

**REVIEW OF THE RECAPITALIZATION OF THE
UNITED STATES COAST GUARD SURFACE, AIR,
IT, AND SHORESIDE ASSETS**

(118-25)

HEARING
BEFORE THE
SUBCOMMITTEE ON
COAST GUARD AND MARITIME TRANSPORTATION
OF THE
COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES
ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

JULY 27, 2023

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

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JULY 21, 2023

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Coast Guard and Maritime Transportation
FROM: Staff, Subcommittee on Coast Guard and Maritime Transportation
RE: Subcommittee Hearing on “*Review of the Recapitalization of the United States Coast Guard Surface, Air, IT, and Shoreside Assets*”

I. PURPOSE

The Subcommittee on Coast Guard and Maritime Transportation of the Committee on Transportation and Infrastructure will meet on Thursday, July 27, 2023, at 2:00 p.m. ET in 2253 Rayburn House Office Building to receive testimony on the “*Review of the Recapitalization of the United States Coast Guard Surface, Air, IT, and Shoreside Assets*.” Members will receive testimony on the United States Coast Guard’s (Coast Guard or Service) recapitalization efforts, specifically focusing on the Service’s efforts to modernize its surface assets, including the Offshore Patrol Cutters (OPC) and Polar Security Cutters (PSC), air assets, shoreside infrastructure, and Information Technology (IT).

II. BACKGROUND

THE UNITED STATES COAST GUARD RECAPITALIZATION PROGRAM

Recognizing that many of its assets were nearing the end of their service lives or were technologically insufficient, in 2007 the Coast Guard approved a program of record to modernize its offshore assets and the communication systems that linked those assets.¹ The program of record has subsequently been updated to reflect budget realities and other factors.² However, the plan at the time failed to take into account IT systems, shoreside assets or Polar icebreakers. The Coast Guard is more than a decade into this recapitalization program and significant problems exist. In 2017, the Coast Guard released a new program of record that included Polar icebreakers and in-service vessel sustainment but failed to incorporate long term plans to recapitalize IT systems or shoreside assets.³

The Coast Guard has successfully undertaken some of the procurement steps outlined in its 2007 recapitalization vision, such as the procurement and deployment of the Fast Response Cutter (FRC) and the National Security Cutter (NSC). Concerningly, however, other programs such as the OPC lag behind, while the PSC, rotary wing aircraft, shoreside infrastructure, and Information Technology (IT) still remain largely unaddressed due to underfunding, mismanagement, poor processes,

¹ UNITED STATES GOV’T ACCOUNTABILITY OFF., GAO-17-654T, COAST GUARD RECAPITALIZATION: MATCHING NEEDS AND CONTINUED RESOURCES TO STRAIN ACQUISITION EFFORTS (2017), available at <https://www.gao.gov/assets/690/685201.pdf>.

² *Id.*

³ *Id.*

and a lack of long-term planning on the part of the Coast Guard.⁴ These shortcomings have created serious capability gaps in the ability of the Service to field the assets required to fulfill its mission demands.⁵

Most notably, in 2014, the Government Accountability Office (GAO) estimated that a gap exists between the Coast Guard's recapitalization needs and the President's budget request—a trend that has continued in subsequent years.⁶ For example, in 2018, an \$800 million gap existed between the Coast Guard's needs and the President's budget request. In an effort to address the funding constraints it has faced annually, the Coast Guard has been reactive, reducing its capability by delaying new acquisitions but the Service does not have a plan to realistically set forth affordable priorities.⁷ These shortcomings have seriously jeopardized Coast Guard capabilities across several vital areas, including shoreside infrastructure and surface assets.

