SECTION C – STATEMENT OF OBJECTIVES

The contractor shall provide the materials and services required to support the United States Antarctic Program (USAP) in accordance with the contractor's Performance Work Statement (PWS), see Section J – Attachment 2**. (THE AWARDEE'S PWS WILL BE INCORPORATED AT CONTRACT AWARD IN SECTION J, ATTACHMENT 2. THE BELOW STATEMENT OF OBJECTIVES (SOO) WILL BE DELETED AT CONTRACT AWARD.)**

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NATIONAL SCIENCE FOUNDATION (NSF)
ANTARCTIC SUPPORT CONTRACT (ASC)
STATEMENT OF OBJECTIVES (SOO)

C.1 NSF BACKGROUND

a) The National Science Foundation (NSF) is an independent executive branch Federal agency established by the National Science Foundation Act of 1950, as amended. Its mission is to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes.

b) NSF is authorized to initiate and support:

- Basic scientific research and research fundamental to the engineering process,
- Programs to strengthen scientific and engineering research potential,
- Science and engineering education programs at all levels and in all fields of science and engineering,
- An information base on science and engineering appropriate for development of national and international policy,
- Fostering the interchange of scientific and engineering information nationally and internationally,
- Maintaining facilities in the Antarctic and promoting the U.S. presence through research conducted there, and
- Addressing issues of equal opportunity in science and engineering.

c) NSF's vision is to advance discovery, innovation and education beyond the frontiers of current knowledge and empower future generations in science and engineering. NSF's goals --discovery, learning, research infrastructure and stewardship -- provide an integrated strategy to advance frontiers of knowledge, cultivate a world-class broadly inclusive science and engineering workforce, build the nation's research capability through investments in advanced instrumentation and facilities, and support excellence in science and engineering research and education.

d) With an annual budget of about $6 billion, NSF funds approximately 20 percent of all federally supported basic research conducted by U.S. colleges and universities.

C.2 U.S. ANTARCTIC PROGRAM (USAP) BACKGROUND AND OBJECTIVE

a) The United States Antarctic Program (USAP) is the activity through which the U.S. Government expresses the national interest in Antarctica. Managed and funded by the National Science Foundation, Office of Polar Programs (NSF/OPP), the USAP fulfills the direction of the President to maintain an "active and influential presence in Antarctica designed to support the range of U.S. Antarctic interests." The USAP includes scientific research conducted by universities and research institutions, as well as by other Federal agencies, and interacts with other international Antarctic programs in support of science. The USAP operates within the framework of the Antarctic Treaty System and U.S. implementing laws.

b) The principal objective of the USAP is support of scientific research. The broad goals of the scientific research are to:

- expand fundamental knowledge of the region,
- foster research on global and regional problems of current scientific importance, and
- use the region as a platform from which to support research that can only be done or is best done in Antarctica.

c) In accordance with national policy NSF is required to operate on behalf of the entire U.S. Government, year-round research stations at South Pole and two coastal locations in Antarctica. Currently, these stations are:

- McMurdo Station (77˚ 50.88' S; 166˚ 40.10' E), located on Ross Island in the southwestern corner of the Ross Sea;
- Amundsen-Scott South Pole Station (90˚ S), located 841 statute miles inland from McMurdo, at the geographic South Pole, and
- Palmer Station (64˚ 46.50' S; 64˚ 03.07' W), located on Anvers Island in the Antarctic Peninsula region.

d) These stations are important assets in accomplishing the USAP objective, and should be configured to best achieve it. Safety and environmental stewardship are also critical factors in implementing the program, as well as compliance with Presidential Memorandum Regarding Antarctica #6646, which tasks the NSF "to manage the program in a manner that maximizes the cost effectiveness and return on investment."

C.3 CONTRACT OBJECTIVE

a) The contract objective is to secure services of a superior performing contractor that can provide NSF with decision support, design, planning, implementation, and operations/maintenance of research infrastructure to achieve the USAP objective stated above.

b) NSF is seeking a contractor that embraces continuous improvement and change throughout the period of performance of the contract.

