

AICC Update on Polar Vessels

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UNOLS FIC Meeting

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New Heavy Polar Icebreaker (PIB)

- * Coast Guard accelerates procurement process for new, heavy icebreaker
 - * Request from White House in 2015 to move forward
 - * Accelerate acquisition of replacement heavy icebreaker and planning for additional icebreakers (CG FY17 Budget - \$150M)
 - * High Latitude Study recommends 3 heavy and 3 medium PIBs
 - * Space, power and weight to complete all CG statutory missions, including science
 - * Request made to AICC for science icebreaker needs and mission requirements

Reports

UNOLS Report:

A New U.S. Polar Research Vessel (PRV): Science Drivers and Vessel Requirement (2012)

Final report of the UNOLS PRV SMR Refresh Committee

National Academies Reports/Studies:

Icebreaker needs

Polar Icebreaker Roles and U.S. Future Needs: A Preliminary Assessment (2005)

Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council

Polar Icebreakers in a Changing World: An Assessment of U.S. Needs (2007)

Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council

Science at Sea: Meeting Future Oceanographic Goals with a Robust Academic Research Fleet (2009)

Committee on Evolution of the National Oceanographic Research Fleet;
National Research Council

Polar Research Missions

The Arctic in the Anthropocene: Emerging Research Questions (2014)

Committee on Emerging Research Questions in the Arctic; Polar Research Board;
Division on Earth and Life Studies; National Research Council

A Strategic Vision for NSF Investments in Antarctic and Southern Ocean Research (2015)

Committee on the Development of a Strategic Vision for the U.S.
Antarctic Program; Polar Research Board; Division on Earth and Life
Studies; National Academies of Sciences, Engineering, and Medicine

Arctic Matters: The Global Connection to Changes in the Arctic (2015)

National Research Council of the National Academies

New Heavy Polar Icebreaker (PIB)

- * FY 17 Budget \$150M (DOD)
 - * CG awarded 5 contracts worth \$20M for heavy polar icebreaker design and analysis
 - * Bollinger Shipyards, LLC, Lockport, LA; Fincantieri Marine Group, LLC, Washington, D.C.; General Dynamics/National Steel and Shipbuilding Co., San Diego, CA; Huntington Ingalls, Inc., Pascagoula, MS; and VT Halter Marine, Inc., Pascagoula MS
- * Studies completed within next year, contract awarded 3rd quarter of FY2019
- * First icebreaker delivered between 2023 and 2026

National Academies Polar Icebreaker Cost Assessment Study

- * Describe current and emerging requirements for the CG's polar icebreaking capabilities
- * Identify potential design, procurement, leasing, service contracts, crewing, and technology options
- * Examine:
 - * CG cost estimates for procurement and operating
 - * **Incremental cost to augment design for scientific missions**
 - * **Potential to offset costs through cost-sharing with other Fed agencies**
 - * US icebreaking capabilities compared with other nations that conduct research and other activities in the Arctic
- * Examine all included costs including: lease, operation, maintenance; disposal at end of life, interest payments, etc.
- * Held 5 meetings since Dec. 2016; report due out June 2017

Polar Research Vessel Update

POLAR ICEBREAKERS

New POLAR ICEBREAKERS (PIB):

- * The Coast Guard held an "industry day" in March (2016) that presented the basic operational requirements of the new PIB(s) to the US shipbuilding industry. (public version of that document is provided).
- * Note that there are some substantial scientific capabilities included in the requirements document that NSF/PLR does not support.
- * Congress has made clear their intention that agency-specific requirements in the new PIBs need to be funded by the requesting agencies. **NSF's current and projected budget is not able to support these additional capabilities and feels that science operations should be conducted by research vessels.**
- * **On an as-needed basis, a research vessel can be paired with a heavy icebreaker to operate in heavier ice conditions.** The science capabilities included in the requirements document were, in large part, placed there by NOAA.