III. COAST GUARD SURFACE ASSET ACQUISITION

OFFSHORE PATROL CUTTER (OPC)

The Coast Guard has stated that the acquisition of the OPC is its highest investment priority as it will be the work horse of the Coast Guard's offshore presence.⁸ The Service intends to replace its 29 medium-endurance Cutters, all of which have far surpassed their planned service lives and are becoming increasingly expensive to maintain and operate, with 25 OPCs.⁹

The first four OPCs are being built by Eastern Shipbuilding Group (ESG) of Panama City, Florida.¹⁰ Unable to meet the terms of the contract signed in 2018, ESG sought a cash infusion from the Coast Guard in order to maintain operations at their yard.¹¹ The Department of Homeland Security subsequently authorized up to \$659 million in relief for the yard, including up to \$65 million for costs not related OPC construction, in order to shore up the yard's financial position.¹²

On June 30, 2022, the Coast Guard announced it had awarded the phase-II fixed-price incentive contract to Austal USA of Mobile, Alabama, to produce up to 11 OPCs.¹³ The Service's proposed fiscal year (FY) 2024 budget requests \$579.0 million in procurement funding for the construction of the sixth OPC, the procurement of long lead-time materials (LLTM) for the seventh OPC, and other program costs.¹⁴

Although the OPC is labeled as a key priority for the Coast Guard, serious program mismanagement has led to long delays, cost overruns, and the emergence of a gap in the Coast Guard's medium endurance capabilities. A June 2023 GAO report found that the OPC's total acquisition cost estimate increased from \$12.5 billion to \$17.6 billion between 2012 and 2022.¹⁵ The program attributes the 40 percent increase to many factors, including restructuring the stage one contract [for OPCs one through four] and recompeting the stage two requirement [for OPCs five through 15].¹⁶ In addition, the program incurred a one and a half year delay in the delivery of the first four OPCs issues related to manufacturing the Cutter's propulsion system.¹⁷ GAO also found indicators that the shipbuilder's significant level of complex, uncompleted work may lead to further delays.¹⁸

⁴*Id.*

⁵*Id.*

⁶*Id.* at 12.

⁷*Id.* at 13.

⁸UNITED STATES COAST GUARD, *Acquisition Directorate, Offshore Patrol Cutter*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/Surface-Programs/Offshore-Patrol-Cutter/> [hereinafter COAST GUARD ACQUISITION DIRECTORATE]

⁹CONG. RSCH. SERV., R42567, COAST GUARD CUTTER PROCUREMENT: BACKGROUND AND ISSUES FOR CONGRESS 1 (June 21, 2023), available at <https://crsreports.congress.gov/product/pdf/R/R42567/162> [hereinafter COAST GUARD CUTTER PROCUREMENT].

¹⁰*Id.* at 10.

¹¹*Id.* at 9–10.

¹²UNITED STATES COAST GUARD, OFFSHORE PATROL CUTTERS ACQUISITION: EXTRAORDINARY RELIEF (FY 2022, FOURTH QUARTER) REP. TO CONG. (Mar. 8, 2023) (on file with Comm.).

¹³*Id.* at 13.

¹⁴*Id.* at 1.

¹⁵UNITED STATES GOV'T ACCOUNTABILITY OFF., GAO-23-105805, COAST GUARD ACQUISITIONS: OFFSHORE PATROL CUTTER PROGRAM NEEDS TO MATURE TECHNOLOGY AND DESIGN 28 (June 2023), available at <https://www.gao.gov/assets/gao-23-105805.pdf>.

¹⁶COAST GUARD CUTTER PROCUREMENT, *supra* note 9, at 28.

¹⁷*Id.* at 28.

¹⁸*Id.* at 37.

The GAO attributed these delays and cost overruns to fundamental flaws in the Coast Guard's design and construction process.¹⁹ The GAO found that the Coast Guard used a high-risk approach to the acquisition of the OPC that attempts to concurrently overlap the acquisition phases of technology development, design, and construction.²⁰ While some overlap is common in the industry, the Coast Guard has exceeded industry standards.²¹ Specifically, the Coast Guard does not require completion of basic and functional design, and maturity of all critical technologies, nor does it require completion of the design of distributive systems—systems that affect multiple zones of the ship—prior to construction of the lead ship.²² These approaches could, and likely will, result in the need for significant design rework late in construction, further increasing costs and delays.²³ This will subsequently extend the Coast Guard's dependence on its current fleet of medium-endurance cutters, continuing to strain the Coast Guard's budget with increased repair and maintenance costs.

