

**MEMORANDUM OF AGREEMENT**  
**BETWEEN**  
**THE DEPARTMENT OF DEFENSE (DoD)**  
**AND**  
**THE NATIONAL SCIENCE FOUNDATION (NSF)**  
**FOR**  
**THE NSF'S POLAR PROGRAMS**  
**AGREEMENT NUMBER SAFMRR202334501**

This is a new Memorandum of Agreement (MOA) between the DoD and the NSF, cancelling and superseding any previous agreements (see para 6.11). When referred to collectively, the DoD and the NSF are referred to as the "Parties."

1. BACKGROUND: This section will provide the program description, to include both polar regions.

1.1. Antarctica

1.1.1. The Antarctic Treaty of 1959 defines the Antarctic as the area south of 60 degrees south latitude, to include all ice shelves.

1.1.2. NSF/Office of Polar Programs (OPP) manages activities in Antarctica in a single integrated program that adheres to the principles of the Antarctic Treaty. The Treaty provides that Antarctica shall be used for peaceful purposes only, and that there shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, and the testing of any type of weapons. However, the Treaty does not prevent the use of military personnel or equipment for support of scientific research or for any other peaceful purposes.

1.1.3. The United States 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 United States (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 scientific disciplines in cooperation with programs of other Treaty nations and reflecting the needs of other U.S. agencies.

1.2. Arctic

1.2.1. The United States Arctic Research and Policy Act of 1984, as amended, provides for, among other things, a comprehensive national policy dealing with national research needs and objectives in the Arctic. The policy 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.

1.2.2. 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 by NSF/OPP as well as numerous disciplinary programs within the NSF. NSF has an annual support agreement with Pituffik Space Base for science support and is the primary U.S. agency that coordinates scientific research with the Government of Greenland. Interagency cooperation between the DoD and NSF is essential to achieving the goals of the Interagency Arctic Research Plan and the National Strategy for the Arctic Region (NSAR). Interagency activities in the Arctic directly support the United States Air Force (USAF) Arctic Strategy and the DoD Arctic Strategy.

1.2.3. NSF/OPP's Arctic Research Support & Logistics Program supports fieldwork of research projects funded by NSF, as well as other national and international entities on a cost reimbursable basis. The program provides field infrastructure, facilities, and services to facilitate research throughout the Arctic. This includes support from the DoD, the U.S. Coast Guard (USCG), and commercial contractors.

## 2. AUTHORITIES:

10 U.S.C. Section 9013

16 U.S.C. Section 2409, Section 2403

42 U.S.C. Section 1861 et seq.

National Environmental Policy Act (NEPA) of 1969

Conservation Act of 1978 (Public Law P.L. 95-541)

Presidential Memorandum (PM) 6646 of February 5, 1982

Arctic Research and Policy Act of 1984, as amended November 16, 1990

Presidential Decision Directive/National Security Council (PDD/NSC)-26 of June 9, 1994

National Security Presidential Directive (NSPD) 66

DoD Financial Management Regulation (FMR) 7000.14-R

Department of Defense Directive (DoDD) 5101.16E, *DoD Executive Agent (EA) for support to the NSF OPP*, 7 February 2020

3. PURPOSE AND SCOPE: This MOA outlines the responsibilities for the DoD and the NSF, and sets forth the policies and procedures by which DoD and NSF manage assets in support of the United States' Polar Programs. The implementing party for NSF is the OPP. The implementing party for DoD is the Secretary of the Air Force, who acts as DoD's Executive Agent for the NSF OPP. It is the goal of both parties to use their best efforts to comply with the terms of this Agreement.

4. RESPONSIBILITIES OF THE PARTIES: This section lists the responsibilities of both DoD and NSF. Where NSF/OPP has entered into an agreement with a DoD organization to implement its responsibilities under this MOA, the agreements for such support are attached to this MOA as appendices. Each Appendix is a standalone document that may be interpreted individually for

that particular subject area. The MOA shall govern where a term or condition is not present in an Appendix. Additionally, the support listed in section 4, the appendices, or both may be jointly modified by Deputy Assistant Secretary of the Air Force (Reserve Affairs and Airman/Guardian Readiness) (SAF/MRR) and OPP in accordance with existing agreements.

4.1. NSF has overall responsibility to fund and manage the USAP and is the lead agency for Arctic and Antarctic research policy. NSF will include supporting DoD commands in program policy formulation that may impact DoD personnel or equipment. When NSF and DoD policies conflict, each organization should collaborate to appropriately change, waive, or eliminate policy conflicts. Assistant Secretary of the Air Force (Manpower, Reserve Affairs) (SAF/MR) and the OPP Director will coordinate solutions within their respective agencies. NSF responsibilities include:

4.1.1. During the USAP operating season, when DoD support personnel are in place, within reasonable limits imposed by the environment, striving to attain and maintain standards of habitability, medical services, welfare and recreation, training, safety, retail sales and religious services that are appropriate for a mixed civilian and military population and are compatible with established DoD standards.

4.1.2. Providing support functions and operations not provided by DoD, such as:

4.1.2.1. Non-DoD air and ship operations;

4.1.2.2. Surface vessel and diving operations; and

4.1.2.3. Station field camps and surface traverses conducted by NSF sponsored civilian personnel.

4.1.3. Provide the following elements and functions related to logistical support.

4.1.3.1. The following infrastructure to support airlift activity in Antarctica as determined in consultation with the Deputy Commander, Joint Task Force-Support Forces Antarctica (DCJTF-SFA). Some infrastructure is provided in the Arctic as applicable and in consultation with the DoD-NSF and Air National Guard (ANG)-NSF liaisons officers (LNOs).

4.1.3.1.1. Aircraft maintenance facilities, support equipment, unique spares, and component systems in coordination with Joint Task Force-Support Forces Antarctica (JTF-SFA)/Joint Staff, Logistics Directorate (J4).

4.1.3.1.2. Airfield control tower, air traffic control center, and base operations facilities in Antarctica including modifications, field changes, and upgrades as necessary.

4.1.3.1.3. Procurement, installation, and maintenance of ground-based electronic aids to air navigation and visual and electronic aids for approach, landing, departure, and ground operations in Antarctica, including airfield markers, approach, and edge lighting.

4.1.3.1.4. Operational communications support and procurement of communications equipment in Antarctica required for reliable and safe DoD operations.

4.1.3.1.5. Runway and skiway configuration, development, and maintenance.

4.1.3.2. The following services to support airlift activity in Antarctica, and as applicable in the Arctic.

4.1.3.2.1. Air Traffic Control (ATC) & Air Space Management - Establish an airspace management system that will provide for air traffic control and separation of participating aircraft, establish instrument approach procedures, develop landing systems, and

publish standards for flight operations. Will coordinate and support rescue operations with the Emergency Operations Center (EOC).

4.1.3.2.2. Flight Operations Support - Provide services other than airfield maintenance in Antarctica such as:

4.1.3.2.2.1. Airfield operational status advisories;

4.1.3.2.2.2. Flight planning services including filing and maintaining Notices to Airmen (NOTAMs); and

4.1.3.2.2.3. Publishing landing minima and annual approach plates for selected USAP airfields, through coordination with appropriate agencies, to include obtaining flight check and approval of all Standard Instrument Approach Procedures.