C.4 NSF/CONTRACTOR RELATIONSHIP

The resulting contract is intended to create a cooperative relationship between the NSF and the contractor. This relationship shall reflect the attributes of an open, collaborative, customer-oriented, and professional association. The NSF intends to structure the contract in a manner that ensures contractor goals and objectives are in alignment with those of the NSF, thus making contractor performance integral to accomplishment of the USAP objective.

C.5 PLACE OF PERFORMANCE

Work will be performed within: the United States, at forward staging facilities in Christchurch, New Zealand, and Punta Arenas, Chile, at other international ports that serve as "gateways" to Antarctica, on the Southern Ocean, and throughout Antarctica.

C.6 REQUIREMENTS AND CONSTRAINTS

a) It is fully recognized and expected that technology and requirements will evolve during the contract performance. To that end, only the highest level objective has been provided in this SOO to encourage potential offerors to be innovative and creative in responding with their proposed solution(s).

b) Specific requirements and constraints within: 1) Technical Management and Administration, 2) Science and Technical Project Services, 3) Information Technology and Communications (IT&C), 4) Infrastructure, Operations and Professional Services, and 5) Transportation and Logistics, needed to meet the contract objective are provided below. These five (5) functional areas are provided for informational purposes only and indicate what NSF currently considers essential services. They are not meant to imply or impose a specific management structure on the program. The proposed management structure should reflect the offeror's best ideas for maximizing the cost effectiveness and return on investment while providing process integration for the entire USAP. Offerors should not infer or imply any other constraints on their solution(s), other than as specified in this document.

C.6.1 TECHNICAL MANAGEMENT AND ADMINISTRATION

NSF has a long tradition of operating the USAP. Through its management and continued development of research infrastructure, it creates opportunities for research that push the frontiers of science forward. The infrastructure supporting this program has grown from its inception. However, the increasing sophistication and complexity of the research projects, coupled with tight federal budgets, has placed a substantial burden on the research infrastructure.

C.6.1.1 Requirements

a) At contract award, contractor management shall ensure uninterrupted operations for all USAP support functions.

b) The contractor shall maximize the value to the USAP objective while structuring services to minimize the footprint of the program (staff and infrastructure) in Antarctica and at other operating locations.

c) The contractor shall research industry trends and apply new and emerging technologies in order to continuously improve USAP operations.

d) The contractor shall provide decision-support for strategic planning in the USAP. This will include scenario evaluation that makes effective use of computational optimization models and automation tools.

e) The contractor shall provide and manage services in an integrated systems approach for the USAP.

f) The contractor shall provide services that are agile and scalable to accommodate programmatic shifts and changes within the traditional NSF research proposal cycle (approximately three years), and changes that occur within an annual budget cycle and field season.

g) The contractor shall provide services based on a “discrete event simulation model” that allow NSF to assess and quantify the impacts to science and operations of single or multiple events, such as budget cuts, fuel shortages, or major equipment failure.

h) The contractor shall provide comprehensive, integrated cost estimating services based on industry best practices for total cost management and cost engineering. In addition the contractor shall produce cost estimates as stand-alone products for Government decision making purposes. Contractor cost estimate turn-around performance and estimating accuracy shall align with Government decision making cycles.

i) The contractor shall employ best industry and Federal practices in financial, project, property, and program management. The contractor shall monitor all developments in Federal accounting and be prepared to adapt deliverables or deadlines as Government guidance is revised.

j) The contractor shall establish systems to provide financial and project reporting and to allow the Government to track contractor labor and direct and indirect costs to a level of detail that allows visibility into the major system, function, product, and service level.

k) The contractor shall develop internal controls to minimize the potential for waste, fraud, and abuse.

l) The contractor shall operate office location(s) that optimize the delivery of services, reduce cost to the Government, and facilitate efficient interaction with NSF.

m) The contractor shall ensure full information assurance and privacy in management, policy, procedures, operations, and maintenance of the USAP information and IT&C systems.

n) The contractor shall provide all required services within the context of a comprehensive safety and health and medical program, while demonstrating leadership in the stewardship of the Antarctic environment.