POLAR SECURITY CUTTER (PSC)

The Coast Guard anticipates the need for enhanced Arctic capabilities in the coming years to support United States economic, security, and scientific interests.²⁴ The *Polar Star* is currently the Coast Guard's only operational heavy ice breaker. Commissioned in 1976, the *Polar Star* has far surpassed its regular service life and has been dependent on constant service life extension programs to allow it to function—heavily straining Coast Guard resources.²⁵

In 2019, the Coast Guard and United States Navy, operating through an integrated program office, awarded VT Halter Marine Inc. of Pascagoula, Mississippi, a fixed price incentive contract for the detail, design and construction of the lead PSC. The yard was subsequently purchased by Bollinger Mississippi. Construction on the first PSC was planned to begin in 2022, with contract delivery planned for the mid-2020s.²⁶ The contract includes financial incentives for earlier delivery. However, construction of the PSC has yet to begin due to design delays that have plagued the program, and the Coast Guard is unable to commit to a timeline for when the first PSC will be mission ready.²⁷

WATERWAYS COMMERCE CUTTER (WCC)

The Coast Guard maintains a fleet of inland water craft responsible for maintaining more than 28,200 marine aids to navigation throughout 12,000 miles of inland waterways, on which 630 million tons of cargo move annually.²⁸ The current fleet of inland tenders has been in operation for an average of more than 57 years, far exceeding their design service life.²⁹ The Coast Guard established the WCC Program after Congress provided funds to replace the capability provided by the inland tender fleet with 16 River Buoy Tenders, 11 Inland Construction Tenders, and three Inland Buoy Tenders.³⁰ To increase efficiency, these vessels will be self-propelled monohulls instead of the current tug-and-barge configuration.³¹

The Coast Guard has faced significant issues with the acquisition process as it relates to small business requirements. The initial contract was awarded to Birdon America, Inc., located in Denver, Colorado, in October of 2022. However, after the contract was awarded, challenges to the contract award were made based on the

¹⁹*Id.* at 16.

²⁰*Id.* at 15.

²¹*Id.* at 15.

²²*Id.* at 24.

²³*Id.* at 16.

²⁴UNITED STATES COAST GUARD, *Acquisitions Directorate, Polar Security Cutter*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/Surface-Programs/Polar-Icebreaker/> [hereinafter POLAR SECURITY CUTTER ACQUISITIONS].

²⁵*Id.*

²⁶*Id.*

²⁷*Review of Fiscal Year 2024 Budget Request for the Coast Guard: Hearing Before the H. Subcomm. on Coast Guard and Maritime Transp.*, 118th Cong. (2023) (response from Adm. Linda Fagan, Commandant of the United States Coast Guard).

²⁸UNITED STATES COAST GUARD, *Acquisitions Directorate, Waterways Commerce Cutter*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/Surface-Programs/WCC/>.

²⁹*Id.*

³⁰*Id.*

³¹CONG. RSCH SERV., IF11672, COAST GUARD WATERWAYS COMMERCE CUTTER (WCC) PROGRAM: BACKGROUND AND ISSUES FOR CONGRESS (2023), available at <https://crsreports.congress.gov/product/pdf/IF/IF11672>.

small business set aside requirements (FAR 52.219 14).³² Despite initially determining that Birdon met its small business requirements during its pre-decision evaluation, on May 26, 2023, the Small Business Administration (SBA) informed the Coast Guard that Birdon, under its WCC proposal, does not meet the status of a small business. The Coast Guard's legal analysis concluded that a new size determination does not prevent the Service from continuing contract performance; however, the Coast Guard continues to evaluate all potential options while the SBA proceedings progress.³³ As a result, the Service may be unable to count the WCC construction against its small business set-aside requirement.