4.1.3.2.3. Meteorology - Provide timely and accurate local and regional weather forecasts, warnings, flight forecasts, and Terminal Aerodrome Forecasts (TAFs) to authorized USAP organizations for all U.S. stations in Antarctica that operate aircraft and support ship operations, including:

4.1.3.2.3.1. En route, area, and terminal weather forecasts and synopses for on continent flights;

4.1.3.2.3.2. Flight forecasts for aircraft operating to/from New Zealand;

4.1.3.2.3.3. Ice condition reports for ship operations; and

4.1.3.2.3.4. Distributing synoptic weather data to the World Meteorological Organization, DoD, science activities, and other national and international agency archives and services.

4.1.3.2.4. Ground Electronics Maintenance - Provide preventive and corrective maintenance support to specific ATC, Communications, and Aviation Meteorology systems in Antarctica including, but not limited to:

4.1.3.2.4.1. Air Traffic Control and Landing systems (ATCALS);

4.1.3.2.4.2. Air navigation aids (NAVAIDS);

4.1.3.2.4.3. Runway electronics systems;

4.1.3.2.4.4. Aviation weather systems;

4.1.3.2.4.5. Air to ground communications; and

4.1.3.2.4.6. DoD Message Center Service.

4.1.3.3. In addition to those functions listed under paragraph 4.2, DoD organizations may provide additional functions and elements of support to the NSF/OPP. This support will be requested by NSF, and if agreed to by the DoD organizations, will be covered by separate MOAs or other support agreements and appended to this agreement.

4.1.3.4. Cold weather and survival equipment for passengers on DoD operated aircraft and ships.

4.1.4. Provide overall logistic support plans for OPP activities including effective coordination with the Commander, Joint Task Force – Support Forces Antarctica (CJTF-SFA) or DCJTF-SFA for those activities under their control.

4.1.5. Provide contract support and management services for the USAP and Arctic Research to include locations not supported by DoD.

4.1.6. NSF shall provide the following medical services to the USAP:

4.1.6.1. Operate medical clinics at each year-round station staffed and equipped to provide USAP participants with appropriate ambulatory/emergent medical care, consistent with generally accepted good medical practice, including provision for medical care/assistance to remote field stations or seasonal camps;

4.1.6.2. Define medical screening criteria for Antarctic assignment and ensure civilian participants meet those requirements; and

4.1.6.3. Coordinate the overall medical care delivery system, incorporating DoD and civilian medical care assets into a unified system available to all USAP participants while deployed.

4.1.7. NSF shall provide the following emergency response services to the USAP:

4.1.7.1. Coordinate aeromedical evacuation determinations and operations, combining assets from DoD and civilian participants; and

4.1.7.2. Plan, coordinate, and support mass casualty, emergency preparedness, and search and rescue (SAR) capabilities, incorporating DoD and civilian components. Coordinate with Rescue Coordination Centers when required.

4.1.8. NSF may issue and maintain operational policies and directives for USAP and the Arctic Research Program, including annual program planning directives. However, no NSF directive shall require DoD units assigned to support NSF/OPP to institute procedures contrary to applicable DoD instructions and regulations.

4.1.9. In accordance with and subject to U.S. Department of State policy and guidance, the NSF retains sole responsibility and cognizance to determine USAP participant status and for overall coordination and contacts with foreign nations that may be involved in the conduct of or receive support from the USAP. DoD, in providing USAP or Arctic support, may coincidentally provide support to science programs of other nations working in concert with NSF or to other nations as a result of NSF response to international emergency requests. At NSF/OPP's request the DoD and ANG LNOs assigned to NSF/OPP and other DoD representatives are authorized to participate with NSF/OPP in liaising with representatives of other nations to facilitate support coordination. DoD representatives will request approval from NSF prior to entering into any agreements with another national program that may implicate USAP participants or fall under the purview of NSF and prior to renewal of any such agreements.

4.1.10. Designate an individual as the NSF Representative/Senior U.S. Representative in Antarctica. This individual is responsible for ensuring compliance with Section 4. of this agreement. Additionally, this Representative will be responsible for, among other things:

4.1.10.1. Assuring implementation of the policy guidance and directives of the Executive Branch of the Government as they pertain to the USAP;

4.1.10.2. Representing the United States in the conduct of activities in Antarctica as those activities interact with the activities of other nations and assure implementation of the U.S. responsibilities under the Antarctic Treaty, and the associated agreed measures;

4.1.10.3. Coordinating the support and scheduling of science projects in Antarctica and the implementation of the annual science program plan;

4.1.10.4. Staying abreast of all matters affecting the USAP using all available communications, and through close liaison with the DCJTF-SFA, subordinate military units, civilian support units, science projects, visitors, and foreign contacts;

4.1.10.5. When circumstances require, revising and adjusting tasking to the DCJTF-SFA and civilian support units to maintain the most effective support to the program's annual plan;

4.1.10.6. Monitoring and assuring on-site coordination among U.S. participants in the conduct of international cooperation involved in the Antarctic program; and

4.1.10.7. Monitoring compliance with the Antarctic Conservation Act of 1978 (P.L. 95-541), and reporting any such infractions to the appropriate authorities pursuant to 16 U.S.C. Section 2409.

4.1.11. Assign a year-round NSF McMurdo Station Manager. The McMurdo Station Manager is a Federal employee reporting to NSF/OPP and is responsible for, among other things:

4.1.11.1. Managing and directing the administrative operation of the station, its property and equipment, and the performance of its life support and service functions;

4.1.11.2. Exercising local host management authority;

4.1.11.3. Ensuring effective execution of environmental practices, consistent with the NEPA including environmental evaluations for any proposed Federal activity that is likely to have more than a minor or transitory impact, or unless a comprehensive environmental evaluation is being prepared pursuant to 16 U.S.C. Section 2403 a(c); industrial, vehicular, and recreational safety; security and internal controls; investigations of casualties; equipment and consumable inventory control; local internal information; and communications infrastructure;

4.1.11.4. Evaluating plans and progress and establishing priorities for facilities operations, construction, and maintenance in the McMurdo area; and

4.1.11.5. When designated, acting as the NSF/Senior U.S. Representative in Antarctica.

4.1.12. In the event of any mishap involving any aircraft/vessel or major asset owned or operated by DoD, or any DoD personnel, NSF shall notify the DCJTF-SFA as soon as practicable. NSF shall make all reasonable efforts to treat all injured personnel and protect and preserve all vital evidence until arrival of an interim or formal safety investigation board. NSF shall, to the maximum extent practicable fully cooperate with DoD in any investigation taken pursuant to this paragraph.

4.1.13. Manage Antarctic visitor and tourism affairs, as well as visitor and tourism affairs at NSF facilities on the Greenland Ice Sheet.

4.1.14. Manage USAP and NSF Arctic program public affairs.

4.1.15. Assist with postal/mail services. The prime contractor to NSF will provide additional personnel after coordinating the number required, based on established work center standards and guidelines, with the Pacific Air Force (PACAF) Air Postal Squadron (AIRPS). NSF will provide adequate facilities, furniture and equipment, other than postal unique equipment.

4.1.16. The director of NSF/OPP may provide input to the performance evaluation of the DoD LNO, ANG LNO, NSF Budget Analyst, and DCJTF-SFA by letter to the incumbent's rating official, a minimum of six weeks prior to the due date for the annual performance report.