o) The contractor shall work collaboratively with other USAP contractors, Federal agency, and business and operations partners to meet USAP objectives.

p) The contractor shall sustain an understanding of NSF's priority issues and opportunities and shall incorporate this understanding into the fulfillment of this contract.

q) In response to NSF's responsibility to be a steward of the Antarctic environment in the conduct of its activities, the contractor shall continue the environmental education program for all USAP participants.

r) The contractor shall develop and maintain Spill Prevention Control and Countermeasure (SPCC) plans which adequately address conditions at all USAP locations.

s) The contractor shall develop emergency response plans and maintain a capability to properly mitigate and respond to emergencies affecting USAP participants and facilities with appropriately trained personnel.

t) The contractor shall be responsible for all aspects of radionuclide use in the USAP.

u) The contractor shall operate a proactive and comprehensive safety risk management program that addresses the wide variety of typical and unique risks associated with the conduct and support of USAP operations at all locations. The contractor shall refer non-compliance issues to the NSF, as required.

v) The contractor shall support the safety and health of all USAP participants, and its safety and occupational health program shall interface with and complement the safety programs of other participating organizations and institutions.

w) The contractor shall manage and operate health care facilities for non-emergent care to eligible personnel. The contractor shall staff these facilities with appropriately qualified and licensed medical professionals.

x) The contractor shall support a safe and hygienic working and living environment.

y) The contractor shall maintain accurate and complete medical records of individuals, including screening records and any treatments administered in Antarctica. Medical records shall be the property of NSF and will be maintained separate from any records management system the contractor may develop for its own organizational needs.

z) The contractor shall develop procedures for medical evacuation of USAP personnel from Antarctica, with final approval residing with NSF.

aa) For specified projects, the contractor shall use appropriate Earned Value Management System (EVMS) methodologies that consider project performance analysis, cost analysis, and risk analysis/mitigation for the purpose of general management as well as detection and notification of problems.

bb) The contractor shall provide cost and resource loaded schedules for all activities in Antarctica in accordance with the Annual Program Plan (APP). Schedules are to be executable and integrate all aspects of the work.

cc) The contractor shall promote clear and accurate understanding of the USAP mission, activities, and its history. This includes but is not limited to providing audio-visual production capability, operation of the www.USAP.gov web portal and its current content, sustaining and developing educational outreach activities, providing current and historical video to the general public, conducting tele- and video-conferences, and producing and releasing training videos.

dd) The contractor shall develop processes and procedures to capture past, present, and future knowledge of activities in the USAP. This information will be used to promote consistency and as a guide for planning.

C.6.1.2 Constraints

a) The contractor shall operate a central program office in the contiguous United States.

b) The Government will provide the contractor with property, equipment, and applications which the contractor will be responsible for maintaining and taking appropriate steps to ensure that they will remain functional unless and until replaced.

c) All financial reporting and management of U.S. Government furnished plant, property, and equipment shall be in accordance with established Federal regulations and NSF policies.

d) The contractor shall assume responsibility for existing leases and charters and operator agreements (e.g. research vessels, Christchurch International Airport Authority, Ltd., NZ).

e) Coordination with other international Antarctic programs and foreign governments is conducted only by the NSF, except when specifically authorized.

f) The contractor shall comply with the USAP zero-tolerance policy for drug and alcohol abuse.

g) All personnel shall have a current National Agency Check with Inquiries (NACI) background investigation or the equivalent for foreign nationals.

h) Unless specifically waived by NSF, the contractor shall comply with Federal occupational safety and health standards, and, in other countries, the host national, regional and local standards when more stringent than U.S. standards.

i) The contractor shall comply with all applicable standards and regulations for handling, shipment, and disposal of radioactive materials.

j) Unless specifically waived by NSF, the contractor shall use applicable safety and emergency response-related consensus standards in circumstances where their use

would be appropriate in the U.S. Where compliance is not feasible, alternate risk management measures will be implemented with NSF approval.

k) The contractor shall comply with Department of Defense (DoD), USAF Air Mobility Command (AMC) Aircraft Rescue and Fire Fighting (ARFF) regulations.