NATIONAL SECURITY CUTTER (NSC)

The Legend-class National Security Cutter (NSC) is the most capable cutter in the Coast Guard's fleet, capable of executing challenging operations, including supporting maritime homeland security and defense missions. The Coast Guard's Program of Record (POR) originally called for eight NSCs to replace the Service's fleet of 12 high endurance cutters.³⁴ The NSCs were originally intended to operate in excess of 185 days per year to maximize operational capability, but based on crew and maintenance concerns, the Coast Guard now intends to operate the vessels for a maximum of 185 days per year.³⁵ Congress has funded 11 vessels. The tenth vessel is scheduled for delivery later this year.³⁶ As the NSC program winds down, that opportunity to acquire additional NSCs has likely been missed.

IV. COAST GUARD AIR ASSET ACQUISITION

MH-65 REPLACEMENT PROGRAM

The MH-65 currently makes up the majority of the Coast Guard's rotary-wing fleet, and the Service is the largest single operation of the platform in the world. However, in 2018 Airbus Helicopters announced it was ending production of the civilian variant of the MH-65, impacting the supply chain and resulting in shortages of critical parts for the fleet.³⁷ The Coast Guard is part of the Department of Defense's (DOD) Future Vertical Lift (FVL) program, which is expected to reach initial operating capability by the late 2030's and full operating capability by the late 2040's.³⁸ The Service Life Extension Program (SLEP) for the MH-65 will not be able to cover this gap, leaving the Coast Guard with a critical air capability shortage.³⁹

The Coast Guard intends to replace its existing fleet of MH-65s with MH-60s, a platform which the Service currently operates. Furthermore, the Coast Guard plans to replace them on a basis of flight-hour parity.⁴⁰ Due to the MH-60's higher endurance in comparison to the MH-65, the Coast Guard believes it can downsize its fleet without losing mission capability.⁴¹ There is considerable risk, however, that downsizing the fleet would dangerously limit the Coast Guard's ability to respond to simultaneous emergencies or mass causality events. At the same time, the introduction of a folding-tail design, used on the Navy's variant, which is needed to accommodate the larger aircraft on Coast Guard surface vessels, has the potential to introduce increased maintenance and operational challenges.⁴²

HC-130J ACQUISITION

The Coast Guard uses fixed wing assets to provide heavy air transport and long-range maritime patrol capability.⁴³ Each aircraft is capable of serving as an on-scene command and control platform or as a surveillance platform with the means

³² United States Coast Guard Briefing to Congress, Waterways Commerce Cutter (WCC) Contract Award Brief (June 21, 2023) (on file with Comm.) [hereinafter COAST GUARD CUTTER BRIEFING].

³³ Email from Earl Potter, Commander, United States Coast Guard, to Subcomm. on Coast Guard and Maritime Transp. Staff (May 30, 2023, 17:07 EST) (on file with Comm.).

³⁴ COAST GUARD ACQUISITION DIRECTORATE, *supra* note 8.

³⁵ UNITED STATES COAST GUARD, REPORT TO CONGRESS: ANALYZING COST AND PERFORMANCE FOR NATIONAL SECURITY CUTTER OPERATIONAL EMPLOYMENT (2023) (on file with Comm.).

³⁶ POLAR SECURITY CUTTER ACQUISITIONS, *supra* note 24.

³⁷ United States Coast Guard Briefing to Congress, Coast Guard Rotary-Wing Fleet Transition (January 24, 2023) (on file with Comm.) [hereinafter COAST GUARD ROTARY-WING BRIEFING].