4.1.17. NSF contractors that are responsible for submitting Special Assigned Airlift Mission (SAAM) requests must clear DoD security screening for access to DoD SAAM input systems. The ANG and DoD LNO's to NSF will ensure these contractors have DoD common access card (CAC) and systems access. NSF will require contractors to maintain their DoD accounts year-round to prevent deactivation.

#### 4.2. DoD responsibilities include:

4.2.1. Retaining command and control of its forces.

4.2.2. The DoD LNO to NSF is the primary focal point for resolving issues between NSF and military organizations. In situations where resolution requires General Officer (GO) or Senior Executive Service (SES) involvement, the DoD LNO should elevate those items to the SAF/MRR. The SAF/MRR can then interface with appropriate SES or GOs to resolve the issue.

4.2.3. Antarctic: The Commander, United States Indo-Pacific Command (CDRUSINDOPACOM), will accept deploying forces and exercise Operational Control (OPCON) or Tactical Control (TACON) (per Chairman of the Joint Chiefs of Staff (CJCS) execute order (EXORD)) upon arrival in CDRUSINDOPACOM Area of Responsibility (AOR) and will relinquish control upon mission completion and redeployment from CDRUSINDOPACOM AOR.

4.2.4. Arctic: Commander, United States Northern Command (CDRUSNORTHCOM), or United States European Command (USEUCOM), as appropriate, will accept deploying forces and exercise TACON upon Defense Support of Civil Authorities (DSCA) mission execution within the AOR of the Arctic region and will relinquish control upon mission completion the tasked force provider will retain OPCON of airlift assets and will operate under a supported/supporting command relationship with USNORTHCOM or USEUCOM.

4.2.5. Providing DoD logistics support of NSF/OPP's polar activities to include: equipment, personnel, and the air, land, and sea operations, necessary for the safe and successful accomplishment of NSF/OPP objectives.

4.2.6. Developing the DoD logistics support and operations plans and advising NSF/OPP when shortfalls of capabilities exist, or if there is any duplication of tasking to the DoD and any contractor. DoD will also develop standardized deployment models to support NSF requirements in Antarctica (Unit Tasking Code (UTC)-based deployment models). These established deployment packages will assist in both planning and forecasting baseline costs, manpower requirements, and standardized processes. These UTC packages will represent the minimum number of personnel required to accomplish the given task. DoD will notify NSF regarding deployment model overages/shortfalls and potential impacts to operations.

4.2.7. Issuing and maintaining an Operations Order (OPORD) and other internal instructions and notices to support USAP operations and implement both NSF and DoD directives as applicable. The annual OPORD will be coordinated with NSF and be consistent with USAP policy and direction.

4.2.8. Conducting activities in compliance with the Antarctic Conservation Act of 1978 (as amended, P.L. 95-541) and its implementing regulations. NSF/OPP and its contractors will submit all necessary permits for DoD operations under this agreement.

4.2.9. Using applicable DoD policies and procedures to record and safeguard NSF-owned equipment (valued at \$2,500 or more) in the custody of DoD agencies. DoD will provide the NSF Property Administrator with mid-year and annual reports of all inventory items valued at \$25,000 or more. All property records are subject to internal and external audit.

4.2.10. SAF/MR shall submit annually to NSF/OPP, a request for Official DoD distinguished visitors (DV) to Antarctica for approval. DoD civilian distinguished visitors will be submitted on a separate request from military personnel. JTF/SFA will coordinate chain of command visits with the DoD and ANG LNOs and Antarctic Infrastructure and Logistics (AIL) directly. Chain of Command visits are authorized via a different process and are not included in SAF/MR's annual request. Arctic visitor requests will be routed through the ANG LNO to NSF.

4.2.11. Providing support to the NSF public affairs program and for conducting the internal DoD public affairs function. DoD public affairs activities will be coordinated with NSF/OPP.

4.2.12. At NSF's request, subject to DoD resource availability and NSF funding, assisting with the medical care program as follows:

4.2.12.1. DoD medical personnel may assist in outbreak investigations, epidemiological surveillance, and other public health/occupational medicine programs at McMurdo Station;

4.2.12.2. DoD medical personnel are authorized to provide non-emergent and emergent medical care to all USAP participants, to include non-DoD personnel. This provision only applies for care while USAP participants are located within the Operation Deep Freeze (ODF) Joint Operations Area (JOA); and

4.2.12.3. DoD will define medical screening criteria for Arctic and Antarctic DoD assignment and ensure DoD participants meet those requirements.

4.2.13. Providing contract management support services. These services include:

4.2.13.1. Negotiating and awarding contracts written to provide DoD logistics support function after NSF approval;

4.2.13.2. Administering and supervising contracts negotiated and awarded, and any other NSF contracts as mutually agreed between DoD and NSF; and

4.2.13.3. Providing all contractors (DoD administered contracts) with necessary safety, emergency, and operating instructions with which they must comply.

4.2.14. Establishing a standard Air Force supply system to support aircraft operations at Christchurch and McMurdo.



4.2.15. Recognizing that NSF is committed to a workplace free from sexual assault and harassment, the DoD agrees to partner with NSF in an effort to increase Sexual Assault/Harassment Prevention and Response (SAHPR) programs. To the extent that DoD policy allows, the PACAF Sexual Assault Response Coordinator (SARC) should provide a releasable information summary upon request to NSF. Releasable information of all reports of sexual assault and sexual harassment involving military deployers supporting NSF missions should be included. The summary should contain the nature and date of each report, how the report was investigated, when the investigation was completed, and the outcome. The report will not contain any Personally Identifiable Information and/or contain any identifying information of the parties involved.

4.2.16. DoD will provide the logistics support functions listed below, in accordance with applicable directives, to NSF Polar Programs.

4.2.16.1. Provide aircraft and vessel operation and logistics support for travel and transportation to and from the Polar Regions. (Appendices A, B, and C)

4.2.16.2. Naval Base Ventura County (NBVC), Port Hueneme, California is the Continental United States (CONUS) logistical hub for the USAP. The DoD's base and service support is vital to the NSF, and the success of the USAP's operations at NBVC. (Appendix D)

4.2.16.3. As requested by NSF, provide technical expertise in cold regions science, engineering and technology, and polar-facilities operations and management in support of OPP Arctic and Antarctic missions. (Appendix E)

4.2.16.4. Provide Naval Information Warfare Center Atlantic support for engineering and aviation technical support in support of the USAP and Arctic research programs. (Appendix F)

4.2.16.5. Provide operational and technical support to and maintain the established Vanda seismic monitoring station (VNDA) and relay station to provide a data link between the seismic station and the communications station on Crater Hill. (Appendix G)

4.2.16.6. With the assistance and support of NSF, provide veterinary care. (Appendix H).

4.2.16.7. Postal services will be provided at Christchurch, New Zealand and McMurdo Station, Antarctica, including sale of stamps and money orders, registered/certified mail, parcel post (ordinary and insured), philatelic mail cancellation as necessary, and related support to other Antarctic stations as needed. DoD will provide one full-time supervisor. (Appendix I)

4.2.16.8. Provide access to morale, welfare, and recreation media services provided by the Defense Media Activity (DMA) and the Navy Motion Picture Service (NMPS), to include content, content distribution, technical assistance, and access to equipment where applicable, on a reimbursable basis according to Appendix K.

