



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION LICENSE

Official Mailing Address:

 KOSSUTH COUNTY BROADCASTING, L.C.
 P. O. BOX 160
 ALGONA, IA 50511

Authorizing Official

Son Nguyen

 Son Nguyen
 Supervisory Engineer
 Audio Services Division
 Mass Media Bureau

Facility ID: 35429

Grant Date: **MAY 28 1999**

Call Sign: KLGA
 License File No.: BL-990226DC

This license expires 3:00 a.m.
 Local time, February 1, 2005

This license covers Permit No.: 971003AA

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

Licensee: KOSSUTH COUNTY BROADCASTING, L.C.

Station Location: ALGONA, IA

Frequency (kHz): 1600

Station Class: B

Transmitter Location:

IA - 2102 80th Avenue, Algona, Iowa

Latitude: N 43° 4' 5"

Longitude: W 94° 18' 16"

Main Studio Location: (See Section 73.1125)

IA - 2102 80th Avenue, Algona. .

Nominal Power (kW): Day: 1.0 Night: 0.50

Antenna Input Power (kW): Day: 1.080 Night: 0.5400

Antenna Mode: Day: DA Night: DA

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

Current (amperes): Day: 4.65 Night: 3.29

Resistance (ohms): Day: 50.00 Night: 50.00

Antenna Description:

Two vertical, guyed, series-excited steel radiators of uniform cross section with an FM antenna side mounted near the top of tower #2(NW).

Ground System Description:

120 equally spaced, buried, copper radials about the base of each tower, each 47 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 120 interspersed radials 15 meters in length about the base of each tower.

Antenna Registration Number(s):

Daytime:

| Twr No. | ASRN |
|---------|---------|
| 1 | 1016954 |
| 2 | 1016951 |

Nighttime:

| Twr No. | ASRN |
|---------|---------|
| 1 | 1016954 |
| 2 | 1016951 |

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m @ 1km): Day: 322.11 Night: 217.31

Augmented RMS (mV/m @ 1km): Day: 350.40 Night: 229.90

Q Factor: Day: 11.10 Night: 7.52

Theoretical Parameters:

Daytime Directional Antenna:

| Tower No. | Field Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref. Switch * | Height (Deg.) |
|-----------|-------------|----------------|----------------|--------------------|---------------------|---------------|
| 1 | 1.0000 | 0.000 | 0.000 | 0.000 | 0 | 87.8 |
| 2 | 1.1500 | -130.000 | 60.000 | 330.000 | 0 | 117.1 |

Augmentation Parameters

| Aug No. | Central Azimuth (Deg. T) | Span (Deg.) | Radiation at Central Azimuth (mV/m @ 1 km) |
|---------|--------------------------|-------------|--|
| 1. | 68.0 | 90.0 | 238.00 |
| 2. | 116.5 | 60.0 | 84.00 |
| 3. | 150.0 | 60.0 | 90.00 |
| 4. | 183.5 | 20.0 | 55.00 |
| 5. | 232.0 | 60.0 | 238.00 |
| 6. | 281.0 | 60.0 | 470.00 |
| 7. | 330.0 | 90.0 | 590.00 |

Nighttime Directional Antenna:

| Tower No. | Field Ratio | Phasing (Deg.) | Spacing (Deg.) | Orientation (Deg.) | Tower Ref. Switch * | Height (Deg.) |
|-----------|-------------|----------------|----------------|--------------------|---------------------|---------------|
| 1 | 1.0000 | 0.000 | 0.000 | 0.000 | 0 | 87.8 |
| 2 | 1.0500 | -130.000 | 60.000 | 330.000 | 0 | 117.1 |

* 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. | 20.0 | 45.0 | 317.40 |
| 2. | 90.0 | 10.0 | 90.60 |
| 3. | 116.0 | 26.0 | 15.30 |
| 4. | 133.0 | 34.0 | 33.10 |
| 5. | 150.0 | 34.0 | 42.20 |
| 6. | 167.0 | 34.0 | 32.30 |
| 7. | 184.0 | 34.0 | 14.20 |
| 8. | 184.0 | 10.0 | 15.30 |
| 9. | 305.0 | 24.0 | 354.60 |
| 10. | 317.0 | 24.0 | 366.10 |
| 11. | 330.0 | 26.0 | 368.50 |
| 12. | 355.0 | 50.0 | 358.10 |

Operating Parameters:

Daytime Directional Operation:

| Twr. No. | Phase (Deg.) | Antenna Monitor Sample Current Ratio | Antenna Base Current Ratio |
|----------|--------------|--------------------------------------|----------------------------|
| 1 | 0.00 | 1.000 | 1.000 |
| 2 | -104.00 | 0.170 | 0.180 |

Nighttime Directional Operation:

| Twr. No. | Phase (Deg.) | Antenna Monitor Sample Current Ratio | Antenna Base Current Ratio |
|----------|--------------|--------------------------------------|----------------------------|
| 1 | 0.00 | 1.000 | 1.000 |
| 2 | -106.00 | 0.242 | 0.240 |

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) |
|-----------------|--------------------------------|-------------------------------|
| 116.5 | 3.80 | 16.80 |
| 183.5 | 1.20 | 45.10 |

Nighttime Operation:

| Radial (Deg. T) | Distance From Transmitter (kM) | Maximum Field Strength (mV/m) |
|--------------------|-----------------------------------|----------------------------------|
| 116.0 | 3.86 ⁶²⁵ 2.98 | 4.90 |
| 150.0 | 5.95 | 6.70 |

Special Operating Conditions or Restrictions:

1. Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.

*** END OF AUTHORIZATION ***