l) All activities in Antarctica shall be conducted in accordance with environmental protocols outlined in the Antarctic Treaty System as implemented by the Antarctic Conservation Act of 1978 and as amended by the Antarctic Science, Tourism and Conservation Act of 1996.

m) The contractor shall administer medical, dental, and for winter-only, psychological, screening programs that reasonably assure fitness to deploy to Antarctica in accordance with USAP Medical Screening Guidelines.

n) Medical records shall be used, maintained, and protected in accordance with applicable provisions of the Privacy Act and the NSF System of Records notification.

o) Explosives shall be stored, handled, and transported in accordance with applicable Federal and DoD regulations. Explosives shall be procured and used in accordance with Federal regulations or the state regulations in which the blaster is certified.

p) Project management and controls software shall be equivalent to and capable of seamless linkage with Primavera ©, Expedition ©, and Timberline ©.

q) Project schedules shall be integrated and follow the Critical Path Method (CPM).

r) The contractor shall comply with the NSF concept of operations for the USAP.gov web portal (as amended and extended), applicable NSF web management and standards manual requirements, and U.S. Government standards for Government websites. A list of federal guidelines is available on the USA.gov website (http://www.usa.gov/webcontent/reqs_bestpractices/laws_regs.shtml).

s) All press releases and media activity for the USAP shall be coordinated and cleared through the NSF.

t) Information Assurance shall be coordinated by a Chief Information Security Officer (CISO) or equivalent Information Assurance Program Manager (IAPM). Appropriate experience will include the following qualifications: Certified Information Systems Security Professional (CISSP), Certified Information Systems Auditor (CISA), Certified Information Security Manager (CISM), Global Information Assurance Certification (GIAC), or GIAC Security Leadership Certificate (GSLC).

u) The contractor shall comply with applicable legislation, Office of Management and Budget (OMB) and NSF guidance, policy, standards, and direction pertaining to the provision and management of IT&C. The contractor shall take particular note of Federal Information Security Management Act (FISMA) statute law and NSF agency implementation of FISMA.

v) All position-related licenses and certifications shall be kept valid and current.

w) The contractor shall comply with all terms and conditions of the USAP Master Permit.

x) Waste management operations shall be compliant with NSF Waste Regulations (45 CFR 671).

y) Waste classification, packaging, and labeling shall be in accordance with the Resource Conservation and Recovery Act (RCRA) as well as applicable Federal regulations and those of ports of entry.

z) Cost estimates shall conform to Association for the Advancement of Cost Engineering (AACE) International cost estimation classifications (18R-97).

aa) The contractor shall comply with NSF Standards for the Conduct of Scientific Diving and Federal regulations as applicable to the diving activity.

C.6.2 SCIENCE AND TECHNICAL PROJECT SERVICES

a) Services are provided to a broad range of NSF-approved activities across all operating locations in the USAP. These services cover the full spectrum of support activities and include everything from concept development, planning and estimating for projects in the pre-proposal to proposal stage, to the delivery of logistical and operations support in the field. The contractor shall be able to provide support equitably to all NSF-approved projects and activities in Antarctica.

b) The contractor shall support many projects, both internal and external. The largest project group is the university research (grantee) community. However, support will also be provided to foreign partner activities, other federal agency projects and tenant activities. The contractor shall also provide services to the military logistical support partners, other NSF contractors, and other NSF-identified groups.

c) The scope of activities will vary, but support services range from, for example, constructing and managing large field camps, to supporting complex international research programs, to providing travel services to a single investigator working with a foreign national program.

d) The project services function is the primary point of entry for all services delivered under the contract and shall be capable of dealing with both project and sustaining needs of USAP activities.

