

OFFICE OF  
POLAR PROGRAMS

# USA Update to FARO 2024

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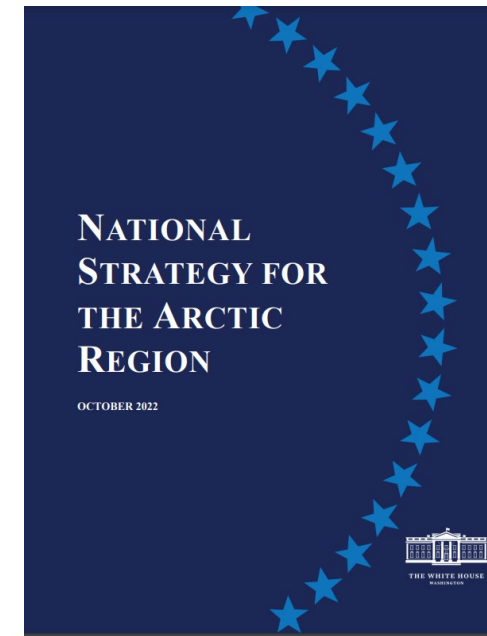
U.S. National Science Foundation  
WHERE DISCOVERIES BEGIN

# Notable US Arctic Updates

- National Strategy for the Arctic Region (NSAR) Implementation Plan released October 2023
- Interagency Arctic Research Policy Committee (IARPC) starting to craft the next Biennial Implementation Plan, which will start November 2024
- Establishment of the Polar Coordination Office at U.S. Coast Guard: “coordinate across the ‘polar enterprise’ at USCG headquarters and across the operational areas on both polar policy and strategic issues”
- Joint NASA/NSF workshop: Future of Greenland Ice Sheet Science (FOGSS) meeting 3-5 April
- NASA-ISRO (Indian Space Agency) SAR (NISAR) mission scheduled for launch later this year
- NASA's Arctic Radiation-Cloud-Aerosol-Surface-Interaction Experiment (**ARCSIX**) is an airborne investigation taking place 24-May – 17-June and 22-July - 17-August out of Pituffik Space Base, Greenland.

