

**MEMORANDUM OF AGREEMENT BETWEEN
UNITED STATES COAST GUARD AND THE NATIONAL SCIENCE FOUNDATION
REGARDING POLAR ICEBREAKER SUPPORT AND REIMBURSEMENT**

1. PARTIES.

The parties to this Agreement are the United States Coast Guard (USCG) and the National Science Foundation (NSF).

2. AUTHORITY.

a. The Coast Guard enters into this agreement under the authority of 31 U.S.C. §§ 1535-1536, 14 U.S.C. § 2, 14 U.S.C. § 93(a)(1) and (20), 14 U.S.C. § 94, 14 U.S.C. § 141(a), 15 U.S.C. § 4109(b)(2), and 16 U.S.C. § 2441(c).

b. The National Science Foundation enters into this Agreement per the authority of the National Science Foundation Act of 1950, 42 U.S.C. §1861 *et seq.*

3. PURPOSE.

The purpose of this Memorandum of Agreement (MOA) is to implement the proposed budget base transfer for use of USCG icebreakers for scientific and operational support for all planned USCG operations for FY 2006 and beyond. It includes guidance for planning and scheduling and sets forth the terms and conditions for reimbursement to USCG by NSF. This Agreement supersedes the USCG/NSF MOA dated 25 May 1999.

The new agreement is required because the Administration has proposed to shift funding for polar icebreaking from the FY 2006 budget of the USCG to that of the NSF. Despite a shift in budget authority to the NSF from the USCG, the USCG shall retain custody of all three polar icebreakers.

4. BACKGROUND.

The polar icebreaker program is managed by the USCG in order to provide a single point manager for the small national fleet of polar icebreakers. The USCG polar icebreaker program supports logistics and research in the polar regions, and is responsible for meeting the Nation's polar icebreaker military requirements. A 1990 Presidential Report cited studies and public law, recognizing the USCG's expertise in icebreaker operations and the efficiencies of single agency management of a small and specialized fleet of vessels.

The USCG is specifically responsible for operating and maintaining the fleet and for supporting NSF, NOAA and other agencies as necessary to support national programs such as the U.S. Antarctic Program and Arctic research.

a. Program Description - Antarctica

The U. S. Antarctic Program (USAP) supports national goals to maintain the Antarctic Treaty, ensure that the continent will continue to be used for peaceful purposes only,

foster cooperative research to contribute to the solution of regional and worldwide problems, protect the environment and ensure equitable and wise use of living and non-living resources. The U.S. scientific research program in Antarctica continues to be the principal expression of national interest and policy in Antarctica. The NSF has been assigned overall management responsibility for planning, funding and implementing the U.S. national program in Antarctica. The fundamental objective of the program is to maintain an active and influential U.S. presence in Antarctica together with the ability to support a substantial program of scientific research balanced among the scientific disciplines in cooperation with programs of other Treaty nations and reflecting the needs of other U.S. agencies.

The USAP funds a multi-disciplinary research program on the Antarctic continent and in the adjacent oceans. The research is conducted at three permanent Antarctic stations, from temporary stations and remote field sites, and aboard ships. Research projects developed by, or in collaboration with, other Government agencies are included, and there are frequent instances of cooperative research with scientists of other Treaty nations. The USAP provides for the direct operational and logistic support of science activities and the maintenance of an effective U.S. presence in Antarctica. The principal segments include DoD support, Department of Homeland Security (USCG) support and commercial contractor support. The DoD and the USCG provide operational and logistic support as requested by NSF on a cost-reimbursable basis.

b. Program Description - Arctic

The U. S. Arctic Research and Policy Act of 1984 defines the Arctic as all areas north of the Arctic Circle and all United States' territory north and west of the boundary formed by the Porcupine, Yukon and Kuskokwim Rivers; all contiguous seas including the Arctic Ocean and the Beaufort, Bering and Chukchi Seas; and the Aleutian chain. Field projects falling outside these boundaries but directly related to arctic science and engineering conditions or issues are appropriate for NSF support, as well as are related laboratory and theoretical studies.

The goal of the NSF Arctic Research Program is to gain a better understanding of the Earth's biological, geophysical, chemical and socio-cultural processes, and the interactions of ocean, land, atmosphere, biological and human systems. Arctic research is supported at NSF by the Office of Polar Programs (OPP) as well as by a number of other disciplinary programs within the Foundation.