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ UNITED STATES COAST GUARD, *Acquisitions Directorate, HC-130J Long Range Surveillance Aircraft*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/Air-Programs/LRS-HC-130J/>.

to detect, classify and identify objects, and share that information with operational forces across multiple domains.⁴⁴

The Coast Guard is acquiring a fleet of 22 new, fully missionized HC-130J aircraft to replace its legacy HC-130Hs.⁴⁵ Advances in engine and propeller technology incorporated in the HC-130J provides a 20 percent increase in speed and altitude, and a 40 percent increase in range compared to the outgoing HC-130H platform.⁴⁶ This will increase the Coast Guard's ability to respond to emergencies, conduct long range search and rescue, and counter illicit operations. H.R. 2741, The Coast Guard Authorization Act of 2023, which passed out of the Committee on April 26, 2023, authorizes \$138,500,000 for the acquisition or procurement of one missionized HC-130J aircraft.⁴⁷

V. INFORMATION TECHNOLOGY (IT)

The Coast Guard requires enhancements to its shoreside and cyber infrastructure to facilitate new assets and more complex mission sets. Currently, limitations in existing physical and data infrastructure have hindered newer platforms from utilizing the full scope of their capabilities. H.R. 2741, The Coast Guard Authorization Bill of 2023, authorizes \$36,300,000 to modernize the Coast Guard's IT systems.⁴⁸ The bill also provides additional funds for the Coast Guard to update the Merchant Marine Credentialing System, which will improve recruitment and retention efforts for Merchant Mariners.⁴⁹

Investment in IT capabilities will also allow the Service to better support its members. On April 9, 2018, DOD announced its intent to partner with the Coast Guard to deploy its electronic health record (EHR) capability across the Service's clinics and sick bays.⁵⁰ On June 7, 2018, the Coast Guard and the Defense Health Agency (DHA), the agency responsible for the DOD's health care system, signed an Inter-Agency Agreement that formally established the partnership to deploy MHS GENESIS.⁵¹ The Electronic Health Records Acquisition (EHRA) will modernize the Coast Guard's health care data management by acquiring an EHR solution in place of its primarily paper-based health record system.⁵² Having an EHR capability will make patient record retrieval easier and faster, reduce administrative errors, and allow electronic information exchange with the DOD, the Department of Veterans' Affairs, and commercial care providers.⁵³ The Coast Guard's EHR program, once fully implemented, will service all Coast Guard clinics and sick bays—ashore and afloat.

In November of 2021, the Coast Guard deployed the MHS GENESIS electronic health records (EHR) system to 26 clinics and 48 ashore sickbays within the Coast Guard Atlantic Area, completing the first segment of EHR system implementation for the service. With Segment A now complete, a total of 43 ashore clinics and 67 ashore sick bays are using MHS GENESIS for EHR management. The Pacific wave was completed earlier this fall. The program will now move to the next segment of the deployment strategy, known as Segment B. Segment B includes modernization of the Coast Guard's entire medical and dental radiology system. The Coast Guard is targeting completion for Segment B for early summer 2024. The final segment, Segment C, will extend an EHR capability to all afloat sickbays; that schedule is still being determined.⁵⁴

⁴⁴ *Id.*

⁴⁵ United States Coast Guard Briefing to Congress, Quarterly Acquisition Briefing (Feb. 2023) (on file with Comm.).

⁴⁶ COAST GUARD CUTTER BRIEFING, *supra* note 32.

⁴⁷ Coast Guard Authorization Act of 2023, H.R. 2741, 118th Cong. (2023).

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ UNITED STATES COAST GUARD, *Acquisitions Directorate, Electronic Health Records*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/C4ISR-Programs/Electronic-Health-Records-Acquisition/> [hereinafter ELECTRONIC HEALTH RECORDS DIRECTIVE].

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

⁵⁴ UNITED STATES COAST GUARD, *Coast Guard launches electronic health records system in Atlantic Area*, available at <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Newsroom/Latest-Acquisition-News/Article/2838468/coast-guard-launches-electronic-health-records-system-in-atlantic-area/>.