# ICARP Activities/Contributions

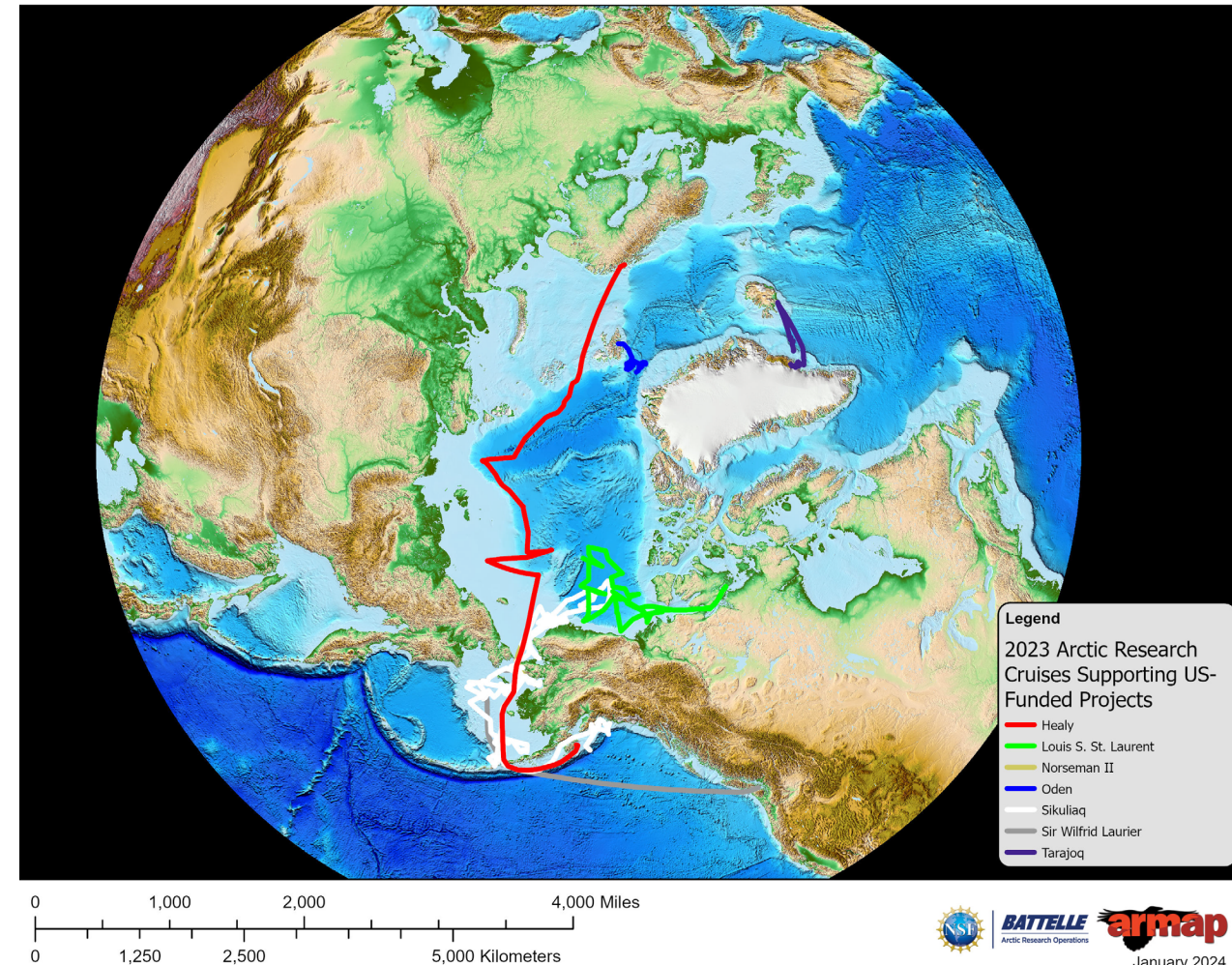
- Jennifer Mercer (member) and Katy Smith (alternate) currently serving as FARO representatives on the ICARP IV Steering Committee (need replacement for Mercer)
- Summit Recapitalization directly addresses concerns/goals being addressed in Research Priority Team 7: Technology, Infrastructure, Logistics, and Services
- Call for “national agencies and organizational partners to send any relevant strategic documents (past or present)”, submitted FARO Strategic Plan and the NSAR





# Vessel/Icebreaker Projects

- U.S. NSF supports \$10-12M annually in ship time on icebreakers or regional vessels (5-10 cruises per year)
- NOAA has a host of Arctic projects, this year on *Sikuliaq*, *Dyson*, assorted fisheries work on smaller vessels
- IARPC Field Operations CoP posts planned vessel movements ahead of the Arctic field season (2024 releasing end of next week):  
<https://www.iarpccollaborations.org/research-expeditions.html>



# 2024 Planned Vessel/Icebreaker Projects

- **USCGC Healy** – Western Arctic Boundary Current Monitoring – Pickart (PI, WHOI) – July 2024 – Dutch Harbor, AK to Nunavut, Canada; [NSF#2135537].
- **USCGC Healy** – Polar Early Career Researcher Chief Scientist Training – Eidam (PI, OSU) – August 2024 – Nunavut, Canada through NW Passage to Nuuk, Greenland; [NSF#2401176].
- **USCGC Healy** – GO-SHIP ARC-01 – Karen Stocks, Lynne Talley (PI, UCSD-Scripps), Alison Macdonald (PI, WHOI), Juranek (Chief Scientist, OSU) – September to October 2024 – Tromsø, Norway to Juneau, AK; [NSF#1829814].
- **R/V Neil Armstrong** – Davis Strait Observing System cruise – Craig Lee (PI, UW) – 10/1/24 to 10/27/24 – Nuuk, Greenland and return; [NSF#1902595].
- **R/V Norseman II** – Bering Strait Observing System – Rebecca Woodgate (PI, UW) – 9/8/24 to 9/17/24 – Nome, AK and return; [NSF#2153942].

