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The requested \$100,000 will fund a feasibility study to design an essential emergency medical communications system in the Norton Sound region. The present system is subject to prolonged periods of outage making communication between the hospital in Nome and the villages extremely unreliable.

It is anticipated that the total communication network will cost \$587,000. Included in this pricetage is the \$100,000 for the study.

The study will be done by Norton Sound Health Corporation.

# VHF Radio Repeater System

## Norton Sound

This project will provide for design purchase, and installation of essential Emergency Medical Services Communications equipment necessary to furnish the reliable communications backbone between the health aides, search and rescue and a clinic/hospital. There is a lack of appropriate reliable EMS communications system between the hospital in Nome and the villages in the Norton Sound Health area. The present system is subject to prolonged periods of outage due to the high latitude location and the associated heavy magnetic storms that affect high frequency radio.

### Description of Project:

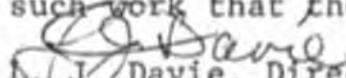
The Norton Sound VHF (very high frequency) Network will interconnect all villages in the Norton Sound Health Complex with the hospital in Nome and allow for search and rescue teams to enter the system from ground search parties and aircraft.

[ Provide approximately 8 VHF repeaters on high points to relay between villages and the Nome hospital. Provide for a selective calling system that would provide confidential medical traffic between villages and village to hospital. ]

The existing system does not lend itself to a highly reliable system but instead has grown as an "add-on" system that has reached its practical limit. The state of the art has reached a point where smaller more efficient, trouble free and very high reliability dictates that a change is now required to provide the communication service that Emergency Medical Services require.

The reliability for "in-time" is professionally estimated to be 98 percent. The life span of the proposed system is estimated to be greater than ten years.

The total estimated cost is \$587,000 with a yearly maintenance of \$25,000. This is based on transportation, increase in equipment and labor costs. This project could be funded in increments over a three year span with each year accomplishing such work that the funds allocated would cover.

  
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