C.6.2.1 Requirements

a) The contractor shall provide uniform, effective, and efficient support services to USAP projects and directed activities. The contractor service model will integrate the internal support units which develop, deliver and sustain services for the support of NSF-

approved project requirements. These requirements can include project-specific needs or the sustainment of operational support.

b) At contract award, the contractor shall provide uninterrupted support for all science and technical project functions.

c) The contractor shall interact with leaders of potential and approved projects to develop timely, comprehensive, and integrated field plans; operational, construction, and technical support requirements; and logistics requirements.

d) The contractor shall support projects that vary in size and scope and span the science, engineering and technology disciplines, with education and outreach objectives that are conducted at USAP stations, remote field sites, on board research vessels, aircraft, airborne platforms, or at facilities of other international programs.

e) The contractor shall provide and retain a qualified, educated, and experienced workforce to ensure continuity of the knowledge base and skills necessary to assist in the assessment of field requirements of project proposals.

f) Contractor personnel directly supporting scientific participants shall be familiar with academic research environments and shall have the ability to support the type and scope of scientific research performed in the USAP.

g) The contractor shall provide assistance to NSF's decision making and proposal review process in accord with NSF's schedules. The objectives of the planning process are: i) Produce timely and accurate projections of current and future support requirements; ii) Enable evaluation of, and plans for, current proposal cycle and future proposal support requirements; iii) Contribute and respond to NSF's short-term and long-range strategic planning goals; and, iv) Provide information that can be a basis for improvements in efficiency and effectiveness of service delivery.

h) The contractor shall provide and sustain a planning process to coordinate and implement single- and multiple-investigator led science, engineering and technology projects when approved by NSF.

i) The contractor shall provide visibility into planning processes and resource utilization and be able to provide snapshots of the availability of resources to support projects.

j) The contractor shall develop, execute, and monitor a comprehensive, integrated annual plan of approved projects that is within available USAP resource capabilities, budget, and schedules, and is consistent with the APP.

k) The contractor shall communicate the five-year outlook of major resource commitments to the research community to aid in the development of research proposals.

l) The contractor shall provide an information database for interactive planning with project leaders and science investigators and ensure continuity with legacy data.

m) The contractor shall provide, operate, maintain, and replace as required common use field equipment, including installed equipment and systems mounted on research vessels and aircraft.

C.6.3 INFORMATION TECHNOLOGY AND COMMUNICATIONS

Information Technology and Communications (IT&C) are integral and critical to all functions of the USAP systems. It spans the spectrum from providing for the movement of research level data into and out of Antarctica and providing communications support for research facilities and field parties to contributing to the quality of life for all USAP participants.

C.6.3.1 Requirements

a) At contract award, the contractor shall ensure uninterrupted operations for all IT&C activities.

b) Over the period of performance, the contractor will be expected to evolve IT&C into an innovation tool that transforms USAP business and mission processes in ways that enable more effective and efficient support for science.

c) The contractor shall provide IT&C services that are fully integrated across the USAP.

d) The contractor shall provide best-of-breed IT&C management framework(s) to achieve governance in customer focused IT&C operations and service management.

e) The contractor shall manage information systems as strategic assets to support business intelligence and enhance business/mission operations.

f) The contractor shall provide general and special purpose electronic systems and services which meet the full spectrum of USAP IT&C needs for remote operations in Antarctica. These include general electronic systems, industrial controls, component-level diagnostics/repair and other electronic systems not generally within the scope of traditional computer network, data center, desktop, or telecommunications.

g) The contractor shall be responsible for the full range of planning, evaluation, acquisition, development, testing, installation, operation, and replacement/retirement of equipment, services, and support for all IT&C at USAP operating locations.

h) The contractor shall use industry best-practices to benchmark its performance with a certified and independent capability-maturity assessment process.

i) The contractor shall provide comprehensive planning and management services to meet Government requirements for availability, integrity, quality, capacity, reliability, maintainability, and security of IT&C services and information.

j) The contractor shall align IT&C infrastructure and services with USAP business and science support needs.

k) The contractor shall provide IT&C infrastructure to enable network-centric operations.

l) The contractor shall develop, document and publish a USAP service catalog, with specifications of service quality and tiers of service. The contractor shall deliver best practices to manage, sustain and evolve the IT&C systems and services for the USAP.

m) The contractor shall perform pre-deployment verification and validation as a key element of the IT&C systems engineering process and shall similarly apply to subsystems for changes deployed to installed systems in Antarctica to ensure that hardware and software are appropriately verified as functionally ready to perform under the austere and potentially harsh conditions of the Antarctic.

n) The contractor shall provide annual resource demand, resource allocation, user technical services consultation and budget forecasts in support of USAP IRIDIUM satellite communications services and shall provide NSF services management support for DoD Defense Information Services Agency (DISA) accounts with the Enhanced Mobile Satellite Services program.

o) The contractor shall establish Service Level Agreements (SLA) with mission critical or key IT&C infrastructure providers subcontracted by the contractor or directly provided by the contractor. The contractor shall make these available for NSF inspection upon demand. SLAs shall be congruent with USAP IT&C information assurance requirements.

