



**Committee on Transportation and Infrastructure**  
**U.S. House of Representatives**  
**Washington, DC 20515**

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November 16, 2018

**SUMMARY OF SUBJECT MATTER**

**TO:** Members, Subcommittee on Coast Guard and Maritime Transportation  
**FROM:** Staff, Subcommittee on Coast Guard and Maritime Transportation  
**RE:** Hearing on “Review of Recent GAO Reports on Icebreaker Acquisition and the Need for a National Maritime Strategy”

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**PURPOSE**

The Subcommittee on Coast Guard and Maritime Transportation will hold a hearing on Thursday, November 29, 2018, at 10:00 a.m. in 2253 Rayburn House Office Building to review recent Government Accountability Office reports on icebreaker acquisition and the need for a National Maritime Strategy. The Subcommittee will hear testimony from the United States Coast Guard (Coast Guard or Service), the Maritime Administration (MARAD), the Government Accountability Office (GAO), and the Congressional Research Service (CRS).

**BACKGROUND**

**Government Accountability Office**

The GAO is the audit, evaluation, and investigative arm of Congress which exists to support Congress in meeting its constitutional responsibilities and to improve the performance and accountability of the federal government for the American people.<sup>1</sup> The GAO examines the use of public funds, evaluates federal programs and policies, and provides analysis, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions.<sup>2</sup> Congress can mandate GAO action through legislation or request GAO action through a Member request letter.

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<sup>1</sup> Page 74, Coast Guard Acquisitions – Polar Icebreaker Program Needs to Address Risk before Committing Resources (GAO-18-600), September 2018.

<sup>2</sup> Ibid

## **Reports**

### **Coast Guard Acquisitions – Polar Icebreaker Program Needs to Address Risk before Committing Resources (GAO-18-600)**

This report was released in September 2018 in response to section 122 of the National Defense Authorization Act for Fiscal Year 2018 (P.L. 115-91). The report directed GAO to assess issues related to the procurement of new icebreaker vessels.

Currently, the Coast Guard has two polar icebreaker vessels in operation, a heavy and a medium icebreaker. A heavy icebreaker can break through six feet of ice continuously at three knots. The Nation’s only operational heavy polar icebreaker, Coast Guard Cutter (CGC) POLAR STAR, is 40 years old. The primary mission of CGC POLAR STAR is breaking a channel through the sea ice in the Ross Sea of the Southern Ocean off Antarctica to resupply the McMurdo Research Station. Its sister vessel, CGC POLAR SEA, has been inactive since 2010 due to major propulsion casualties. The Coast Guard operates a medium icebreaker, CGC HEALY, which can break through 4.5 feet of ice continuously at three knots. CGC HEALY, the Nation’s only operational medium polar icebreaker, is 23 years old. CGC HEALY is primarily used to support scientific research in the Arctic and is also capable of performing search and rescue and other missions in the Arctic seasonally.

For much of the past decade, the Coast Guard has been talking about the need to recapitalize its icebreaker fleet, but did not show movement toward that goal until 2016.<sup>3</sup> The Department of Homeland Security (DHS) approved the Polar Icebreaker Operational Requirements Document in January 2016. In February 2017, the Service awarded industry studies to five U.S. shipyards with technical capabilities to build icebreakers<sup>4</sup>. The Coast Guard received industry technical proposals and pricing proposals in mid-July and early fall 2018, respectively. The Service plans to award a Detail Design and Construction contract in fiscal year (FY) 2019, with desired delivery of the first new icebreaker in the fourth quarter of FY 2023.

The recently released GAO report (GAO-18-600) notes that DHS did not have a sound business case in March 2018, when it established the cost, schedule, and performance baselines for its heavy polar icebreaker (HPIB) acquisition program. GAO found four risk areas:

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<sup>3</sup> Ronald O’Rourke, “Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress”, CRS Report RL 34391 (October 26, 2018).

<sup>4</sup> The contracts were awarded to: Bollinger Shipyards, LLC (Lockport, Louisiana); Fincantieri Marine Group, LLC (Washington, District of Columbia); General Dynamics/National Steel and Shipbuilding Company (San Diego, California); Huntington Ingalls, Inc. (Pascagoula, Mississippi); and VT Halter Marine, Inc. (Pascagoula, Mississippi). <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Newsroom/icebreaker022217/>

- Program baselines were set before the Coast Guard conducted a preliminary design review, which puts the program at risk of having an unstable design and increasing program cost and schedule risks.
- A technology readiness assessment was not conducted by the Coast Guard to determine maturity of key technologies before setting baselines.
- The cost estimate did not quantify the range of possible costs over the entire life cycle of the program, compromising its reliability and potentially underestimating the total funding needed for the program.
- The planned delivery dates were driven by the potential gap in icebreaking capabilities instead of being informed by realistic assessment of shipbuilding activities.

