

THOMAS M. ECKELS, PE
STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE
ERIK C. SWANSON, PE

THOMAS S. GORTON, PE
MICHAEL H. MEHIGAN, PE

JAMES B. HATFIELD, PE
BENJAMIN F. DAWSON III, PE
CONSULTANTS

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151
FACSIMILE (206) 789-9834
E-MAIL hatdaw@hatdaw.com

MAURY L. HATFIELD, PE
(1942-2009)
PAUL W. LEONARD, PE
(1925-2011)

ENGINEERING REPORT

APPLICATION for CONSTRUCTION PERMIT for MODIFIED NIGHTTIME OPERATION

KVNT(AM)
1020 kHz
Eagle River, Alaska

Facility ID 53491

10 kW ND Unlimited Time

Christian Broadcasting, Inc.

June 2017

Purpose of Application

This Engineering Report is part of an application by Christian Broadcasting, Inc. (“CBI”) to modify the nighttime operation of KVNT(AM), Eagle River, Alaska to specify use of a non-directional antenna. KVNT currently operates at a power of 10 kW unlimited time using a directional antenna during nighttime hours. This application seeks 10 kW non-directional operation both day and night.

Allocation Considerations

Daytime

No changes to the currently licensed daytime operation are proposed.

Nighttime

The proposed nighttime operation of KVNT not enter into the 50% RSS of any operating facility. In fact, the only station to which the proposed operation of KVNT would exceed the 10% RSS threshold is CKVH, High Prairie, Alberta.

The nighttime operation of KVNT requires the use of a directional antenna for no reason other than to protect an long unused Canadian “placeholder” at Terrace, British Columbia. Given Canada’s history of abandonment of the AM band over the last two decades, it appears highly unlikely that the Terrace facility will ever be made operational. Therefore, after discussion with staff in the Commission’s International Branch, we request that the International Branch seek Canadian acquiescence to the proposed non-directional nighttime operation of KVNT.

Facilities Proposed

CBI proposes continued operation of KVNT on 1020 kHz with a power of 10 kW using the presently licensed non-directional antenna for both day and night operation. No changes to the currently approved daytime operation are proposed. No new construction or modification of the existing KVNT antenna facilities or ground system would be required by grant of this application.

Blanketing Contour

The area within the proposed 1 V/m contours is unpopulated¹, thus meeting the requirements of §73.24(g). The area of the proposed nighttime blanketing contour is identical to the licensed daytime blanketing contour.

Antenna Tower Access

Antenna tower access is restricted by a fence with a locked gate that is least 2 meters from the antenna base, as required by OET-65. The antenna is posted with warning signs, and all station personnel and contractors will be required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

¹Block Centroid method - 2010 US Census data



KVNT Transmitter Site

Statement of Engineer

This Engineering Report, relative to application for modified nighttime operation for KVNT(AM), Eagle River, Alaska has been prepared by the undersigned. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am an engineer in the firm of Hatfield and Dawson Consulting Engineers and am Registered as a Professional Engineer in the States of Washington and Oregon.

Signed this 30th day of June 2017



Thomas S. Gorton, P.E.

Hatfield & Dawson Consulting Engineers