United States of America FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:
IHM LICENSES, LLC
7136 S. YALE AVENUE
SUITE 501
TULSA OK 74136

Facility Id: 48386
Call Sign: KJR
License File Number: BL-20010320ABX

Son Nguyen<br>Supervisory Engineer<br>Audio Division<br>Media Bureau<br>Grant Date: March 25, 2002<br>This license expires 3:00 a.m.<br>local time, February 01, 2006.


#### Abstract

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. | $8: 00 \mathrm{AM}$ | $4: 45 \mathrm{PM}$ | Jul. | $4: 30 \mathrm{AM}$ | $8: 00 \mathrm{PM}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feb. | $7: 15 \mathrm{AM}$ | $5: 30 \mathrm{PM}$ | Aug. | $5: 00 \mathrm{AM}$ | $7: 30$ | PM |
| Mar. | $6: 30 \mathrm{AM}$ | $6: 15 \mathrm{PM}$ | Sep. | $5: 45 \mathrm{AM}$ | $6: 30$ | PM |
| Apr. | $5: 30 \mathrm{AM}$ | $7: 00 \mathrm{PM}$ | Oct. | $6: 30 \mathrm{AM}$ | $5: 30 \mathrm{PM}$ |  |
| May | $4: 30 \mathrm{AM}$ | $7: 45 \mathrm{PM}$ | Nov. $7: 15 \mathrm{AM}$ | $4: 30 \mathrm{PM}$ |  |  |
| Jun. | 4:15 AM | $8: 00 \mathrm{PM}$ | Dec. $7: 45 \mathrm{AM}$ | $4: 15 \mathrm{PM}$ |  |  |

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Name of Licensee: IHM LICENSES, LLC
Station Location: SEATTLE, WA
Frequency (kHz): 950
Station Class: B
Antenna Coordinates:
                    Day
\begin{tabular}{llrl} 
Latitude: & N & 47 Deg & 13 Min \\
Longitude: & F & Sec \\
& 122 Deg & 23 Min & 22 Sec
\end{tabular}
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## Night

