



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

Authorizing Official:

Official Mailing Address:

\_\_\_\_\_  
 BONNEVILLE INTERNATIONAL CORPORATION  
 55 NORTH 300 WEST  
 2ND FLOOR  
 SALT LAKE CITY UT 84101

\_\_\_\_\_  
 Son Nguyen  
 Supervisory Engineer  
 Audio Division  
 Media Bureau

Facility Id: 30823

Call Sign: KEPN

License File Number: BZ-20040812ABT

\_\_\_\_\_  
 Grant Date: August 15, 2005

\_\_\_\_\_  
 This license expires 3:00 a.m.  
 local time, April 01, 2021.

BS-20150608ACD: This authorization granted on August 15, 2005 is reissued to reflect a change of the antenna monitor per licensee's request of June 8, 2015 (EAL-7-15-15).

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

Name of Licensee: BONNEVILLE INTERNATIONAL CORPORATION

Station Location: LAKEWOOD, CO

Frequency (kHz): 1600

Station Class: B

Antenna Coordinates:

Day

Latitude: N 39 Deg 39 Min 20 Sec
Longitude: W 105 Deg 04 Min 28 Sec

Night

Latitude: N 39 Deg 39 Min 20 Sec
Longitude: W 105 Deg 04 Min 28 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: 6.22 Night: 10.39

Resistance (ohms): Day: 129 Night: 50

Non-Directional Antenna: Day

Radiator Height: 109.7 meters; 210.8 deg
Theoretical Efficiency: 428.09 mV/m/kw at 1km

Antenna Registration Number(s):

Day:

Tower No. ASRN Overall Height (m)
1 1024552

Night:

Tower No. ASRN Overall Height (m)
1 1024552
2 None 57.6
3 None 57.6
4 None 57.6

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 756.23  
 Standard RMS (mV/m/km):  
 Augmented RMS (mV/m/km): Night: 796.1  
 Q Factor: Night: 23.5

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	210.8
2	0.5500	100.000	89.6000	185.000	0	108.3
3	0.5000	98.000	209.3000	250.000	0	108.3
4	0.8900	-9.000	189.2000	275.000	0	108.3

\* 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	2.5	45.0	1890.96
2	30.0	40.0	1367.94
3	125.0	10.0	96.56
4	220.0	60.0	386.24
5	250.0	60.0	160.93
6	315.0	10.0	643.74

Night Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
1	136	0.932
2	94.9	0.65
3	84.2	1.06
4	0	1

Antenna Monitor: POTOMAC INSTRUMENTS MODEL 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)
71.5	3.2	45.6
122.5	5.1	9.1
262	3.8	27.6

Special operating conditions or restrictions:

1 DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

No. and Type of Elements: Four (4), vertical, guyed, series-excited steel radiators of uniform cross section with a six foot STL antenna at 105.2 m above ground on NE tower #1. Theo RMS: 756.2 mV/m @ 1 km; Aug. RMS 796.1 mV/m @ 1 km; Q=23.5.

Ground System consists of 120 equally spaced, buried copper radials about the base of each tower 61 m in length, except where terminated by property boundaries or where intersecting radials are shortened and bonded, plus a 9.8 m by 9.8 m ground screen at the base of each tower.

DESCRIPTION OF AND FIELD INTENSITY MEASURED AT MONITORING POINTS:

Direction of 71.5 True North. The monitor point is on the east sidewalk at the northern property line of 2784 Patton Court. Distance from the center of array 3.22 km. Field strength meter must be oriented toward transmitter site. The field intensity measured at this point should not exceed 45.6 mV/m.

Direction of 122.5 True North. The monitor point is in the middle of the street directly in front of 2998 Tanforan Dr., the house on the SE corner. This is point #21 and it is 5.1 km from the array. The field intensity measured at this point should not exceed 9.1 mV/m.

Direction of 262 True North. The monitor point is located on the west side of Oak Street, 100 feet north of its intersection with Newcombe Way. This is point #16 and it is 3.8 km from the center of the array. The field intensity measured at this point should not exceed 27.6 mV/m.

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