



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 18-036

Dear Colleague Letter: Planning for the Future of the Sondrestrom Research Facility

December 26, 2017

Dear Colleagues:

The Geospace Section (GS) of the of the Atmospheric and Geospace Sciences (AGS) Division of the National Science Foundation (NSF) has supported observations from the Sondrestrom Research Facility (SRF) located in Greenland at a location near the geomagnetic cusp that makes it well positioned for conducting observations of the geospace system. The facility supports an incoherent scatter radar (ISR) and a suite of auxiliary instruments including magnetometers, GPS receivers, ionosonde, HF radiowave receivers, imagers, and a LIDAR system.

The [Geospace Portfolio Review](#) considered the current balance of research investments made by the GS under the assumption of a flat budget outlook and among its many recommendations was one that indicated that ISR operations at the SRF should end when the current grant cycle is complete. Furthermore, the Portfolio Review (PR) recommended that continued support for the auxiliary instruments be evaluated through the peer review process. A subsequent evaluation of the PR by the National Academy of Sciences reinforced these recommendations.

Based upon the community input evidenced by these reports and NSF's judgment, we are evaluating the transition of the SRF to a Geospace Polar Observatory (GPO). As a first step in this process we are planning to support ISR operations at the SRF until March 31, 2018. After that time, we will support caretaker operations at the site while we evaluate the future of science activities at the site. During this time NSF will be conducting an engineering assessment evaluating the prospective expenses of decommissioning the ISR, options for reducing operating costs, and the environmental impact implications of the transition.

The Geospace Polar Observatory could be supported as a unique location where remote observations of the geospace system are made with minimal operational needs. Instruments conducting these observations could include members of the current suite as well as new ones. The concept of the GPO is in line with the PR recommendation that instrumentation for geospace studies from Sondrestrom be supported by NSF through the peer review process from the existing core programs. We welcome comments on the relative importance of the GPO, in light of the current constrained budget landscape, as well as concepts for its operation. These comments can

be sent via email to Geospace Facilities Program Director John Meriwether at jmeriwet@nsf.gov. For consideration, these comments must be received within 45 days of the release of this letter. Using the input from engineering assessment and the community responses to this DCL, NSF may consider supporting activities related to the GPO.

Sincerely,
Dr. William Easterling
Assistant Director
Directorate for Geosciences
National Science Foundation