



United States of America  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION LICENSE**

Authorizing Official:

Official Mailing Address:

EUREKA BROADCASTING CO., INC.  
1101 MARSH ROAD  
EUREKA CA 95501

Son Nguyen  
Supervisory Engineer  
Audio Division  
Media Bureau

Facility Id: 19841

Call Sign: KWSW

License File Number: BL-20070404ACT

Grant Date: September 07, 2007

This license expires 3:00 a.m.  
local time, December 01, 2013.

This license covers permit no.: BP-20070405AAK

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

Callsign: KWSW

License No.: BL-20070404ACT

Name of Licensee: EUREKA BROADCASTING CO., INC.

Station Location: EUREKA, CA

Frequency (kHz): 980

Station Class: B

Antenna Coordinates:

Day

Latitude: N 40 Deg 48 Min 02 Sec

Longitude: W 124 Deg 07 Min 39 Sec

Night

Latitude: N 40 Deg 48 Min 02 Sec

Longitude: W 124 Deg 07 Min 39 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: 0.5

Antenna Input Power (kW): Day: 5.0 Night: 0.54

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 11.1 Night: 3.16

Resistance (ohms): Day: 40.4 Night: 54

Non-Directional Antenna: Day

Radiator Height: 71.6 meters; 84.2 deg

Theoretical Efficiency: 302.54 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1039558	

Night:

Tower No.	ASRN	Overall Height (m)
1	1039557	
2	1039558	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 223.4  
 Standard RMS (mV/m/km):  
 Augmented RMS (mV/m/km): Night: 234.8  
 Q Factor: Night:

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	84.2
2	0.5700	133.800	135.0000	70.000	0	84.2

\* 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	4.5	11.0	96.60
2	70.0	10.0	235.00
3	145.0	10.0	96.60

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	0	1
2	143	0.6

Antenna Monitor: POTOMAC AM-19

Monitoring Points:

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
4.5	7.08	11.9
70	1.77	131.2
145	1.87	37

## Special operating conditions or restrictions:

## 1 DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

No. and Type of Elements: Two uniform cross section, guyed, series excited steel radiators. East tower of array is detuned and not used for directional or non-directional operation.

Ground System consists of 120-250' equally spaced, buried copper wire radials about the base of each tower. Intersecting radials shortened and bonded to common transverse copper strap midway between towers.

## DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:

Direction of 4.5 True North: Proceed northward on U.S. 101 to Arcata. At the south entrance to Arcata, turn left on road to Samoa going 1.0 mile west (from south G Street, Arcata) to cross road intersection. At this point turn south and proceed 1/4 mile to road intersecting running east and west. Then turn west and proceed 1 1/4 miles to the monitoring point located on the Oliver George property. The monitoring point is at the westernmost point of the circular driveway around the farmhouse, 100 feet south of the roadway and about 25 feet east of the line fence. Air distance from transmitter is 4.4 miles. The field intensity measured at this point should not exceed 11.9 mV/m.

Direction of 70 : From the transmitter, proceed south on Marsh Street for a distance of 0.3 mile to Park Street. Turn west on Park Street and proceed 0.4 mile to Myrtle Avenue. Turn northwest on Myrtle Avenue and proceed for a distance of 1.2 miles to US Highway 101. Turn northeast on US Highway 101 and proceed for a distance of 2.4 miles to ranch house turn off. Turn south and east on ranch road for a distance of 0.4 mile to monitoring point. Measuring point is on east side of road, approximately 100 feet north of wooden gate which is located on west side of road. Distance from transmitter is 1.1 miles. The field intensity measured at this point should not exceed 131.2 mV/m.

Direction of 145 True North: From the transmitter, proceed south to Park Street. Turn west proceeding 0.35 miles to Myrtle Avenue. Then turn left proceeding southward to old Arcata Road running east ward. Proceed eastward for a distance of 0.7 miles to light green house on south side of road. Turn northwest, cross fence, proceed to open field 150 feet from fence in a direct line to tower. Monitor point is marked by survey maker in ground. Distance from transmitter is 1.16 miles. The field intensity measured at this point should not exceed 37.0 mV/m.

\*\*\* END OF AUTHORIZATION \*\*\*