C.6.3.2 Constraints

a) The contractor shall ensure that Government furnished legacy mission applications transitioned to the contractor remain functional until replaced.

b) The contractor shall comply with USAP electromagnetic (EM) spectrum management procedures.

c) The contractor shall comply with the terms/conditions of Memorandum of Agreements (MOA) as amended and extended, which define IT&C service and supplier relationships.

d) Contractor personnel performing in the capacity of Antarctic station radio operators, emergency response center managers, and similar functions shall use the following professional standards or equivalents:

    i) National Fire Protection Association (NFPA) Job Performance Standard 1061, Standard for Professional Qualifications for Public Safety Telecommunicator;
    ii) Association of Public-Safety Communications Officials (APCO) National Public Safety Telecommunicator Safety Training Standard;
    iii) Federal Communication Commission (FCC) Restricted Radiotelephone Operator Permit (radiotelephone operator's restricted certificate) (47CFR13) as appropriate.

C.6.4 INFRASTRUCTURE, OPERATIONS, AND PROFESSIONAL SERVICES

The USAP operates across a wide range of facilities, ranging in complexity from small tents and temporary field structures to world-class laboratories and technologically-advanced stations.

The contractor shall be able to support all operational activities and facilities at all USAP operating locations.

C.6.4.1 Requirements

a) At contract award, the contractor shall ensure uninterrupted operations and support for existing infrastructure.

b) Over the period of performance the contractor shall enhance the effectiveness and efficiency of USAP operations and infrastructure.

c) The contractor shall provide process integration for all USAP operations.

d) The contractor shall plan, manage, and execute all necessary services required to support USAP permanent and temporary facilities, roads, airfields, ports, utilities, fuel systems, and all other infrastructure.

e) The contractor shall optimize support capabilities, operations and facilities for energy efficiency and reduced environmental impact to the greatest extent practical.

f) The contractor shall demonstrate flexibility and agility in responding to changing programmatic requirements.

g) The contractor shall manage, operate, and maintain all USAP facilities, utilities, infrastructure systems, and mechanical/electrical equipment to a service level that will maximize efficiency and life expectancy.

h) The contractor shall manage, operate, and maintain vehicles, mechanical equipment, and utilities to industry standards and for the Antarctic environment.

i) The contractor shall provide comprehensive meal planning and food services at the three stations and at field camps in Antarctica ensuring a reasonable variety and appropriate nutritional content.

j) The contractor shall provide and manage housing and berthing for program personnel at all stations, at field camps, and on research vessels.

k) The contractor shall keep common use living space, bathrooms, administrative offices, and other public areas at all stations in a sanitary condition.

l) The contractor shall provide and operate site-appropriate social, recreational, and entertainment functions in Antarctica.

m) The contractor shall provide postal services at McMurdo, South Pole, and the Air Post Office (APO) in Christchurch, NZ.

n) The contractor shall develop engineering designs as required for new infrastructure or modifications to existing facilities. All engineered designs shall be stamped by a professional engineer and/or architect as appropriate.

o) Professional Engineers (PEs) in all engineering disciplines shall be available for engineering design and review of all construction, renovations, and facility maintenance requirements.

p) The contractor may be required to coordinate with other USAP professional and technical service contractors/providers for design and construction.

q) The contractor shall manage, operate, and maintain all USAP bulk fuel storage and distribution systems.

r) The contractor shall manage, operate, construct, and maintain USAP facilities to provide for safe and efficient operations.

s) The contractor shall provide continuous power, water, water treatment, and waste water disposal at all USAP stations.