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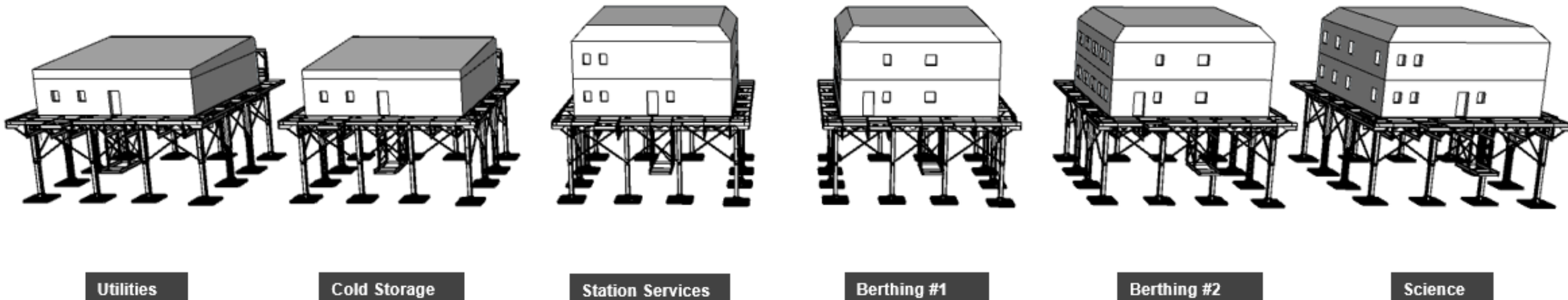
- **CCGS Louis S. St-Laurent** (Department of Fisheries and Oceans, Canada) – Joint Ocean Ice Study/Beaufort Gyre Observing System (JOIS/BGOS) NSF-DFO joint cruise – Mary-Louise Timmermans (PI, Yale U) – 8/19/24 to 9/16/24, Cambridge Bay, Nunavut, Canada and return; [NSF#1950077].
- **CCGC Sir Wilfred Laurier** (Department of Fisheries and Oceans, Canada) – NSF-DFO joint cruise related to the Distributed Biological Observatory (DBO) – Jackie Grebmeier (UMD-CBL) – 7/5/24 to 7/25/24, Victoria, BC, Canada to Utqiagvik, AK; [NSF#1917469].
- **R/V Celtic Explorer** – West Greenland Fjords – Ginny Catania (PI, UT-Austin) – 7/29/24 to 8/23/24, Nuuk, Greenland and return; [NSF#2234520].
- **R/V Saana** – Ingelfield Fjord, NW Greenland – Fiametta Straneo (PI, UCSD-Scripps) – TBD Dates and Ports; [NSF#2127241].



# Modernizing Infrastructures for Green Transitions

## Summit Recapitalization (SuMR)

- Updating infrastructure to be more efficient, flexible, and scalable
- Elevating the station above accumulating and drifting snow in a location about 1km from the current station
- Automating instrumentation and systems to be capable of being unstaffed at times
- Multi-year effort to invest in science for years to come
- Plan to increase the use of renewables in future operating model to reduce reliance on fossil fuels



# Research Projects: Energy Technologies in Arctic Communities - Principal Investigator Mary Albert

- NSF Award # 1927845
- Project in co-production with the Qaanaaq community in Greenland
- Communities currently rely on expensive fossil fuels for energy needs
- The research identifies, creates, tests, and demonstrates cutting-edge and next-generation energy technology systems suited to cold, harsh Arctic conditions





# International infrastructure access

- International collaborators are welcome at Summit Station and Toolik Field Station, both with reasonable day rates. Long-lead time coordination of planning and proposal preparation will assist with international vessel access options
  - Please contact Battelle ARO and/or Toolik Field Station for more information
- Pituffik Space Base Partnership
  - Please contact Kate Ruck at US NSF ([kruck@nsf.gov](mailto:kruck@nsf.gov)) for more information
- ARMAP/AOV (Arctic Research Mapping Application/Arctic Observing Viewer):  
<https://battlearcticgateway.org/program-locations/interactive-maps/armap-new>



# Contact Information

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**Battelle ARO contact form:** [https://battellearcticgateway.org/contact\\_us](https://battellearcticgateway.org/contact_us)

**Toolik Field Station Contact Page:** <https://www.uaf.edu/toolik/about/people.php>