt. Vernon Road and proceed for 1.25 miles to O'Connor Road. Turn right (south) on O'Connor Road and proceed for 0.2 miles to the monitor point. The monitor point is located on the west side of the road at a field line. This location is 2.30 kilometers (1.43 miles) from the antenna. The GPS acquired coordinates of this monitor point are 41-58-22 North Latitude and 91-30-23 West Longitude by NAD27 datum. The nominal measured field intensity at this location is 40.0 mV/m, with a maximum limit of 43.9 mV/m.

116-deg: From the 84 degree true monitor point, proceed south approximately 0.3 miles to the "T" intersection of O'Connor Road with Arrowhead Road. Turn right (west) on Arrowhead Road and proceed for 0.25 miles to the intersection with Big Creek Road. Turn left (south) on Big Creek Road and proceed for 0.4 miles to the monitor point. The monitor point is located on the west side of the road just south of a tree line. This location is 2.09 kilometers (1.30 miles) from the antenna. The GPS acquired coordinates of this monitor point by NAD27 datum are 41-57-46 North Latitude and 91-30-41 West Longitude. The nominal measured field intensity at this location is 50 mV/m, with a maximum limit of 94.84 mV/m.

135.5-deg: From the 116 degree true monitor point, continue south and west along Big Creek Road for a distance of approximately 0.55 miles to the monitor point. The monitor point is on the north side of the road at a location which is along the same azimuth as the tower line. The directional array is clearly visible from this location. This location is 1.71 kilometers (1.06 miles) from the array. The GPS acquired coordinates of this monitor point by the NAD27 datum are 41-57-37 North Latitude and 91-31-10 West Longitude. The nominal measured field intensity at this location is 116 mV/m, with a maximum limit of 143.0 mV/m.

154.5-deg. From the 135.5 degree true monitor point, continue on Big Creek Road for 0.45 miles to the intersection with Holman's Road. Turn right (west) on Holman's Road and proceed 150 feet to the monitor point. The monitor point is located on the south side of the road. This location is 1.82 kilometers (1.13 miles) from the antenna. The GPS acquired coordinates of this location by NAD27 datum are 41-57-22 North Latitude and 91-31-28 West Longitude. The nominal measured field intensity at this location is 49 mV/m, with a maximum limit of 80 mV/m.

214.0-deg. From the 154.5 degree true monitor point, continue west on Big Creek Road for 0.25 miles to the intersection with Bertram Street. Turn left (south) on Bertram Street and proceed for 0.6 miles to Angle Street. Turn right (north) on Angle Street and proceed for one block to 2nd Street. Turn left (west) on 2nd Street and proceed for 0.57 miles to the intersection with Blaine's Crossing Road. Turn right (north) on Blaine's Crossing Road and proceed for 0.2 miles to the intersection with the four-lane highway of US 151 and Iowa State Route 13. Turn right (north) on US 151 and IA 13 and proceed for approximately 0.5 miles to the monitor point, which is next to mile marker 32 on the east side of the highway. This location is 2.46 kilometers (1 .53 miles) from the array. The GPS acquired coordinates of this location by NAD27 datum are 41-57-09 North Latitude and 91-33-03 West Longitude. The nominal measured field intensity at this location is 112 mV/m, with a maximum limit of 121.0 mV/m.

*** END OF AUTHORIZATION ***