4.3. On a mutually agreed upon basis by DoD and NSF, provide sponsorship, assistance, and access to DoD satellite communications (SATCOM) resources, as a DoD/Office of the Chief Information Officer (OCIO)-sponsored user in the SATCOM Database (SDB), and associated requests for satellite/teleport access for NSF polar regions service (Arctic and Antarctic). Recognizing the critical importance of SATCOM to the NSF USAP mission, DoD will work in partnership with NSF to identify and mitigate USAP satellite communication risks, share system lifecycle schedules, provide access to relevant DoD contracted SATCOM resources, and investigate system bridging and continuity of operations solutions. DoD is uniquely positioned to both support and benefit from the USAP extreme high latitude geolocation and will work in partnership with NSF to ensure space-based collaborations for shared national interests.

4.4. USCG. Icebreaker support is provided to the NSF/OPP by the USCG under the terms of a separate NSF/USCG MOA. USCG ships in the Antarctic operate under the TACON of the DCJTF SFA upon reaching south of 60 degrees south.

## 5. PROGRAM MANAGEMENT POLICY:

5.1. NSF/OPP is responsible for management and funding of the entire USAP and NSF-sponsored programs in the Arctic and Antarctic. The DoD is responsible for providing operational and logistics support for the programs as requested by NSF on a cost-reimbursable basis. However, NSF retains the option to use non-DoD sources of support where these are determined by NSF to be cost-effective and will not be detrimental to the national interest. Pursuant to the single agency management concept that has been assigned to NSF, it is the policy of NSF to employ a mix of military and commercial program support managed as a single package with cost structures that ensure effective and responsive program support at minimum cost. A civilian organization exercising funding control over operational military units is a departure from normal military command procedures and requires an exceptional amount of understanding and flexibility by all parties involved. The parties recognize that OPCON, TACON and Administrative Control (ADCON) of assigned military units covered by this agreement must remain at all times within DoD.

5.2. The Secretary of Defense (SecDef), pursuant to Title 10 U.S.C. 113 and consistent with DoDD 5101.1 designated the Secretary of the Air Force (SecAF) as the DoD Executive Agent for the NSF/OPP. Accordingly, the SecAF is responsible for support functions, which include equipment, personnel, and the air, land, and sea operations necessary for the safe and successful accomplishment of NSF/OPP's program objectives. Additionally, the SecAF delegated its Executive Agent authority to the SAF/MR. All NSF/OPP requests for support must be transmitted to the SecDef for his/her concurrence and approval.

5.3. DoD has established military positions primarily tasked to support the NSF/OPP. These positions are included by Congress in DoD military end strength limitations but are exempted as a matter of mutual agreement from overall manpower reductions. Neither DoD nor NSF will take any unilateral actions to change these manning positions. Exempted position personnel may be required to respond to a condition of national emergency. When such condition occurs, DoD will make every possible effort to ensure personnel replacements avoid gaps or vacancies during the USAP operating season and avoid replacing both liaisons at the same time during the Arctic operating season. DoD will make every effort not to reassign program personnel until the completion of a forthcoming Antarctica operating season (season concludes annually in March). SAF/MRR will coordinate with NSF/OPP to provide input to ANG on the selection of the NSF funded positions: DoD Liaison, ANG Liaison, (DCJTF-SFA, and the National Guard Bureau (NGB) Budget Analyst. Additionally, NSF is welcome to provide feedback to National Guard Bureau Human Resources (NGB/HR) on the selection process and candidates, but final selection for these ANG Statutory Tour positions remains with NGB.

5.4. The parties recognize that the military standards for safety of aircraft operations must not be weakened or compromised by the effects of civilian funding and management arrangements.

Therefore, it is agreed that DoD, on a fully reimbursable basis, will provide specified elements of logistics and operational training support essential to the maintenance of military standards of safety. DoD owned aerospace ground equipment (AGE) may be maintained by NSF contractors supplied with appropriate equipment Technical Orders. Accountability of AGE in the off season will be coordinated between the units that own the equipment, Joint Task Force-Support Forces Antarctica (JTF-SFA) and the NSF. NSF will direct on-site contractors for support.

5.5. DoD, like other agencies, may fund and undertake directed short-term programs of scientific activity related to Polar Regions. Such activities in the Polar Regions shall be conducted within the framework of the NSF logistics support program. These research activities will be included in the material compiled by NSF and used by the Department of State to satisfy annual Antarctic Treaty or international agreement report requirements.

5.6. All DoD activities conducted within the geographic regions covered by the Antarctic Treaty shall comport with U.S. Department of State policy for Treaty compliance. This requirement is categorical and applies equally to DoD-centric mission activities as to NSF U.S. Antarctic Program activities. NSF shall be kept informed of DoD-centric mission activities subject to Treaty compliance, to include receiving courtesy copies of relevant documentation, such as proof of Department of State coordination/concurrence and the associated implemented compliance measures. Illustrative examples of DoD-centric mission activity include: U.S. Space Force Defense Meteorological Satellite Program data downlink at McMurdo Station via its agreements with NSF hosted tenant, National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite Data and Information Service (NESDIS), and the Joint Polar Satellite System (JPSS).

5.7. Antarctica is a unique environment with special training challenges. NSF will collaborate with JTF-SFA to determine training requirements for deploying DoD/military members. Reciprocity will be recognized where appropriate (e.g. DoD information security training) and delivery will be flexible to meet the needs of deploying units.

## 6. GENERAL PROVISIONS:

6.1. POINTS OF CONTACT (POCs). The following POCs will be used by the Parties to communicate matters concerning this MOA. Each Party may change its POC upon reasonable notice to the other Party.

### 6.1.1. For the DoD:

6.1.1.1. The DoD LNO to NSF, SAF/MRR, (703) 292-7987, and [scott.stenger@us.af.mil](mailto:scott.stenger@us.af.mil)

6.1.1.2. The ANG LNO to NSF, Air National Guard Readiness Center (ANGRC), (703) 292-7987, and [graham.boutz.2@us.af.mil](mailto:graham.boutz.2@us.af.mil)

### 6.1.2. For the NSF:

6.1.2.1. Director, NSF/OPP, (703) 292-8030, and [psheppar@nsf.gov](mailto:psheppar@nsf.gov)

6.2. CORRESPONDENCE. All correspondence to be sent and notices to be given pursuant to this MOA will be addressed, if to the DoD LNO to NSF, to—

6.2.1. Attention DoD LNO NSF/OPP, 2415 Eisenhower Avenue, Alexandria, VA 22314

and, if to the NSF, to—

6.2.2. Attention NSF/OPP, 2415 Eisenhower Avenue, Alexandria, VA 22314,  
or as may from time to time otherwise be directed by the Parties.

6.3. REVIEW OF AGREEMENT. This MOA will be reviewed as necessary, but no less often than mid-point on or around the anniversary of its effective date (five years), for applicability and currency of its provisions stated herein, and will be updated as necessary. The review will be documented by attaching an addendum confirming completion.

6.4. MODIFICATION OF AGREEMENT. This MOA may only be modified by the written agreement of the Parties, duly signed by their authorized representatives. Any requested change(s) to the MOA or appendices A, B, or C must be submitted in writing to the DoD-NSF LNO for the DoD and the NSF/OPP Office Head for the NSF for routing to SAF/MR (delegated to SAF/MRR) and NSF/OPP. Appendices A, B, and C interim changes will be approved by SAF/MRR and NSF/OPP. NSF will inform SAF/MRR of additional appendices or of any changes to existing appendices.