VI. SHORESIDE INFRASTRUCTURE

The Coast Guard owns or leases more than 20,000 shore facilities, such as piers, docks, boat stations, air stations, and housing units at more than 2,700 locations.⁵⁵ Coast Guard shoreside infrastructure is aging rapidly, with 40 percent of its buildings being 50 years or older.⁵⁶ These buildings and infrastructure are also exposed to harsh environments, with salt air, high winds, and water contributing to their corrosion.⁵⁷

The Coast Guard's Office of Civil Engineering sets agency-wide civil engineering policy, which includes facility planning, design, construction, maintenance, and disposal of real property.⁵⁸ The Service's Shore Infrastructure Logistics Center (SILC), established in 2009, is tasked with the management and coordination of infrastructure condition assessments via six regional Civil Engineering Units (CEUs), along with other divisions and offices, in addition to implementing shore infrastructure policies.⁵⁹ The condition of individual shore infrastructure assets is determined by CEU personnel and civil engineers in the field.⁶⁰ According to the Service, every facility is to be inspected by a CEU representative every three years.⁶¹

A 2019 GAO report stated that the Coast Guard has more than a \$2.6 billion backlog in deferred or overdue maintenance, repair, and recapitalization work for its shoreside infrastructure.⁶² Importantly, the Service estimates that when factoring in recapitalization projects for which it has not made cost estimates on, the recapitalization backlog likely exceeds \$3 billion.⁶³ The 2023 Coast Guard Authorization Act authorizes \$400,000,000 for maintenance, construction, and repairs for Coast Guard shoreside infrastructure.⁶⁴

VII. WITNESSES

- Vice Admiral Paul Thomas, Deputy Commandant for Mission Support, United States Coast Guard
- Marie Mak, Director, Contracting and National Security, United States Government Accountability Office

⁵⁵ UNITED STATES GOV'T ACCOUNTABILITY OFF., GAO-19-82 COAST GUARD SHORE INFRASTRUCTURE, available at <https://www.gao.gov/assets/700/697012.pdf>.

⁵⁶ Mike Gooding, "USCG Commandant says infrastructure 'antiquated' and 'crumbling,'" 13NEWSNOW, (Feb. 20, 2020), available at <https://www.13newsnow.com/article/news/national/military-news/uscg-commandant-says-infrastructure-antiquated-and-crumbling/291-80c90197-1e82-4ecd-92f7-c6a9b07f954a>.

⁵⁷ *Id.*

⁵⁸ ELECTRONIC HEALTH RECORDS DIRECTIVE, *supra* note 50.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ COAST GUARD ROTARY-WING BRIEFING, *supra* note 37.

**REVIEW OF THE RECAPITALIZATION OF THE
UNITED STATES COAST GUARD SURFACE,
AIR, IT, AND SHORESIDE ASSETS**

Thursday, July 27, 2023

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COAST GUARD AND MARITIME
TRANSPORTATION,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:32 p.m. in room 2253 Rayburn House Office Building, Hon. Daniel Webster (Chairman of the subcommittee) presiding.

Mr. WEBSTER OF FLORIDA. The Subcommittee on Coast Guard and Maritime Transportation will come to order.

I ask for unanimous consent that the chairman be authorized to declare a recess at any time during the hearing, and without objection, show that ordered.

I also ask unanimous consent that Members who are not members of the subcommittee be permitted to sit in the subcommittee today and ask questions during the hearing.

Without objection, show that ordered.

As a reminder, if you have a document to submit, submit it to the House also at DocumentsTI@mail.house.gov.

I now recognize myself for the purpose of an opening statement for 5 minutes.