GAO made six recommendations for executive action by the Commandant of the Coast Guard and one recommendation for DHS Under Secretary for Management. DHS concurred with all six GAO recommendations:

- GAO Recommendation 1: The Commandant should direct the polar icebreaker program to conduct a technology readiness assessment in accordance with best practices for evaluating technology readiness before detail design of the lead ship begins.
  - DHS Response: The Coast Guard Acquisition Directorate is conducting a tailored technical readiness assessment date with an estimated completion date of June 30, 2019.
- GAO Recommendation 2: The Commandant, in coordination with the Secretary of the Navy, should direct the polar icebreaker program to update the HPIB cost estimate in accordance with best practices for cost estimation before the option for construction of the lead ship is awarded.
  - DHS Response: The Coast Guard Acquisition Directorate is conducting a tailored technical readiness assessment to update the HPIB cost estimate with an estimated completion of June 30, 2019.
- GAO Recommendation 3: The Commandant should direct the polar icebreaker program to develop a program schedule in accordance with best practices for project schedules before the option for construction of the lead ship is awarded.
  - DHS Response: The Coast Guard Acquisition Directorate will update the program schedule within three months of the Detail Design and Construction contract award and before awarding construction, as appropriate, with an estimated completion date of September 30, 2019.
- GAO Recommendation 4: The Commandant should direct the polar icebreaker program office to analyze and determine appropriate schedule risks that could affect the program after construction of the lead ship begins to include in the risk management plan and develop appropriate risk management strategies.
  - DHS Response: The Coast Guard Acquisition Directorate is conducting a tailored technical readiness assessment to analyze and determine schedule risks with an estimated completion of June 30, 2019.

- GAO Recommendation 5: The Commandant, in coordination with the Secretary of the Navy, should update financial management and budget execution appendix of the memorandum of agreement between the Coast Guard and the Navy to detail how each organization will address any and all cost growth on the HPIB program.
  - DHS Response: Coast Guard and Navy officials are in the process of reviewing the July 2017 budget agreement to clarify the definition of cost overruns which should be completed by March 30, 2019.
  
- GAO Recommendation 6: The DHS Under Secretary should require the Coast Guard to update the HPIB acquisition program baselines prior to authorizing lead ship construction, after completion of the design review, and after information is updated on its technologies, cost, and schedule.
  - DHS Response: DHS Management Directorate Office of Program Accountability and Risk Management officials are in the process of updating acquisition policy to require key technical reviews prior to approving final acquisition program baselines.

In November 2018, GAO released a study assessing a June 2018 Navy report on the Navy’s capabilities in the Arctic.<sup>5</sup> The study found that the Navy and Department of Defense (DoD) align in the current assessment of low risk for conflict in the Arctic. Even though the Navy has significant limitations for operating surface ships in the Arctic, the Navy stated that there are currently no capability gaps that require them to ice-harden existing vessels or construct ice-capable vessels. The Navy’s traditional surface combatant ships are not designed to operate in icy waters, although some of the Navy’s T-class ships have capability to operate in light or broken first-year ice. In addition, the study notes that DoD officials that stated the U.S. right to operate in the Arctic can be demonstrated outside of Navy surface ships, such as through Coast Guard vessels, Navy submarines, or military aircraft.<sup>6</sup>

**Maritime Security – DOT Needs to Expediently Finalize the Required National Maritime Strategy for Sustaining U.S.-Flag Fleet (GAO-18-478)**

This report responded to a request by the Chairman of the House Committee on Rules, Congressman Pete Sessions (R-TX), and Congressman Mark Sanford (R-SC). In this report, released in August 2018, GAO reviewed:

- the effects of U.S. government support for the international trading U.S.-flag fleet on defense needs and other government programs;
- the sustainability challenges, if any, the international trading U.S.-flag fleet faces in meeting national defense needs;
- the status of the mandated national sealift and maritime strategies, and options the Department of Transportation considered to address any challenges related to sustaining the international trading U.S.-flag fleet.

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<sup>5</sup> Arctic Planning – Navy Report to Congress Aligns with Current Assessments of Arctic Threat Levels and Capabilities Required to Execute DOD’s Strategy (GAO-19-42), November 2018.