6.5. DISPUTES. Any disputes relating to this MOA will, subject to any applicable law, Executive Order, or DoD issuance, be resolved by consultation between the Parties.

6.6. TERMINATION OF AGREEMENT. This MOA may be terminated by either Party by giving at least 90 days' written notice to the other Party. The MOA may also be terminated at any time upon the mutual written consent of the Parties.

6.7. TRANSFERABILITY. This MOA is not transferable except with the written consent of the Parties.

6.8. ENTIRE AGREEMENT. It is expressly understood and agreed that this MOA embodies the entire agreement between the Parties regarding the MOA's subject matter, thereby merging and superseding all prior agreements and representations by the Parties with respect to such subject matter.

6.9. EFFECTIVE DATE. This MOA takes effect beginning on the day after the last Party signs.

6.10. EXPIRATION DATE. This agreement will remain in effect for ten years from the date of signature.

6.11. CANCELLATION OR MODIFICATION OF PREVIOUS AGREEMENT. This MOA cancels and supersedes the previously signed agreement between the same Parties with the subject The National Science Foundation's Polar Programs, and effective date of April 27, 2007. The appended agreements remain in force as updated.

6.12. NO THIRD-PARTY BENEFICIARIES. Nothing in this MOA, express or implied, is intended to give to, or will be construed to confer upon, any person or entity not a party any remedy or claim under or by reason of this MOA and this MOA will be for the sole and exclusive benefit of the Parties.

6.13. SEVERABILITY. If any term, provision, or condition of this MOA is held to be invalid, void, or unenforceable by a governmental authority and such holding is not or cannot be appealed further, then such invalid, void, or unenforceable term, provision, or conditions of this MOA shall continue in full force and effect. The Parties shall endeavor in good faith to replace such invalid, void, or unenforceable term, provision, or condition with valid and enforceable terms, provisions, or conditions which achieve the purpose intended by the Parties to the greatest extent permitted by law.

6.14. OTHER FEDERAL AGENCIES. This MOA does not bind any federal agency, other than the Parties, nor waive required compliance with any law or regulation.

## 7. PLANNING AND BUDGETING:

7.1. Program planning is accomplished on a continuous year-round basis.

7.1.1. The principal formal planning events scheduled and chaired by NSF are:

7.1.1.1. An Annual Planning Meeting (APM), to review Antarctic Program activities of the previous season and to establish support requirements and schedules for the upcoming operating season; and

7.1.1.2. An Annual Transportation meeting to determine passenger and cargo transportation requirements and to develop airlift and ship schedules for the upcoming Antarctic operating season.

7.1.2. The principal formal planning event scheduled and chaired by the 109th Airlift Wing (109 AW) is an annual Greenland Planning Conference (GPC) to review Arctic program activities of the previous season and to formalize support requirements and schedules for the upcoming operating season.

7.2. NSF funds logistical support for Polar Programs. Therefore, budget submission requirements must conform to the NSF budget cycle and not to that of DoD. NSF and the individual DoD units required to submit budget data will mutually agree to budget submission schedules. The NSF may request revised budget estimates when unexpected events occur that necessitate budget alterations. The calculation method used to establish costs cannot change without prior coordination with and approval from the NSF. To assist NSF with budget forecasting for future season planning, the DoD LNO will provide OPP with the most up to date National Defense Budget Estimates (The Green Book) and SAAM rates. This estimate is published annually by the Office of the Under Secretary of Defense (Comptroller) and provides budget estimates for the coming 5-year period for both fuel and personnel pay raises. The DoD LNO will also ensure NSF access to the Air Force Total Ownership Cost (AFTOC) website. AFTOC will be used by NSF to provide an estimate for future flying hour related cost increases.

## 8. FUNDING AND REIMBURSEMENT:

8.1. The specific financial details between NSF and the various DoD organizations are contained within the corresponding attached Appendices. The details for the ANG are in Appendix C, the details for the U.S. Army Cold Regions Research and Engineering Laboratory (CRREL) are in Appendix E, the details for the Naval Information Warfare Center (NIWC) are in Appendix F, the details for the AIRPS are in Appendix I, and the details for the Navy Motion Picture Service are in Appendix K.

8.2. NSF shall be responsible for the programming, budgeting, and funding for all logistics support services requested by NSF and rendered by DoD in accordance with this MOA and DoD 7000.14-R (FMR).

8.3. Changes occurring subsequent to budget approval can be made after consultation and mutual agreement between the NSF and the DoD entity or unit providing support.

8.4. Logistics support elements and functions requested by NSF to be provided by DoD are identified in Section 4. DoD is precluded from increasing the scope or adding new cost elements of NSF/OPP support services without the prior approval of NSF and may only so if coordinated in accordance with (IAW) paragraph 7.2. above.

8.5. Employment of non-dedicated DoD units is planned and budgeted for in accordance with the procedures in Section 8., and actual costs, personnel costs at standard rates, travel and per diem, etc. for the time spent in direct support are reimbursed accordingly. Advanced payment will be provided for 109 AW's Operation and Maintenance (O&M) and military personnel costs directly attributable to support of the NSF/OPP, if required.

8.6. NSF authorization of obligations or expenditures under this agreement that occur later than the first day of any fiscal year, such NSF authorization constitutes approval of any expenditure made under this agreement beginning the first day of such fiscal year if authorized by law. NSF funds issued to DoD will remain available until expended or withdrawn after notification and coordination with DoD.

8.7. NSF approval shall be received prior to contracting for services or making inter-service support agreements that use NSF funds. DoD procurements using non-NSF reimbursed funds, but which require direct NSF expenditures for transport to and facility support in Antarctica in excess of \$1000 per year will also require prior NSF approval.

8.8. No agency or echelon of the DoD shall impose administrative restrictions on the use of the NSF funds made available to DoD operating units without prior coordination with NSF.

8.9. NSF reimbursement to DoD for bulk fuel supply for McMurdo is based on quantities of bulk fuel delivered to McMurdo, the number of days the ship is on charter to the USAP, and the current DoD price schedules.

8.10. Agency responsibility for the processing, adjudication, and payment of claims arising from activities supporting the NSF/OPP will depend on the control exercised by the NSF or DoD support units over the personnel or equipment causing the incident giving rise to the claim.

8.10.1. NSF will process, adjudicate and pay meritorious claims resulting from the acts or omissions of NSF personnel acting within the scope of their employment or caused by equipment operated and controlled by NSF, and all personnel claims submitted by employees of NSF. Such processing, adjudication and payment will be in accordance with existing statutes and agency claims implementing regulations.

8.10.2. DoD will process, adjudicate, and pay meritorious claims resulting from the acts or omissions of DoD personnel acting within the scope of their employment or caused by equipment operated and controlled by DoD, and all personnel claims submitted by military personnel or civilian employees of DoD. Such processing, adjudication and payment will be in accordance with existing statutes and agency claims implementing regulations.

8.10.3. In instances where agency responsibility is unclear or where claims allege or subsequent investigation reveals responsibility on the part of both NSF and DoD, the agencies shall determine which agency shall be designated the single agency that will investigate, decide the merits and if appropriate, pay the claim. The designated agency shall notify the claimant that all future correspondence concerning the claim shall be directed to that agency.

