

EXHIBIT 10 - 6
RF EXPOSURE SURVEY AND
COMPLIANCE STATEMENT

INTRODUCTION

This report is prepared on behalf of Jackson Hole Community Radio, Incorporated, licensee of non-commercial station KHOL(FM) at Jackson, Wyoming. It presents technical information relating to the modified Auxiliary Antenna and transmission system used for KHOL(FM).

CONSTRUCTED FACILITY

The Auxiliary system was originally installed in July 2010 at the existing multiple user communications site at Rendezvous Mountain. The existing large cross section antenna mounting grid at the roof of the mountain top shelter (Corbets Cabin) supports a Scala type CLFM Log Periodic antenna mounted in the vertical polarization orientation at 10 meters AGL and 3.5 meters above the roof. A second Scala type CLFM Log Periodic antenna was added with horizontal polarization approximately 3 meters above the vertical antenna. The transmitter power was adjusted so that after line loss, a 3dB splitter and its loss, and antenna gain the Effective Radiated Power (ERP) is 600 Watts for both Horizontal and Vertical antennas. The added Horizontally Polarized antenna has the same orientation as the licensed Vertically Polarized antenna. The added antenna has a slightly narrower horizontal plane pattern, therefore its antenna pattern is contained entirely within the licensed Vertical/Composite patten.

RF EXPOSURE SOURCES

Several other RF Emission sources are licensed at that site. In addition to several low power two-way and cellular operations, there are four licensed FM or TV translators as listed below.

Present

K29HG	128W - Digital	20M AGL
K25ID	298W - Analog	10M AGL

K56BT	1.13kw - Analog	10M AGL
K265DA	76W - Analog	5M AGL

These sources are not co-located with the KHOL-FM Auxiliary antenna but are located nearby.

RF EXPOSURE CALCULATION

The KHOL(FM) Auxiliary antenna has a very sharply controlled field pattern in the vertical plane for each polarization as indicated on the attached antenna pattern plots. At all vertical angles in excess of 70 degrees below the horizontal plane (20 degrees up from the vertical), the relative field is 20% of maximum or less for either polarization and the predicted ground level RF Exposure is less than 10: W/Cm.Sq. This level of exposure is less than 5% of the FCC Adopted Uncontrolled Environment (Public) exposure level.

RF EXPOSURE SURVEY

In compliance with the conditions on the KHOL-FM Auxiliary construction permit, FCC File BXPED-20101026AAI, the RF Exposure produced at the Auxiliary antenna has been surveyed. Broad band exposure measurements were made using a Holiday Industries Type 3002 meter, using the E-Field probe and meter indications of Field Strength Units Squared. Because of the very low power in the Auxiliary antenna and the well controlled field pattern described previously, the area in which any significant RF Exposure measurement values could be obtained were confined to immediately below and in front of the antenna, within a few feet of the front of the dual polarized antennas.

Using the maximum reach of the measurement probe above the operators shoulder height, a probe height of approximately 2.5 meters above roof level, several critical exposure level locations were spotted. Those locations were where the Controlled Environment RF Exposure was equal to or below; 100%, 50% and 25% respectively of the FCC adopted long term exposure value. Since the meter indications are in FSQ^2 , the corresponding E^2 values are; 4000, 2000 and $1000V^2$. Measurements below this minimum value are problematical as it would require interpolation near the lowest marked meter value, between zero and $1000 V^2/M^2$. At the roof edge the measurements failed to give any significant up scale reading on the instrument used. The measurement locations were photographed and will be retained for future reference.

Additional probe measurements were made immediately in front of other operating antennas where RF sources were confirmed to be active and exposure values were found to be very low, even at near contact distances in front of the antennas or with the probe elevated as high as possible in front of the elevated antennas. Therefore, none of the additional antennas contribute significantly to the exposure from the KHOL-FM antenna.

Additional measurements were made using the same elevated probe procedure at ground level around the building on which the KHOL-FM Auxiliary antenna is mounted and no up-scale reading was obtained.

RF EXPOSURE COMPLIANCE STATEMENT

The KHOL(FM) RF Exposure contribution is significantly controlled by the Auxiliary Antenna vertical patterns and is calculated to be less than 5% of the FCC Adopted Uncontrolled Environment limit at all public accessible locations and therefore is not subject to any further RF Exposure controls. This very low ground level exposure was confirmed by measurements when no up-scale readings were seen at the most sensitive level of the RF Exposure meter used.

A site user agreement will be entered into so that workers who may have access to the roof top antenna location are not subject to RF Exposure in excess of the Controlled Environment limits when work is required in the vicinity of any location near any of the RF sources at the site.

The general site area will be posted with suitable RF Exposure warning signs and controls to prevent climbing the supporting structure.

Respectfully Submitted
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by 

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SCALA - Kathrein

CLFM – Horizontal Polarization – Vertical Plane – Relative Field Pattern



