ANTARCTIC FACILITIES AND OPERATIONS (AFO)
www.usap.gov

Antarctic Facilities and Operations Funding
(Dollars in Millions)

			Change over FY 2023 Base Plan	
FY 2023 Base Plan	FY 2024 (TBD)	FY 2025 Request	Amount	Percent
$224.71	-	$269.94	$45.23	20.1%

Brief Description

The U.S. Antarctic Program (USAP) implements the longstanding Presidential Directive[1] to maintain an active and influential presence in Antarctica on behalf of the Nation and supports U.S. participation in the Antarctic Treaty System. AFO funds the non-military[2] infrastructure and logistics necessary to conduct world-class science in the Antarctic and engage in mutually beneficial international cooperation.

Meeting Scientific Community Needs

The research community participates actively in decisions regarding scientific infrastructure and logistics requirements through the annual science planning process managed jointly by the Antarctic Infrastructure and Logistics and the Antarctic Sciences sections of GEO's Office of Polar Programs (OPP). The research community is made up of NSF awardees as well as inter-agency partners such as the National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, Department of Energy, and portions of the Department of Defense. USAP supports many scientific focus areas including astronomy, space physics, biology, and earth and the environment. For projects involving fieldwork, USAP only supports research that can be conducted exclusively or optimally in Antarctica.

Status of the Facility

AFO comprises the non-military infrastructure and logistics needed to conduct U.S. research in Antarctica, including research funded by other U.S. federal agencies. Activities occur on two research ships, at a variety of remote field camps, and year-round at the U.S. stations–McMurdo, South Pole, and Palmer. AFO's support for these activities includes commercial transportation, facilities, communications, utilities (water and power), health and safety infrastructure, and environmental stewardship.

USAP operations continue to be severely stressed from the effects of the COVID-19 pandemic. Numerous science grants that were awarded prior to the onset of COVID remain to be completed. These were deferred from the FY 2021 and FY 2022 seasons when deployments to Antarctica were limited in an effort to keep COVID from reaching the continent, and from FY 2023 when station

[1] www.nsf.gov/geo/opp/ant/memo_6646.jsp
[2] Military support for USAP, including heavy airlift, sealift, and some components of the deployed workforce, is funded by the U.S. Antarctic Logistical Support Activities (USALS) appropriation.

populations were kept lower than normal to minimize contagion. In addition, construction of a new lodging facility has been delayed, and the reduced dormitory capacity has impacted work supported from McMurdo Station as well as South Pole Station. Despite these challenges, USAP continues to successfully support key science priorities including the International Thwaites Glacier Collaboration, the Long Duration Balloon program, the Center for Oldest Ice Exploration (COLDEX), and South Pole astrophysics observation programs.

In 2022, NSF published the USAP Sexual Assault/Harassment Prevention and Response report and continues to work towards a safe environment for all participants. More information on these critical activities is routinely shared on NSF's web page at https://new.nsf.gov/stopping-harassment.

The Antarctic Infrastructure Recapitalization (AIR) program was initiated in FY 2022 in response to a 2012 Blue Ribbon Panel (BRP) report,[3] which recommended that NSF create a capital plan to renew USAP's aging physical plant. As reported in the AIR narrative (see the Major Research Equipment and Facilities Construction chapter), the program is beginning to execute mission-essential infrastructure improvements.

Governance Structure and Partnerships

NSF Governance Structure

NSF oversight is provided by program officers and operations managers in OPP, who work cooperatively with staff from BFA's Research Infrastructure Office and Division of Acquisition and Cooperative Support, and the Office of the General Counsel. The GEO facilities team and the Chief Officer for Research Facilities also provide high-level guidance, support, and oversight. BFA and the Department of the Interior's Interior Business Center provide contract oversight and management.

External Governance Structure

USAP is subject to the Provisions in the Protocol for Environmental Protection to the Antarctic Treaty and its annexes which were enacted in U.S. legislation as the Antarctic Conservation Act. The Antarctic Treaty allows for Treaty nations to inspect any station with no advance notice.

Partnerships and Other Funding Sources

NSF has arrangements for cooperative sharing of logistics and science capabilities with international treaty partners operating near USAP stations and remote field sites. These arrangements mostly use in-kind contributions rather than monetary contributions. NSF also performs reimbursable field work for other agencies. The Department of Justice provides Security Operations Center services for the USAP network.

[3] www.nsf.gov/geo/opp/usap_special_review/usap_brp/rpt/index.jsp

Funding

Total Obligations for AFO

(Dollars in Millions)

	FY 2023 Base Plan	FY 2024 (TBD)	FY 2025 Request	ESTIMATES[1] FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Operations and Maintenance	$224.71	-	$269.94	$269.94	$269.94	$269.94	$269.94	$269.94

[1] Outyear estimates are for planning purposes only. The main support contract ends March 2025.

In FY 2025, AFO funding is increased to account for economic factors driving material, labor, freight, and fuel costs necessary to support continued operation of the stations, as well as support for priority science activities including the International Thwaites Glacier Collaboration, COLDEX, and IceCube (see the IceCube narrative for detail on this Major Facility). USAP is maximizing science support in Antarctica despite the lingering impacts from the COVID pandemic and delays to planned operations.

Reviews and Reports

The USAP Blue Ribbon Panel (BRP) released a report on its review of the program in July 2012. The initial NSF response to the USAP BRP report was released in March 2013 and progress to address recommendations is ongoing. The AIR program is a significant step towards addressing the report's recommendations and is covered in detail in the MREFC chapter. Additionally, OPP evaluates the performance of the Antarctic support contractor annually via an Award Fee Plan, which involves multiple tiers of review, including a Performance Evaluation Board comprising NSF staff in OPP and BFA.

Renewal/Recompetition/Disposition

Lockheed Martin Corporation (LMC) was awarded a 13.5-year Antarctic support contract (ASC) in December 2011. In FY 2017, LMC novated and successfully transferred management of the ASC to Leidos Corporation. The final option with Leidos was exercised in September 2022.

In anticipation of recompeting the ASC prime contract, NSF conducted a Virtual Industry Day for Operations and Science Support to the United States Antarctic Program on February 16, 2021, and issued requests for information in December 2021 and, most recently, in October 2023.

A contract for helicopter support was awarded to Pathfinder Aviation in November 2023. A contract for fixed-wing small aircraft support was awarded to Kenn Borek Air in December 2022.

Currently there are no plans to dispose of this facility.