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\begin{tabular}{llrlll} 
Latitude: & N & 47 Deg & 13 Min & 56 Sec \\
Longitude: & W & 122 Deg & 23 Min & 22 Sec
\end{tabular}
Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and
73.1670 of the Commission's Rules.
\begin{tabular}{lll} 
Nominal Power (kW): & Day: 50.0 & Night: 50.0 \\
Antenna Input Power (kW): Day: 50.0 & Night: 50.0 \\
Antenna Mode: & Day: DA & Night: DA \\
(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)
\end{tabular}
Current (amperes): Day: 32.45 Night: 32.45
Resistance (ohms): Day: 50 Night: 50
Antenna Registration Number(s):
    Day:
        Tower No. ASRN Overall Height (m)
                        1 1033501
            2 1033499
            3 1033500
            4 1046357
            5 1046358
```

Night:
Tower No. ASRN Overall Height (m)
11033501
21033499
31033500
$4 \quad 1046357$
51046358

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM
Theoretical RMS (mV/m/km): Day: 2393.6 Night: 2393.6
Standard RMS (mV/m/km):
Augmented RMS (mV/m/km): Day:2518.1 Night:2518.1
Q Factor: Day: 84.82 Night: 84.82
Theoretical Parameters:
Day Directional Antenna:

| Tower | Field <br> Ratio | Phasing <br> (Deg.) | Spacing <br> (Deg.) | Orientation <br> (Deg.) | Tower Ref <br> Switch * | Height <br> (Deg.) |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 90.5 |
| 2 | 0.8350 | 109.000 | 99.1000 | 233.500 | 0 | 90.5 |
| 3 | 0.6930 | 153.100 | 100.6000 | 173.000 | 0 | 90.5 |
| 4 | 0.6130 | -127.800 | 84.1000 | 335.400 | 0 | 90.5 |
| 5 | 0.4390 | -94.900 | 160.3000 | 204.000 | 0 | 90.5 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Augmentation Parameters:

|  | Central |  | Radiation |
| :--- | :---: | :--- | :--- |
| Aug | Azimuth | Span | at Central Azimuth |
| No. | (Deg. T) | (Deg.) | $(\mathrm{mV} / \mathrm{m}$ @ 1 km$)$ |
| 1 | 289.5 | 40.0 | 819.60 |

Theoretical Parameters:
Night Directional Antenna:

| Tower | Field | Phasing | Spacing |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ratio | (Deg.) | (Deg.) | Orientation <br> (Deg.) | Tower Ref <br> Switch | Height <br> (Deg.) |
| 1 | 1.0000 | 0.000 | 0.0000 | 0.000 | 0 | 90.5 |
| 2 | 0.8350 | 109.000 | 99.1000 | 233.500 | 0 | 90.5 |
| 3 | 0.6930 | 153.100 | 100.6000 | 173.000 | 0 | 90.5 |
| 4 | 0.6130 | -127.800 | 84.1000 | 335.400 | 0 | 90.5 |
| 5 | 0.4390 | -94.900 | 160.3000 | 204.000 | 0 | 90.5 |

* Tower Reference Switch
$0=$ Spacing and orientation from reference tower $1=$ Spacing and orientation from previous tower

Augmentation Parameters:

|  | Central |  | Radiation |
| :--- | :---: | :--- | :--- |
| Aug | Azimuth <br> (Deg. T) | Span <br> (Deg.) | at Central Azimuth <br> $(\mathrm{mV} / \mathrm{m} @ 1 \mathrm{~km})$ |
| No. | (Deg. |  |  |
| 1 | 289.5 | 40.0 | 819.60 |

Day Directional Operation:

| Twr. Phase | Antenn |  |
| :--- | :--- | :--- |
| No. | (Deg.) | Sample |
| 1 | 0 | 1 |
| 2 | 99.3 | 0.612 |
| 3 | 155.8 | 0.668 |
| 4 | -134.8 | 0.585 |
| 5 | -174 | 0.338 |

Night Directional Operation:
Twr. Phase Antenna Monitor
No. (Deg.) Sample Current Ratio

| 1 | 0 | 1 |
| :--- | :--- | :--- |
| 2 | 99.3 | 0.612 |
| 3 | 155.8 | 0.668 |
| 4 | -134.8 | 0.585 |
| 5 | -174 | 0.338 |

Antenna Monitor: POTOMAC INSTRUMENTS 1901
Sampling System Approved Under Section 73.68 of the Rules.
Monitoring Points:

Day Operation:

| Radial <br> $($ Deg. T) | Distance | From Transmitter Maximum <br> $(\mathrm{kM})$ |
| :--- | :---: | :---: |
| 105.5 | 8.48 | 23.8 |
| 174 | 6.92 | 19.6 |
| 289.5 | 5.19 | 98.4 |

Night Operation:

| Radial <br> (Deg. T) | Distance | From Transmitter Maximum <br> $(\mathrm{kM})$ |
| :--- | :---: | :---: |
| Field <br> $(\mathrm{mV} / \mathrm{m})$ |  |  |
| 105.5 | 8.48 | 23.8 |
| 174 | 6.92 | 19.6 |
| 289.5 | 5.19 | 98.4 |

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Special operating conditions or restrictions:
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1 Direction of Monitoring Points:
Direction of $105.5^{\circ}$ True North. Take 29 th Avenue East from transmitter site 0.3 km ( 0.2 mi ) to River Road. Turn right onto River Road. Proceed east-southeast on River Road $8.3 \mathrm{~km}(5.2 \mathrm{mi})$ to Meridian Street North. Turn left onto Meridian Street North. Proceed north $3.4 \mathrm{~km}(2.1$ mi) to Chrisella road. Turn right onto Chrisella road. Proceed southeast on Chrisella Road 1.7 km (1.1 mi) to Karshner road. Point is located on south side of Karshner Road, 5 meters ( 125 feet) from "Dead End" sign at intersection of Chrisella Road and Karshner Road.

Direction of $174^{\circ}$ True North. Take 29 th Avenue East from transmitter site $0.3 \mathrm{~km}(0.2 \mathrm{mi})$ to River Road. Turn left onto River Road. Proceed west-northwest on River Road 0.7 km ( 0.4 mi ) to Pioneer Way. Turn left onto Pioneer Way. Proceed south-southwest 1.4 km ( 0.9 mi ) to Waller Road. Turn right onto Waller Road. Proceed south on Waller Road 6.5 km (4.0 mi) to 96th Street East. Turn left onto 96th Street East. Proceed east $0.6 \mathrm{~km}(0.4 \mathrm{mi})$ to 3707 96th Street East. Point is located on south side of road between mailbox and driveway of residence.

Direction of $289.5^{\circ}$ True North. Take $29 t h$ Avenue East from transmitter site $0.3 \mathrm{~km}(0.2 \mathrm{mi})$ to River Road. Turn left onto River Road.
Proceed west-northwest on River Road $1.3 \mathrm{~km}(0.8 \mathrm{mi})$ to Interstate Highway 5 entrance ramp. Take $\mathrm{I}-5$ south $4.3 \mathrm{~km}(2.7 \mathrm{mi})$ to exit for Highway 16, toward the Tacoma Narrows Bridge. Take the first exit onto Sprague Avenue. Travel north on Sprague Avenue $1.4 \mathrm{~km}(0.9 \mathrm{mi})$ to South 15th Street. Turn right onto South 15th Street. Proceed east $0.6 \mathrm{~km}(0.4 \mathrm{mi})$ to Sheridan Avenue. Turn left onto Sheridan Avenue. Point is located on east side of street on sidewalk at steps to residence at 1419 Sheridan Avenue.

Description of Ground System: Ground system consists of 120 copper radials per tower 88 m long or terminating at property line or transverse copper strap plus 120 copper radials 20 m long interspersed between longer radials.

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 ***