OPP offers a focused multidisciplinary and interdisciplinary research program that emphasizes the special character of the Arctic for scientific study. The arctic regions are among the most sensitive to environmental change, and have exceptionally long natural climate records and thousands of years of human settlement. This interplay provides a unique basis for integrated research on global systems and human adaptation.

An Arctic logistics component has been established in OPP to address field program requirements beyond those commonly included in proposals from an individual or small

group of investigators. Examples of the type of research support that may be provided through the separate logistics component include DoD support, Department of Homeland Security (USCG) support and commercial contractor support. The DoD and USCG provide operational and logistic support as requested by NSF on a cost-reimbursable basis.

5. RESPONSIBILITIES.

a. The NSF agrees to:

- 1) Convene an annual scheduling meeting to consider all national priorities and maintenance requirements and schedule accordingly as resources allow.
- 2) Identify icebreaker mission needs for the succeeding fiscal year to the USCG by 1 June of each year.

Note that USCG has agreed to support Canadian logistical requests in the Western Arctic, scheduled on a situational basis, in accordance with an annual advanced planning process, to gain Canadian icebreaker support of U.S. facilities in the Eastern Arctic. This obviates the need for each country to send resources across the Arctic for these missions, with a net savings of operational days to devote to other objectives, primarily scientific support. If Canadian icebreaker resources are not available in the eastern Arctic, USCG polar icebreaker resources may need to be reprioritized.

- 3) Fund all UNOLS Arctic Icebreaker Coordinating Committee (AICC) support.
- 4) In the Antarctic, provide communications, meteorology and ice condition reconnaissance support as resources allow.
- 5) Provide or support aviation services as mutually agreed upon.
- 6) Provide or support transportation of personnel and equipment necessary to meet planned operational requirements as mutually agreed upon.
- 7) Provide support of polar research equipment as mutually agreed upon.
- 8) Manage agreements and funds transfers with other agencies that require polar icebreaker services. If USCG assistance is required, NSF and USCG will enter into a separate agreement detailing the best way to meet NSF's needs.

b. The USCG, to the extent scheduled by NSF on an annual basis, agrees to:

- 1) Participate in NSF's annual polar icebreaker scheduling meeting for the three polar icebreakers, and coordinate operational planning with NSF staff, other agencies, research project personnel and DoD as necessary.
- 2) Provide the support staff and services necessary to operate and maintain the polar icebreaker fleet.

- 3) Transfer polar icebreaker Tactical Control (TACON) to DoD when sailing south of 60 degrees south latitude in accordance with the NSF/DoD Memorandum of Agreement.
- 4) Manage the polar icebreaker fleet in an economical manner and continue to seek opportunities to improve reliability and reduce costs. The polar icebreaker fleet shall be maintained in accordance with USCG and DoD directives and instructions.
- 5) Provide crews properly trained and qualified for polar icebreaker and polar research operations, in accordance with current USCG instructions. The USCG has established positions for properly crewing the three polar icebreakers. Neither the USCG nor NSF will take unilateral actions that result in a change in these crewing positions.
- 6) Provide an operational summary report of icebreaker activities annually by 1 September.
- 7) Keep NSF informed of secondary polar icebreaker missions as they occur.
 - i) Traditional USCG missions performed by the polar icebreakers, such as Search and Rescue and Enforcement of Laws and Treaties, were conducted as needed and funded from the program base that was shifted to NSF. These types of operations will continue to be funded from the program base.
 - ii) If a situation occurs that requires long-term polar icebreaker involvement, such as major marine pollution or humanitarian relief efforts, funding and scheduling impacts will be coordinated between USCG and NSF.

6. PLANS/BUDGETS.

- a. USCG will prepare and submit proposed Program Plans, the annual budget request that is based on NSF's schedule, with supporting documentation, to the NSF annually on or before 1 July of each year. NSF and USCG will agree on the format for submission of the Program Plan.
- b. Logistical support for polar programs is funded by NSF. Therefore, OMB and Congressional budget submission requirements must conform to the NSF budget cycle and not to that of USCG. Budget submission schedules will be mutually agreed to by NSF and USCG. Revised budget estimates may be requested by the NSF when unexpected events occur that necessitate budget alterations. Budget schedules will be coordinated between NSF and USCG.