**OPENING STATEMENT OF HON. DANIEL WEBSTER OF FLORIDA,
CHAIRMAN, SUBCOMMITTEE ON COAST GUARD AND
MARITIME TRANSPORTATION**

Mr. WEBSTER OF FLORIDA. Before we begin the discussion of the hearing topic at hand, I want to commend the Coast Guard for undertaking Operation Fouled Anchor, an investigation of sexual assault and harassment incidents at the Coast Guard Academy from the late 1980s to early 2000s. As a grandfather of 13 granddaughters, I was horrified by the report, and the Service must use the data gleaned from this review to better protect future cadets.

However, like many of my colleagues, I urge the Coast Guard to share important Service oversight actions with Congress as a routine matter of day-to-day operations, rather than being forced to do it by some sort of press pressure.

Turning now to the topic at hand, today our subcommittee will receive testimony on the Coast Guard's efforts to recapitalize its surface, air, IT, and shoreside assets. I would like to welcome our

witnesses, Vice Admiral Paul Thomas, Deputy Commandant of the Coast Guard for mission support, and Marie Mak, Director of Contracting and National Security Acquisitions at the United States Government Accountability Office.

Ms. Mak, I understand, is retiring at the end of next month, and this will probably be the last of the many congressional hearings you have attended. This will be it. So, I hope we will make it memorable, but not too memorable.

[Laughter.]

Mr. WEBSTER OF FLORIDA. On behalf of the subcommittee, I would like to thank you for your contributions over the last decade to the subcommittee's oversight of Coast Guard acquisition programs. Thank you so much. I appreciate that. In the spirit of today's hearing, we all wish you fair winds and following seas as you embark on your next chapter.

The Coast Guard is in the middle of a multidecade recapitalization campaign to replace aging surface and air assets. There have been many successes in this effort. The Coast Guard is nearing completion of the 11-ship *Bertholf* class National Security Cutters and the, at present, 64-ship *Webber* class Fast Response Cutters.

The Coast Guard has acquired 15 C-130J long-range aircraft; 18 C0144s, and 14 C-27 mid-range aircraft, and reengined the MH-65 rotary-wing aircraft. Are those still available? The Service has also made significant investments in the shoreside facilities necessary to homeport these new assets, but many additional home port and hangar upgrades are needed.

Unfortunately, no administration of either party has requested anything even approaching the resources necessary to carry out this recapitalization in an efficient and cost-effective manner. Congress has provided more resources than those requested by multiple administrations, but Congress was only able to go so far beyond the requested levels. These paltry budgets dramatically stretch out timelines for these programs.

The Coast Guard says that the timeline has moved to the right. It has. It keeps moving. Program delays always raise program costs. They delay the implementation of the next-in-line programs. These delays also reduce the Coast Guard's mission capability as legacy assets degrade. In addition, older assets require greater maintenance and repair, and costs increase.

Delays prevent the Service from maintaining its shoreside assets, and they prevent the Coast Guard from meaningful participation in the ongoing digital revolution. Throughout this long saga—made longer by severely constrained budgets—world and domestic events, new and evolving congressional and executive branch policy priorities, and rapidly changing maritime technology have all contributed to expanding the scope and requirements of Coast Guard mission responsibilities.

In short, we expect the Coast Guard to do more without giving them the resources to carry out their existing programs.

This committee has consistently produced bills that authorized the amounts we believe are the minimum necessary to keep the Service from falling behind. However, appropriations and administration budget requests then leave the Coast Guard at the dock, al-

lowing mission capability creep downward while increasing maintenance and construction backlogs.

Nonetheless, this subcommittee will continue to authorize the procurement, construction, and improvement account at levels that would at least keep the Coast Guard from losing more ground. This is not to say that the Coast Guard doesn't have acquisition problems of its own making. In the future, the committee hopes that the Coast Guard will use proven parent craft designs, and design first, then build.

The subcommittee looks forward to hearing today how the Coast Guard will upgrade and replace aging shoreside infrastructure and antiquated IT systems; build its largest, most expensive single class of ships; and replace the rapidly aging H-65s over the next 15 years.

