Upgrade and Expansion of the Geophysical Institute Research Infrasound Facility on the North Campus

To: Marshall Lind

From: John D. Craven, Chair

UAF Master Planning Committee

MPC Recommendation Related to Upgrade and Expansion of

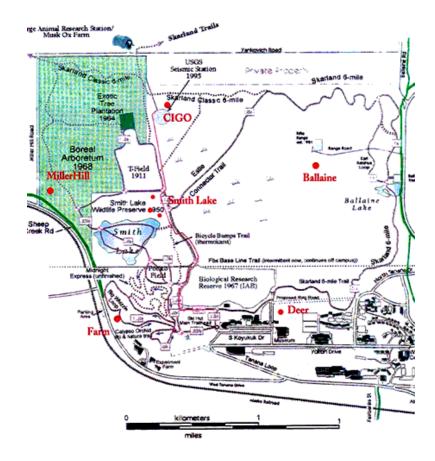
Subject: the Geophysical Institute Research Infrasound Facility on the

North Campus

Background

Prof. John Olson and Prof. Emeritus Charles Wilson of the Geophysical Institute presently operate a research network of four infrasound sensors at distributed sites in the UAF North Campus. The research focuses on the detection and analysis of sub-audible, low-frequency acoustic waves in the atmosphere. The sources are varied (e.g., explosive mining operations, weather storm systems), but the underlying objective is associated with the Comprehensive Nuclear Test Ban Treaty and the detection of nuclear explosions. The research is centered on developing an understanding of the sources of the natural background and in developing techniques for distinguishing the signature of such an explosion from the background of natural emissions. Sensor arrays within wooded areas are highly valued since the woods reduce wind-induced background noise.

The goal of their proposal is to upgrade the existing array and to expand it to eight sites including three closely spaced sites near the center of the array. Since camouflage is an objective for increased security, there will be only minimum disturbance of vegetation and no brush or trees will be removed. Low-voltage power from nearby electrical service will be used through buried lines. A color map of the area is attached. The Geophysical Institute is to work with Facilities Services in carrying out this project.



Action

A formal presentation was made to the committee, and after a lengthy discussion the following motion was made, amended, and discussed. The motion passed unanimously.

MOTION

The Master Planning Committee recommends to the chancellor that the upgrade and expansion of the Geophysical Institute's Infrasound Facility on the North Campus be allowed according to the submitted plan, but with five modifications:

- 1. The "Deer" site is to remain at or near its current location and not moved south of the North Tanana Loop road.
- 2. The "Smith Lake" site is to be moved into the wetlands to the east of the access road area, for which Army Corp of Engineers permission may be needed.
- 3. Enclosure colors are to be selected for minimum visibility.
- 4. The proposed fences will not be installed until it is demonstrated that moose and/or intruders are a problem.
- 5. The Geophysical Institute is to provide a map and location "GPS Address" of each site to Facilities Services and to the Master Planning Committee.

MPC Recommendation Approved: Meeting of May 24, 2001 Recommendations Submitted to the Chancellor: May 28, 2001