7. PROGRAM PLAN APPROVAL.

- a. NSF budget and operations personnel, as well as Subject Matter Experts (e.g., maritime engineers), will review proposed Program Plans. USCG will assist in reviews as requested.

b. Negotiation of the Program Plan will begin annually on 1 July, and every effort will be made to conclude the negotiation by 1 September, but in any case not later than 30 September.

c. NSF will approve the Program Plan upon mutual agreement of the parties. Once approved, NSF will provide USCG with a Letter of Intent documenting the amount of funding to be provided in the subsequent fiscal year.

d. Modifications to the approved Program Plan may only be made with the mutual agreement of the parties. Modifications may be made, for example, in the event that unanticipated expenses are incurred for unscheduled maintenance, catastrophic damage or damage incurred in severe ice conditions.

8. FUNDING AND REIMBURSEMENT.

a. NSF shall reimburse USCG based on actual costs, except where standard rates are available and agreed to. Standard rates apply, for example, to military personnel costs. However, in the budget process NSF, as the single agency program manager, requires specific cost basis information for such reimbursable costs. The basis for costs will be presented in sufficient detail, showing source of data and the rationale. NSF requires this information in order to justify and report on its budget development and execution activities.

b. NSF will reimburse for other USCG operations/activities that remain within the USCG's budget authority when the use of these services has been mutually agreed. For example, the NSF would reimburse for aviation support costs incurred by USCG aircraft as per USCG standard rates.

c. Subject to the availability of funds, NSF will make obligations annually on 1 October of each fiscal year and throughout the year as required per the approved Program Plan.

d. NSF funds transferred to USCG will remain available until expended – subject to USCG's authorized account limitations – or withdrawn after notification and coordination with USCG.

e. No agency or echelon of the Department of Homeland Security shall impose administrative restrictions on the use of NSF funds made available to USCG without prior coordination with NSF.

f. USCG is precluded from unilaterally increasing the applicable annual Program Plan either in cost or scope without prior NSF approval.

g. NSF approval shall be received prior to contracting for services or making inter-service support agreements, outside the approved Program Plan, that use NSF funds. USCG procurements using non-NSF funds but which require direct NSF expenditures for

transport to and facility support in Antarctica or the Arctic in excess of \$1,000 per year also require prior NSF approval.

h. The USCG shall provide the NSF the necessary data to collect funds from other agencies no later than 30 days upon completion of USCG polar icebreaker services.

9. PROPERTY RIGHTS AND LIABILITY.

a. The USCG maintains sole responsibility for investigation, adjudication, and settlement and payment of all claims in accordance with the USCG's regulations and policies for incidents occurring on or involving the USCG polar icebreaking fleet.

b. The USCG's responsibility includes but is not limited to claims arising out of service contract administration.

c. The USCG's responsibility excludes claims arising out of actions caused by NSF or NSF sponsored individuals.

d. NSF remains responsible for scientific equipment not transferred to the USCG but used on USCG polar icebreakers that is damaged or lost during operations unless the damage or loss is caused by USCG personnel.

e. If NSF participates in Administrative Investigations and Mishap Reports, the NSF agrees to be bound by restrictions prescribed by existing USCG directives on the use and dissemination of the investigations and reports.

f. In the event that any USCG icebreaker sustains substantial damage during use scheduled in accordance with this MOA, NSF, in consultation with OMB, OSTP and USCG, will decide whether to repair or not to repair. In arriving at the decision, consideration must be given to such factors as the availability of NSF funds and the value of such expenditures in light of programmatic, economic, and policy considerations.

10. POINTS OF CONTACT.

The USCG Chief of the Office of Aids to Navigation (G-OPN) shall be the NSF's primary point of contact. The Section Head, Polar Research Support Section (NSF/OPP) shall be the primary point of contact for the USCG.

11. CONFLICTS.

Nothing in this Agreement is intended to conflict with current law or regulation or the directives of the Department of Homeland Security (USCG) or NSF. If a term of this agreement is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.

12. EFFECTIVE DATE.

The terms of this Agreement will become effective upon the last signature to the Agreement.

13. MODIFICATION.

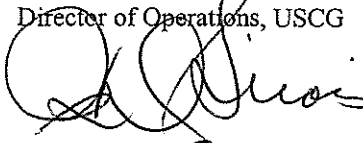
This agreement may be modified upon the mutual *written* consent of the USCG and NSF.

14. TERMINATION.

This agreement, as modified, will remain in effect until terminated by mutual consent. It may also be unilaterally terminated by 12 months written notice by either party to the other.


15. APPROVED.

RADM D. SIROIS
Director of Operations, USCG



(date) 9 Aug 2005

Dr. KARL ERB
Director of Polar Programs, NSF



(date) Aug 8, 2005