

ALASKA TELECOM, INC.

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November 27, 2000

To: Nick Miller
ACS Wireless Engineering

From: Keith Merrick

Re: MPE Measurements for Eagles Nest Tower Site

Nick,

Electric field equivalent, plane wave power density measurements were made at the Eagles Nest tower site on 20-Nov-00 at approximately 1400 hours AST. All broadcast and microwave transmitters of concern were reported to be operating at their fully authorized power levels. All antennas were mounted in their final elevations and orientations at the time of the field study.

A Narda model 8718 EME survey meter with a Narda Model B8722D "Shaped" probe was used for the measurements. The Model B8722D "Shaped" probe conforms to the IEEE C95.1-1991, 300kHz to 50 GHz standard for "controlled" environments. The probe has an isotropic response of $\pm 0.75\text{dB}$ and a frequency sensitivity of $\pm 2\text{dB}$ from standard. The calibration of the meter and probe were performed at the factory and is valid through 17-May-01.

The procedures outlined in OET Bulletin 65, 4th edition, August 1999 and IEEE C95.1.1991 were followed in performing these field measurements.

An excess of fifty data points were recorded in and around the transmitter site in addition to areas inside and on the roof of the transmitter building. Additional measurements were taken on the adjoining property along the hiking trail directly to the north of the tower. Spatially averaged measurements were performed at the locations with the highest readings within the "controlled" and "uncontrolled" areas around the site. These areas are identified on the attached site map.

SUMMARY

The field measurements taken on 20-Nov-00 indicate that there are no areas that exceed the "controlled" environment Maximum Permissible Exposure (MPE) limits *within the restricted access* areas of the tower base, building roof, site grounds and parking areas.

The field measurements also indicate that there are no areas that exceed the "uncontrolled" environment MPE limits outside of the restricted access area.

Maximum levels for the "controlled" MPE were recorded at location "A" with a spatial average level of 55% of the maximum permissible 6 minute exposure limit for industry workers. Maximum levels for the "uncontrolled" MPE were recorded at location "B" with a spatial average level of 55% of the maximum permissible 30 minute exposure limit for the general public.

Public access to the property is restricted through a series of locked gates and fences.

EME warning signs are posted around the facility to remind workers to follow all applicable safety procedures.

Note 1: A level of 50% of the maximum permissible 6 minute exposure limit for industry workers was also recorded on top of the ice bridge directly in front of the temporary antenna location for the KATB transmitter (location "C"). This transmitter is low power (50 watts) and will be moved onto the 180 foot tower when contractual arrangements can be made with the station owners.

If you have any questions concerning the methodology or results of this EME study please feel free to contact me at the number listed above.

Cordially,

Keith Merrick, BSEE

CC: Doug Staats

Martin Stewart