t) The contractor shall collect, process, package, and document solid waste generated by the USAP, including hazardous materials, to ensure acceptance for import and disposal at licensed commercial facilities.

u) The contractor shall provide site specific aviation weather observations when required.

v) The contractor shall plan, design, execute, and manage projects using tools consistent with industry best practices.

w) The contractor shall be proficient in the procurement, management, and use of hazardous materials in accordance with all applicable regulations.

x) The contractor shall operate a self-sustaining working capital fund to support retail and club activities throughout the USAP. This working capital fund will include only those costs associated with the point-of-sale operations (e.g. station stores and clubs) and will be segregated from recreational activities and equipment such as physical fitness facilities, outdoor gear issuance, and other NSF-approved activities offered for the morale and well being of deployed Antarctic personnel.

C.6.4.2 Constraints

a) The contractor shall comply with the International Building Code (IBC) and family of codes for design application, unless specifically waived by NSF.

b) Postal service support shall be conducted in accordance with the DD Form 1144 Support Agreement dated September 2005 between the NSF and the U.S. Air Force.

c) American Petroleum Institute (API) guidelines and regulations shall be followed with respect to fuels and major fuel processes and functions. Tanks with capacities less than 50,000 gallons, pipes less than four inches in diameter, and dispensers shall be controlled by the International Code series and the National Fire Protection Association (NFPA) Code series.

C.6.5 TRANSPORTATION AND LOGISTICS

a) The USAP relies on a transportation system composed of a mix of civilian, military, and international logistical support elements. In the case of operations for Palmer Station, Antarctica, the contractor is responsible for all transportation. However, in the continental Antarctic system which includes McMurdo, South Pole and the majority of deep field operating locations, the USAP uses a mix of civilian and military transportation. The U.S. Coast Guard and foreign countries provide icebreaker escort into McMurdo, U.S. Military Sealift Command provide fuel tankers and cargo ships, the U.S. Air National Guard provide LC-130 aircraft, and the U.S. Air Force provides C-17 strategic airlift to support the program. NSF also contracts for light, on-continent, aircraft and helicopters to support deep field and local activities near the major stations in Antarctica. A fleet of surface vehicles provide local, on-continent, transportation.

b) The contractor is responsible for coordinating, supporting, and, in some cases, operating the various transportation functions as well as providing logistics support for the entire program.

C.6.5.1 Requirements

a) At contract award, the contractor shall ensure uninterrupted operations for all transportation and logistics functions.

b) Over the period of performance, the contractor shall transform transportation and logistics functions into effective and efficient functions supporting the USAP.

c) The contractor shall provide a fully integrated supply chain that includes both cargo and personnel movement networks (air, land, and sea), using industry standards, where appropriate.

d) The contractor shall provide in-transit visibility for personnel, materials, and equipment throughout the supply chain and transportation networks.

e) The contractor shall coordinate the planning for USAP aircraft and vessels.

f) The contractor shall develop specifications, solicit providers, and arrange the procurement of materials.

g) The contractor shall provide deployment services to include travel, extreme cold weather clothing, and other required gear to participants traveling to designated USAP sites.

h) The contractor shall manage cargo staging and loading and unloading for aircraft and ships at all supply chain network nodes.

C.6.5.2 Constraints

a) The contractor shall comply with the requirements contained in the Federal Travel Regulation and OPP direction.

b) The contractor shall comply with rules and regulations governing transportation to the requisite ports and airfields as enforced by the Federal and State's Departments of Transportation and the Federal Aviation Administration throughout the USAP.

c) Air transportation of cargo and passenger transportation between Christchurch, NZ and McMurdo Station, Antarctica will be performed by the U.S. Air Force or though cooperative international logistic support as negotiated by the Government. Movement of bulk fuels and cargo to McMurdo Station, Antarctica will be performed by ships chartered through Military Sealift Command and will be provided by the Government. Air transportation of cargo and personnel from McMurdo Station, Antarctica to inland locations (e.g. field camps and South Pole Station) will be provided by the Government.

d) Light aircraft and helicopter support in Antarctica will be provided by the Government.