9. LIST OF APPENDICES:

APPENDIX A – USINDOPACOM

APPENDIX B – United States Transportation Command (USTRANSCOM)

APPENDIX C – ANG

APPENDIX D – Port Hueneme

APPENDIX E – CRREL

APPENDIX F – NIWC

APPENDIX G – Comprehensive Nuclear-Test-Ban Treaty

APPENDIX H – Veterinary Food Protection Support

APPENDIX I – AIRPS

APPENDIX J – Expanded History

APPENDIX K – Navy Motion Picture Service

AGREED:

For the Department of Defense -

For the National Science Foundation –



Frank Kendall  
Secretary of the Air Force  
DoD Executive Agent for NSF/OPP



Sethuraman Panchanathan  
Director, National Science Foundation

28 Aug 2024  
(Date)

28 August 2024  
(Date)

Mid-Point Review Due Date: \_\_\_\_\_

Mid-Point Review completed by: \_\_\_\_\_

The Dept. of the Air Force  
is honored and delighted to  
be able to support this  
critical National Science  
Foundation work.  
FK



## DEFINITIONS

1. Active Guard and Reserve (AGR). National Guard and Reserve members on voluntary active duty providing full-time support to National Guard, Reserve, and Active Component organizations for the purpose of organizing, administering, recruiting, instructing, or training the Reserve Component.
2. Administrative Control (ADCON). Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.
3. Air Force Total Ownership Cost (AFTOC) website. A website which includes cost data on all major Air Force systems, all appropriations and Major Commands, crosses cost-logistics data boundaries, and provides permanent archive of cost and logistics data.
4. Air National Guard Liaison to NSF/OPP. Rated field grade officer assigned for duty at NSF to provide continuous liaison to operational units, the Air National Guard, and other major commands/agencies as required for the planning and execution of NSF requested support.
5. Air National Guard/ Logistics (NGB/A4). The Logistics Directorate of the Air National Guard responsible for initiating and executing logistics policy in the areas of aircraft maintenance and engineering. Accomplishes Air Staff/Major Command duties in planning, programming, and allocation of resources.
6. Area Director. The senior contractor official responsible for implementing NSF tasking, as assigned, and the supervision of contractor operations with appropriate liaison with the NSF Representative and SFA JTF/CD.
7. Commander, Joint Task Force Support Forces Antarctica (CJTF SFA). USINDOPACOM appointed commander of the operation in support of the USAP, in the Antarctic Joint Operating Area. Dual hatted as the Commander, 13th Expeditionary Air Forces, which is the execution organization for ODF in the USINDOPACOM area of responsibility.
8. Deputy Commander Joint Task Force Support Forces Antarctica (DCJTF SFA). The designated on-scene commander of DoD Support Forces in Antarctica. Dual hatted as the 13th Air Expeditionary Group Commander (13 AEG/CC). He/she is responsible for all military logistical support functions provided to NSF in Antarctica under the provisions of this MOA and must be a rated officer.
9. DoD Liaison to NSF/OPP. The senior ANG rated officer assigned for duty at NSF to provide continuous liaison and DoD policy guidance between DoD and NSF.

10. McMurdo Station. The complex of facilities at McMurdo Station which constitutes the hub for air and ship operations, the storage point for ship-delivered bulk fuel, the staging base for annual resupply of South Pole Station, and for the support of other inland sites. It is also the support hub for the major portion of U.S. research conducted in Antarctica.

11. National Science Foundation/Office of Polar Programs (NSF/OPP). Office within the NSF that manages or coordinates scientific activities in the Arctic and Antarctic Polar Regions; NSF has been designated via Presidential Memorandum to serve as the single point manager for all U.S. activities in Antarctica.

12. NSF Representative in Antarctica. The NSF senior staff member designated by the Director of the Office of Polar Programs of the NSF (OPP) to provide for on-site management of the U.S. Antarctic Program (USAP).

13. Operational Control (OPCON). Pertaining to DoD organizations, the command authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command.

14. Operation Deep Freeze (ODF). The DoD operation within USAP that provides logistic support.

15. Pacific Air Force (PACAF). The air component of USINDOPACOM.

16. Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR). The focal point for Air Force policy oversight of human resources and Reserve component programs. SAF/MR directs the development of policy and advises the Secretary of the Air Force on programs for Manpower and Reserve Affairs that respond to Air Force Secretariat, Office of the Secretary of Defense, Congressional, and Administration guidance.

17. Senior United States Representative in Antarctica. The designated ranking U.S. government official in Antarctica, as authorized by the Director, National Science Foundation.

18. Summit Station. The complex of facilities at Summit Station which constitutes the main NSF Hub for scientific research on the Greenland Ice Sheet.

19. System Program Office (SPO). A general term of reference to those DoD organizations directed by individual managers exercising authority over the planning, direction, and control

of tasks and associated functions essential for support of designated weapons or equipment systems. The authority vested in this organization may include such functions as research, development, procurement, production, material distribution, and logistic support, when so assigned.

20. Tactical Control (TACON). Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to and exercised at any level at or below the level of combatant command. When forces are transferred between combatant commands, the command relationship the gaining commander will exercise (and the losing commander will relinquish) over these forces must be specified by the Secretary of Defense. Tactical control provides sufficient authority for controlling and directing the application of force or tactical use of combat support assets within the assigned mission or task.

21. The Green Book. National Defense Budget Estimates (commonly referred to as “The Green Book”) is a reference source for data associated with the current budget estimates of the DoD.

22. United States Antarctic Program (USAP). United States scientific activities in Antarctica as managed and budgeted by NSF/OPP, including the logistic support of those activities in Christchurch, New Zealand; Punta Arenas, Chile; and Antarctica.

23. USAP Participants. Any person recognized by NSF/OPP, to include U.S. citizens directly supporting or performing research under the auspices of the USAP, members of other National Antarctic Programs working in concert with NSF/OPP, and other persons requiring USAP support as a result of NSF/OPP response to requests for humanitarian assistance.

24. U.S. European Command (USEUCOM). Responsible combatant command for U.S. military operations across Europe, as well as portions of Asia and the Middle East, and the Arctic and Atlantic oceans.

25. U.S. Indo-Pacific Command (USINDOPACOM). The supported unified command for Operation DEEP FREEZE, assigned the Indian and Pacific Area of Responsibility, as defined by SecDef/JCS Unified Command Plan.

26. U.S. Northern Command (USNORTHCOM). The supported command for operations in part of the Arctic Region, assigned the Alaskan and North American continent Area of Responsibility (AOR) as defined by SecDef/JCS Unified Command Plan.

27. 13th Air Expeditionary Group Commander (13 AEG/CC). When established by DoD, serves as the designated agent for all airlift issues in the area of responsibility (AOR) or joint operations area (JOA) and for other duties as directed. He/she coordinates authority between the CJTF SFA, 613 AOC/AMD, airlift coordination cell, the air mobility element, the Tanker Airlift Control

Center (TACC), the joint movement center, and the air operations center in order to expedite the resolution of airlift problems.

28. 109th Airlift Wing (109 AW). New York Air National Guard airlift wing operating and maintaining a fleet of LC-130s and C-130's out of Stratton Air National Guard Base, Scotia, New York.

## APPENDIX "A"

### **MEMORANDUM OF AGREEMENT BETWEEN NSF AND INDOPACOM FOR OPERATIONAL SUPPORT.**

**A. Transportation Services:** The following transportation services provided to the NSF/OPP by DOD include military airlift and are provided on a reimbursable basis.

