

ANTARCTIC FACILITIES AND OPERATIONS (AFO)

www.usap.gov

Antarctic Facilities and Operations Funding¹

(Dollars in Millions)

	FY 2023		Change over	
FY 2022	Estimate	FY 2024	FY 2023	Estimate Base
Actual	Base	Request	Amount	Percent
\$244.67	\$237.14	\$256.66	\$19.52	8.2%

¹ Includes development and design costs for the Antarctic Research Vessel of \$7.44 million, \$12.43 million, and \$15.11 million in FY 2022, FY 2023, and FY 2024, respectively.

Brief Description

Antarctic Facilities and Operations supports the infrastructure, logistics, and science operations underlying the United States Antarctic Program (USAP). In direct support of the Nation's goals under the Antarctic Treaty System, the program strives to maintain an active and influential presence in the region through fostering the conduct of world-class science and mutually beneficial international cooperation when and where appropriate. At the same time, the program strives to optimize funding efficiency while ensuring safe, environmentally sound and effective operations.

Meeting Scientific Community Needs

The research community participates actively in decisions regarding scientific platform and logistics requirements through the annual science planning process managed jointly by the Antarctic Infrastructure and Logistics (AIL) and the Antarctic Sciences (ANT) sections of OPP.

The Antarctic Infrastructure Recapitalization (AIR) program was initiated in FY 2022 in response to a 2012 Blue Ribbon Panel (BRP) report¹, which recommended that NSF create a capital plan to renew the USAP's aging physical plant. Unfunded parts of the Antarctic Infrastructure Modernization for Science (AIMS) project, currently in the construction phase, will be considered as part of the ongoing refresh of the McMurdo Station master plan and may be accomplished as part of the broader AIR program. The longer-term recapitalization of McMurdo Station and other Antarctic infrastructure under the AIR program is expected to produce further efficiencies.

Status of the Facility

The U.S. presence in Antarctica is maintained in accordance with U.S. policy and supports Antarctic Treaty administration under Department of State leadership. AFO comprises the infrastructure and logistics needed to conduct U.S. research in Antarctica, including research funded by other U.S. 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. All support for these activities is provided through AFO, including transportation, facilities, communications, utilities (water and power), health and safety infrastructure, and environmental stewardship.

¹ www.nsf.gov/geo/opp/usap_special_review/usap_brp/rpt/index.jsp

Governance Structure and Partnerships

NSF Governance Structure

NSF oversight is provided by a program officer in GEO's Office of Polar Programs, who works cooperatively with staff from Office of Budget, Finance, and Award Management (BFA), the Office of the General Counsel, and the Office of Legislative and Public Affairs. The GEO facilities team and the Chief Officer for Research Facilities also provide high-level guidance, support, and oversight.

NSF's Division of Acquisition and Cooperative Support and the Department of Interior's Interior Business Center provide contract oversight and management.

External Governance Structure

The USAP is subject to the Antarctic Conservation Act and provisions within the Antarctic Treaty, under Department of State leadership. USAP stations in Antarctica can be inspected by Treaty member nations on short term notification. The USAP has *ad hoc* reviews at 10 to 15-year intervals, with the most recent review summarized in the 2012 BRP Report. The AIR program is a significant step towards addressing the report recommendations and is covered in detail in the MREFC chapter.

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 performs reimbursable field work for other agencies.

In FY 2022, NSF, in partnership with NOAA, completed the Ross Island weather and communications satellite downlink/transmission station to replace aging facilities on Black Island.

Funding

Total Obligations for AFO

(Dollars in Millions)

	FY 2022	FY 2023	FY 2024	ESTIMATES ¹				
	Actual	Estimate Base		Request	FY 2025	FY 2026	FY 2027	FY 2028
Operations and Maintenance ²	\$244.67	\$237.14	\$256.66	\$269.61	\$269.61	\$269.61	\$269.61	\$269.61

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

² Includes development and design costs for the Antarctic Research Vessel of \$7.44 million, \$12.43 million, and \$15.11 million in FY 2022, FY 2023, and FY 2024, respectively.

In FY 2024, AFO funding is increased to cover higher deployment costs and accommodate continued operation of the stations, as well as support for priority science activities including the International Thwaites Glacier Collaboration. COVID-19, and the resulting need for pre-deployment quarantine in New Zealand, has led to significantly higher per-person costs for grantees and contract personnel deploying to Antarctica. Higher deployment costs could persist into the FY 2024 season, increasing the overall operating cost even if the deployment tempo is lower than prior to the COVID-19 pandemic. Once pre-deployment quarantine periods are no longer required, the lower per-person cost will be offset by a higher deployment tempo, which will be needed to clear the backlog of field

science projects that were deferred during the pandemic.

Reviews and Reports

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. The USAP 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 recommendations and is covered in detail in the MREFC chapter.

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 a request for information in December 2021.

A contract for helicopter support was awarded to Air Center Helicopters in April 2019. In FY 2024 it will be in the final of four option years.

A contract for fixed-wing small aircraft support was awarded to Kenn Borek Air in August 2018. A follow-on support contract is expected to be awarded in late FY 2023.

Currently there are no plans to dispose of this facility.