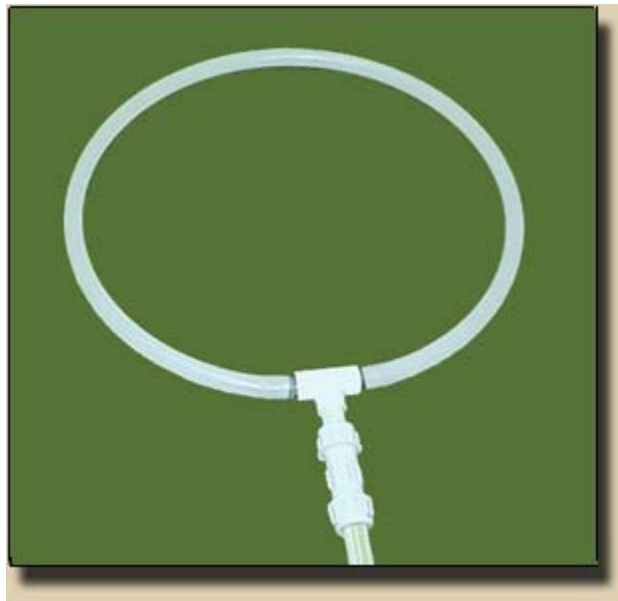


# HIPAS Observatory

High Power Auroral Stimulation



## All Alaska Monitoring



**HF Receive Loop Antenna**

### **All Alaska Monitoring of HF waves scattered by HIPAS/HAARP or other Ionospheric Perturbations (Remote Sensing).**

This task is to establish a series of remote communications stations throughout Alaska to monitor the characteristics of high frequency communication as a function of ionospheric conditions. These measurements, consist of measuring the amplitude and phase of many received HF waves at many locations. This will provide a three-dimensional (holographic) view of the ionosphere. The stations will take advantage of the existing GCI communication network spanning the entire state. HIPAS Observatory will serve as the center for data gathering and analysis.

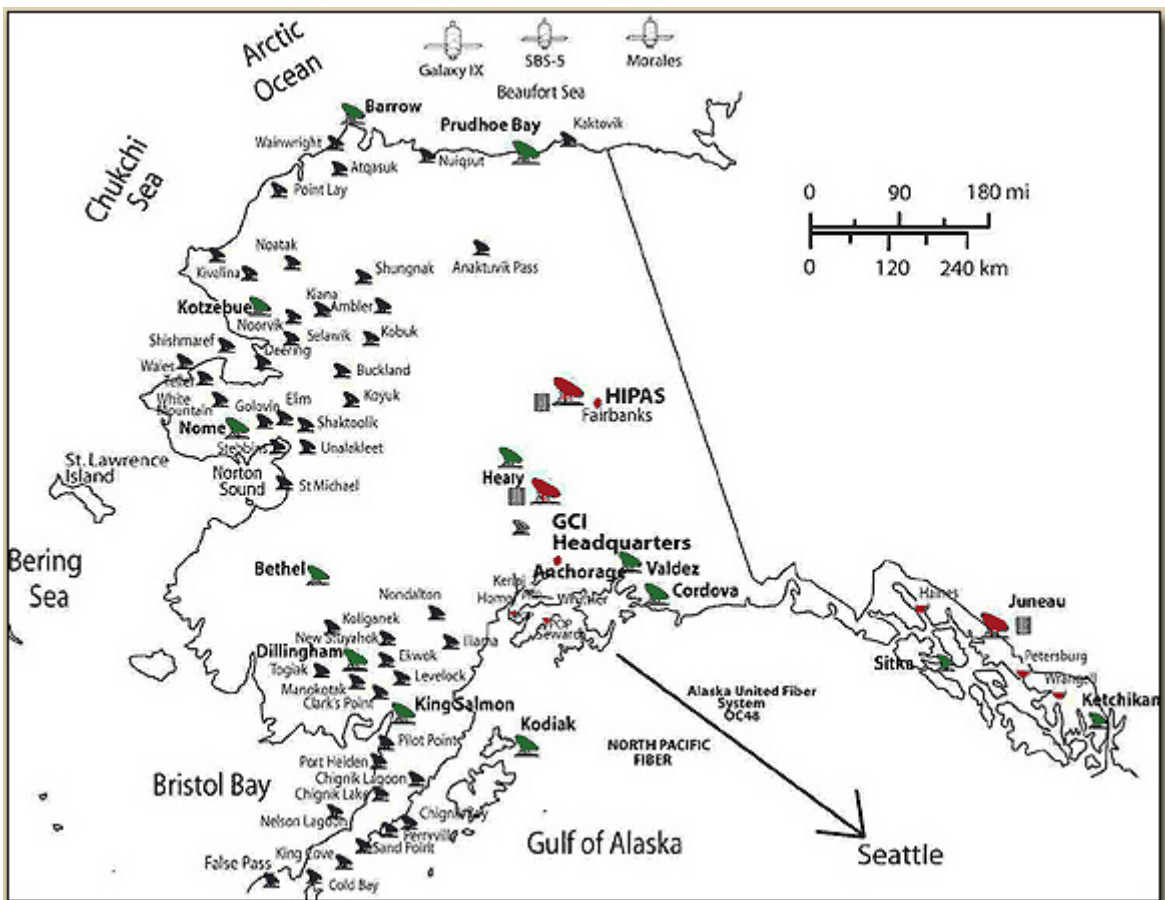
The All-Alaska Monitoring project will create a topographic map of the ionosphere over time using the many remote, receiving antennas at General Communications, Inc. (GCI) telecommunication sites around Alaska. Data will be collected and analyzed to create a three-dimensional surface showing the ripples and waves in the ionospheric layer.

**Reference:**

ABSTRACT: Sung, S.C.; Wong, A.Y. R.F. HOLOGRAPHIC IMAGING OF IONOSPHERIC DENSITY PERTURBATIONS

H.F. Holography is discussed as a diagnostic tool for probing the ionosphere. The concept is illustrated in the imaging of ionospheric cavitations by computer simulation. Factors which affect resolution are discussed.

Present General Communications, Inc. (GCI) telecommunication sites in Alaska.



**BACK**

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