<sup>6</sup> Page 12, Ibid

There are over 41,000 U.S. flagged vessels. However, only 81 are currently employed in international commerce between U.S. and foreign ports (e.g., U.S. foreign trade).<sup>7</sup> Over the last 35 years, the number of U.S. flagged vessels sailing in the foreign trade dropped from 850 to 81 vessels. Within the international U.S. flag fleet, 60 vessels are enrolled in the Maritime Security Program (MSP).<sup>8</sup> Under this program, militarily useful oceangoing commercial vessels receive annual operating stipends of \$5 million through FY 2020 to provide military sealift for the United States Transportation Command within the Department of Defense (DoD). The GAO report noted that, according to 2010 and 2013 mobility studies, 60 MSP vessels meet DoD's stated capacity needs. The National Defense Authorization Act for Fiscal Year 2018 (P.L. 115-91) requires DoD to complete a new mobility study by September 30, 2018. This study has not been released.

In addition to MSP, the U.S. government supports the international trading U.S.-flag fleet through cargo preference laws that require federal agencies to transport certain percentages of government-impelled cargo on U.S.-flag vessels. The GAO report noted that food aid advocates have questioned the economic efficiency of food aid shipments being used to support the U.S.-flag fleet for defense purposes. Officials with U.S. Agency for International Development (USAID) and U.S. Export-Import Bank (EXIM Bank) raised concerns that cargo preference requirements increase shipping costs and negatively affect their missions. Concerns were raised regarding the use of U.S.-flag vessels with limited military utility to transport 57 percent of food aid. In contrast, DoD and MARAD reiterate that a key aspect of supporting the U.S.-flag fleet, regardless of the military utility of the vessel, is to ensure a sufficient pool of mariners to operate vessels for defense sea lift purposes.

A MARAD report estimated the availability of approximately 11,768 qualified U.S. citizen mariners which is 1,839 less than the 13,607 mariners necessary for sustained operation (i.e., exceeding six months) of the reserve and commercial fleet.<sup>9</sup> The Subcommittee held a hearing on January 17, 2018, that reviewed the MARAD report and assessed the data limitations between the Coast Guard and MARAD that may be understating the extent of the potential mariner shortage.<sup>10</sup>

In 2014, Congress issued two mandates to the Secretary of Transportation. The first was to develop a national maritime strategy to support U.S.-flag vessel competitiveness (P.L. 113-281) no later than February 2015 and the second was for the Secretary to work with DoD to develop a national sealift strategy to ensure the long-term viability of the U.S. Merchant Marine (P.L. 113-76). A draft strategy that combined the two mandates was developed in 2016 by the Obama Administration. That draft has been under review by the Trump Administration but has not been released or submitted to Congress by the Secretary.

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<sup>7</sup> U.S. Department of Transportation Maritime Administration United States Flag Privately-Owned Merchant Fleet Report November 2017

<sup>8</sup> This program is authorized under Chapter 531 of title 46, United States Code.

<sup>9</sup> U.S. Department of Transportation, Maritime Administration, Maritime Workforce Working Group Report (Washington, D.C., Sept. 29, 2017).

<sup>10</sup> <https://transportation.house.gov/calendar/eventsingle.aspx?EventID=402105>

The lack of a national maritime strategy has hindered MARAD and Department of Transportation (DOT) efforts to identify options to address the competitiveness of the U.S.-flag fleet and the long-term viability of the U.S. Merchant Marine. While the draft report has been under review, MARAD has identified some options to address those goals in other reports<sup>11</sup>:

- Reduce time and costs of bringing vessels under the U.S. flag;
- Implement tax reforms, including mariner income tax and liability insurance reform and eliminating the tax on U.S.-flag vessels receiving maintenance overseas;
- Increase the volume of government cargo carried on U.S.-flag vessels (e.g., energy export commodities such as oil or liquefied natural gas);
- Increase the MSP stipend; and
- Develop a broad-based reserve program.

Until a final national maritime strategy is released, MARAD and DOT officials are not yet ready to formally propose actions to address any of these issues. GAO recommends the Secretary of Transportation: (1) complete the national strategy; and (2) establish and provide to Congress a timeline by which the strategy document will be issued. DOT agreed with that recommendation.

### WITNESS LIST

Rear Admiral Michael J. Haycock  
Assistant Commandant for Acquisition & Chief Acquisition Officer  
United States Coast Guard

Rear Admiral Mark H. “Buz” Buzby, USN, Ret.

Administrator  
Maritime Administration

Ms. Marie A. Mak  
Director of Acquisition and Sourcing Management  
Government Accountability Office

Mr. Andrew Von Ah  
Director of Physical Infrastructure Issues  
Government Accountability Office

Mr. Ronald O’Rourke  
Specialist in Naval Affairs  
Congressional Research Service

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<sup>11</sup> Department of Transportation, Maritime Administration, Maritime Administration Strategic Plan Navigating the Future 2017-2021 and U.S. Department of Transportation, Maritime Administration, Maritime Workforce Working Group Report (Washington, D.C., Sept. 29, 2017).