1. Polar Regional Airlift support by ANG, Air Mobility Command (AMC), or Pacific Air Forces (PACAF) aircraft and crews qualified for polar operations. Airlift support may also include airlift to and within the Antarctic continent. Also included is arranging for special airlift support as requested by the NSF/OPP in situations not defined elsewhere in this agreement.
2. Field Support Airlift transportation of designated passengers and cargo as required in the Antarctic region. Designated aircraft units will be responsible for performing and supporting all DOD air operations and aircraft maintenance related functions. The DCJTF SFA will be responsible to direct AF/ANG operations and support in New Zealand and Antarctica. DCJTF SFA will track progress of operations and forward SITREPs to supported and supporting commanders and NSF.
3. US Navy Cargo Handling Battalion and US Army 7th Transportation Battalion will be tasked as need for vessel operations
4. Aeromedical Evacuation support in which DOD flight surgeons will consult on selection, preparation, and treatment of personnel requiring aeromedical evacuation.
5. INDOPACOM will provide the following emergency response services to the USAP:
  - a. Emergency extraction from Antarctic sites to tertiary care facilities elsewhere, including assistance in establishing extraction and evacuation plans and capabilities within the medical care system.
  - b. Provide assistance as specified in the Comprehensive Emergency Management Disaster Preparedness and SAR Plans for McMurdo Station, Antarctica.
  - c. DOD flight surgeons will provide assistance in stabilizing injured personnel prior to aeromedical evacuation.
  - d. Aeromedical Evacuation support to include Aeromedical Evacuation Crews, Critical Care Air Transport Teams, and specialty medical teams when required for patient movement and requested by CJTF-SFA or DCJTF-SFA are tasked to 613 Air Operations Center/Air Mobility Division.

**B. DOD distinguished visitor management:** DCJTF SFA shall schedule and coordinate all DOD Antarctic visitor events subject to SAF/MR approval.

**C. Approve DCJTF SFA selection:** The DCJTF SFA will be an O-6 or an O-5 that meets all requirements for immediate promotion to O-6 upon selection. The National Guard Bureau owns the DCJTF position and will make the final selection. The incumbent will be rated and should have mobility experience. Incumbent will be a graduate of Air University's JTF Staff Basic Course or will complete the course as soon as possible after selection. The incumbent will receive an orientation of INDOPACOM/PACAF, TRANSCOM DDOC, and AMC as soon as possible. If the selectee is not LC-130 or C-17 qualified, he/she will complete a Senior Officer Qualification course in one of those weapon systems.

**D. Safety:** INDOPACOM will provide for safety and feasibility of all logistic support functions provided by DOD and the USCG in the Antarctic theater when under the tactical control of DOD, including:

1. Ship and air operations
2. Station operations at McMurdo Station, and any other station/camp/field party under DCJTF SFA authority; and
3. Boating and diving operations.

## APPENDIX "B"

**Transportation Services:** The transportation services provided to the NSF/OPP by DOD include military and commercial airlift and sealift provided on a reimbursable basis.

A. USAF aircraft and crews qualified for polar operations will provide Intercontinental airlift between the U.S. and the Arctic/Antarctic. Also included is arranging for special airlift support as requested by the NSF/OPP in situations not defined elsewhere in this agreement.

B. Provide air transportation of designated passengers and cargo as required in the Arctic/Antarctic. Designated aircraft units will be responsible for performing and supporting all DOD air operations and aircraft maintenance related functions.

C. Aeromedical Evacuation support. Provide aeromedical evacuation IAW established United States Transportation Command (USTRANSCOM) procedures and policies. DOD flight surgeons will provide consultation on selection, preparation, and treatment of personnel requiring aeromedical evacuation.

1. Emergency Response. Provide the following services to NSF/OPP:

a Emergency extraction from Arctic/Antarctic sites to tertiary care facilities elsewhere, including assistance in establishing extraction and evacuation plans and capabilities within the medical care system.

b DOD flight surgeons will provide assistance in stabilizing injured personnel prior to aeromedical evacuation in the Antarctic.

D. Sealift. Elements included are Military Sealift Command (MSC) tasked US Government Owned or MSC-leased vessels and associated supporting activity for service to and from the U.S. forward staging areas, and Antarctica; and services of DOD cargo handling crews when available to augment USAP cargo handling assets.

E. Seaport Access. Provide access to DOD ports for onload and offload of MSC or MSC-leased vessels and civilian vessels contracted by NSF.

F. Bulk Fuel Supply. Procurement of bulk fuel for McMurdo is a function of the Defense Logistics Agency Energy (DLA-Energy), and the ship delivery of bulk fuel to McMurdo is a function of the Joint Deployment and Distribution Enterprise (JDDE) in accordance with USTRANSCOM policies and procedures.

G. Transportation requirements validation and scheduling: The NSF, through the assigned NSF Liaison Officers, as a Defense Transportation System (DTS) customer, forwards Special Assignment Airlift Mission (SAAM) transportation requirements through USTRANSCOM's Global Operations Center, (GOC) who upon validation of requirements, will pass requirements to Air Mobility Command (AMC) for scheduling and mission execution. NSF passes C-130/LC-130 requirements to DOD/ANG Liaison

Officers, USTRANSCOM, and the 109th AW ANG. NSF passes sealift requirements to USTRANSCOM's GOC who validates requirements to Military Sealift Command (MSC). NOTE: Special Assignment Airlift Missions (SAAMs), in support of Polar Operations, normally operate from deployed staging locations (NZCH, BGSF, etc), as the short-term repositioning of aircraft would be impractical. SAAMs are scheduled from these locations as individual, organic airlift missions, therefore minimum activity rates (MAR) are not normally applicable.

H. DTS Mission Control: USTRANSCOM maintains oversight of all inter-theater airlift and strategic sealift support to Operation DEEP FREEZE. USTRANSCOM exercises airlift Operational Control (OPCON) for SAAMs through Commander, 618 Air Operations Center (618 AOC). The DCJTF SFA will be trained as DIRMOBFOR. The DCJTF SFA is authorized to coordinate with USTRANSCOM's GOC to maintain visibility of sea and air support operations. The DCJTF SFA is charged to maintain "on- scene" visibility as needed to ensure DTS operations operate safely in a challenging and hazardous environment. Specifically, the DCJTF SFA is designated to accomplish and/or maintain visibility of the following DTS mission scheduling and execution tasks:

1. CJTF and DCJTF will retain control of mobility assets as designated in ODF Execution Orders. DCJTF will deconflict C/LC-130 missions and missions flown by strategic air mobility assets. The deployed AMC mission commander reports to DCJTF SFA or 13 AEG/CC as appropriate to ensure safe operations.

2. Maintain visibility of sea support operations. DCJTF SFA will directly coordinate with USTRANSCOM's GOC to and maintain visibility for sea support operations. GOC will, in turn, ensure that sealift support activities are performing as scheduled and relay any concerns direct to the SFA JTF/CD. Function of DCJTF SFA in relation to sea support operations, is to maintain visibility of the operation and assist as needed.



## **APPENDIX "C"**

### **MEMORANDUM OF AGREEMENT BETWEEN NATIONAL SCIENCE FOUNDATION AND AIR NATIONAL GUARD FOR LC-130 SUPPORT**

#### **A. Manpower**

1. The NSF will provide the NYANG an annual USAP airlift mission requirement forecast that estimates maximum requirements over a 5-year planning horizon (FY0-4). Factors included in the forecast will determine the number of aircraft and crews needed to meet NSF mission requirements. The annual 5-year forecast will lock in the FY3 NSF manning financial commitment and reconfirm FYs 0-2. The NYANG will manage the Title 32 USAP AGR positions to minimize NSF expense by reducing and expanding full-time positions based on the forecasted mission requirements in the outyears allowing a three-year time period (Current FY0-FY2) to ramp up/down personnel.

#### **B. Training requirements**

1. In response and acknowledgment to the NSF's annual USAP Airlift Mission Requirements Forecast, additional training for the 109 AW that is above wartime requirements and necessary to support NSF mission tasking will be identified (FY2-4) by the 109 AW. Training requirement levels approved for FY0-1 cannot be changed without concurrence from NSF.

#### **C. Property Rights and Liability**

1. Substantial Damage.
  - a. In the event any AF/ANG aircraft sustains damage while engaged in a directly funded flight in support of the U.S. program in Antarctica or engaged in training flights to support the program, there will be a coordinated AF/ANG/NSF decision on repair. Consideration should be given to such factors as the availability of funds and the value of such expenditures including programmatic and economic concerns.
  - b. Substantial damage to a DOD aircraft in Polar Regions could require an extensive recovery operation in addition to the repair effort. Any such recovery

operation shall be the subject of additional joint DOD/INDOPACOM/PACAF/EUCOM/USAFE/ANG/NSF (as applicable) discussions to arrive at a decision with respect to recovery and associated costs.

2. Mishap Investigations - AF/ANG.

- a. In the event of a mishap involving AF/ANG aircraft operating in direct support of polar programs and covered by this agreement, the nearest DOD entity will preserve vital evidence until USAF Interim Safety Board (ISB) members (supplied by nearest USAF installation), and eventually, AF/ANG Safety Investigation Board (SIB) members, arrive. For operations supporting the USAP, the DCJTF SFA will form the ISB until arrival of the formal SIB. The nearest USAF installation will release a message reporting the mishap.
- b. For all mishaps, AMC, and the Air National Guard Operations Center (and PACAF, if applicable) should be contacted within one hour of occurrence. The formal investigation board will be convened by the AF/ANG in accordance with applicable directives.
- c. The NSF agrees to cooperate fully with the DOD in any investigation undertaken pursuant to this paragraph.
- d. The NSF shall be bound by the same restrictions on the use and dissemination of the reports as are applicable to the USAF under existing USAF directives. The Air Force or the Air National Guard will conduct a SIB in accordance with Department of the Air Force Instruction (DAFI) 91-204, which is not releasable to anyone except USAF officials solely concerned with aviation safety. Nothing in this agreement shall be construed as a requirement for release of SIB material or be construed to prohibit USAF safety officials from taking appropriate action with officials of NSF to further aviation safety.
- e. The convening authority shall provide NSF copies of the AFI 51-307 Accident Report if an Accident Investigation Board (AIB) is convened. If NSF requests, and if approved by the USAF Safety Center Commander, the NSF may appoint a representative to the Safety Investigation Board.

**D. Funding and Reimbursement**

1. The ANG account management of NSF funds will normally be audited by the Air Force Audit Agency every two years.
2. DoD will continue to fund 109 AW support and training for its wartime tasking at its primary aircraft assigned (PAA) level. The NSF agrees to fund the personnel and training costs above and beyond the wartime tasking requirements to include funding for NSF dedicated AGR positions for the entire fiscal year and all flying training hours required for these personnel to maintain proficiency. Annual flying training hours are mutually established by NSF and the DoD for each fiscal year. The NSF will be charged the standard rate for the LC-130H as developed through the Air Force Cost Analysis Improvement Group (AFCAIG) process. Due to the

unique nature of this agreement and the total funding arrangements between the NSF and the DoD for the LC-130H's, Transportation Working Capital Fund (TWCF) rates will not be used if a LC-130H mission is designated as a training mission vice TWCF. A reimbursable rate (the amount billed by ANG/FM) will instead be utilized. TWCF's DoD rates will be charged if a mission is designated as TWCF. NSF shall reimburse DoD, for all costs incurred in supporting the NSF/OPP. Reimbursement is based on actual cost or estimated actual cost, except where DoD standard rates are available. Standard rates apply, for example, to charter DoD sealift and strategic airlift and to military personnel. 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 for each item.

3. USAP funded AGRs should plan for an 8-week deployed commitment and non-AGRs should plan a 2-week minimum deployed commitment. Time traveling on commercial aircraft to or from New Zealand and the United States should not be counted in the 8-week deployed time. Pre-season planning should schedule ANG support north/south missions (Guard Rotators) when necessary to efficiently rotate aircraft and personnel to support the overall mission.
4. In response and acknowledgement to the NSF's annual USAP Airlift Mission Requirements Forecast, additional training for the 109AW that is above wartime requirements and necessary to support NSF mission tasking will be identified (FY2-4) by the 109 AW if that amount exceeds a total \$5,000 in any given fiscal year. Training requirement levels approved for FY0-1 cannot be changed without concurrence from NSF.

#### **E. Financial Details**

1. Availability of Funds. This MOA does not document the obligation of funds between the Parties. The obligation of funds by the Parties, resulting from this MOA, is subject to the availability of funds pursuant to the DoD Financial Management Regulation. No provision in this MOA will be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, Section 1341 of Title 31, United States Code.
2. Billing. The Air National Guard will bill the National Science Foundation on a monthly basis in accordance with the procedures of the Billing Party. A record of the transaction will be sent to the National Science Foundation within 30 calendar days after the month in which the transaction occurred.
3. Payment of Bills. The National Science Foundation paying office will forward payments, along with a copy of billed invoices, to the Air National Guard within 30 calendar days of the date of invoice. Bills rendered will not be subject to audit in advance of payment.
4. Financial Specifics. See Attachment A for all other details and information on the reimbursable support identified in this MOA.

5. Economy Act Determination and Findings (D&F). If the MOA is being entered into in accordance with Section 1535 of Title 31, United States Code (the Economy Act), both Parties agree that the requirements listed in Paragraph (a) of the Economy Act have been met. The provider has determined that the capabilities exist to render the requested support without jeopardizing its assigned missions.

ATTACHMENT A  
to  
Appendix C for  
MEMORANDUM OF AGREEMENT  
BETWEEN  
NATIONAL SCIENCE FOUNDATION  
AND  
AIR NATIONAL GUARD  
FOR  
LC-130 SUPPORT  
Financial details for a reimbursable MOA

1. Reimbursable Support: Manpower, Flying Hours, Travel, Logistics, Supplies, Equipment, Facilities
2. Estimated Amount of Funds to Be Reimbursed: ~\$66,000,000 Appropriation: FY2024
3. Cost Center Number: (if required) Provider, 10051Z Receiver, 06090200
4. Financial Points of Contact: Provider:  
DENNIS C. MORGAN, GS-14, DAF  
Chief, NGB/FMAI  
[Dennis.morgan.8@us.af.mil](mailto:Dennis.morgan.8@us.af.mil)  
240-612-8777  
Receiver:  
MIRANDA H. LEWIS  
Contracting Officer, Polar Contracts  
[milewis@nsf.gov](mailto:milewis@nsf.gov)  
703-292-4669
5. All reimbursable rates are furnished IAW the DoD FMR 7000.14-R, Vol 11a, Ch 6.