So, this is a lot longer than I thought it would be, so, I am going to stop there. That is plenty of stuff said already, and we just appreciate this opportunity we have.

But I just wanted to say the subcommittee is deeply concerned about the limited ability of the Service to access data about the United States documented vessels. As the Federal entity tasked with documenting vessels, that information should be at your fingertips, and it isn't.

[Mr. Webster of Florida's prepared statement follows:]

**Prepared Statement of Hon. Daniel Webster of Florida, Chairman,
Subcommittee on Coast Guard and Maritime Transportation**

Before we begin discussion of the hearing topic at hand, I want to commend the Coast Guard for undertaking Operation Fouled Anchor, an investigation of sexual assault and harassment incidents at the Coast Guard Academy from the late 1980's through the early 2000's. As a grandfather of 13 granddaughters, I was horrified by the report, and the Service must use the data gleaned from this review to better protect future cadets.

However, like many of my colleagues, I urge the Coast Guard to share important Service oversight actions with Congress as a routine matter of day-to-day operations, rather than being forced to do so by impending press coverage.

Turning now to our hearing topic, today our subcommittee will receive testimony on the Coast Guard's efforts to recapitalize its surface, air, IT, and shoreside assets. I'd like to welcome our witnesses—Vice Admiral Paul Thomas, Deputy Commandant of the Coast Guard for Mission Support, and Marie Mak, Director of Contracting and National Security at the United States Government Accountability Office.

Ms. Mak, I understand that you will be retiring at the end of next month, and this will be the last of many Congressional hearings at which you have testified for GAO. On behalf of the Subcommittee, I would like to thank you for your contributions over the last decade to the Subcommittee's ongoing oversight of Coast Guard acquisition programs. In the spirit of today's hearing, we all wish you fair winds and following seas as you embark on your next chapter.

The Coast Guard is in the middle of a multi-decade recapitalization campaign to replace its aging surface and air assets. There have been many successes in this effort. The Coast Guard is nearing completion of the 11-ship BERTHOLF class National Security Cutters, and the, at present, 64-ship WEBBER class Fast Response Cutters.

The Coast Guard has acquired 15 C-130J long range aircraft, 18 C-144, and 14 C-27 medium range aircraft, and reengined the MH-65 rotary wing aircraft. The Service has also made significant investments in the shoreside facilities necessary to homeport these new assets, but many additional homeport and hangar upgrades are needed.

Unfortunately, no administration of either party has requested anything even approaching the resources necessary to carry out this recapitalization in an efficient and cost-effective manner. Congress has provided more resources than those re-

quested by multiple administrations, but Congress was only able to go so far beyond the requested levels. These paltry budgets dramatically stretch out timelines for these programs. The Coast Guard says, “The timeline has moved to the right,” almost as often as it says “Semper paratus.”

Program delays always raise program costs. They delay implementation of the next-in-line programs. These delays also reduce the Coast Guard’s mission capability as legacy assets degrade. In addition, older assets require greater maintenance and repair, and costs increase.

Delays prevent the Service from maintaining its shoreside assets, and they prevent the Coast Guard from meaningfully participating in the ongoing digital revolution. Throughout this long saga, made longer by severely constrained budgets, world and domestic events, new and evolving Congressional and Executive Branch policy priorities, and rapidly changing maritime technology have all contributed to expanding the scope and requirements of Coast Guard mission responsibilities.

In short, we expect the Coast Guard to do more without giving them the resources to carry out their existing programs. This committee has consistently produced bills that authorized the amounts we believe are the minimum necessary to keep the Service from falling behind. However, appropriations and administration budget requests then leave the Coast Guard at the dock, allowing mission capability creep downward while increasing maintenance and construction backlogs.

Nonetheless, this subcommittee will continue to authorize the Procurement, Construction and Improvement Account at levels that would at least keep the Coast Guard from losing more ground. This is not to say that the Coast Guard doesn’t have acquisitions problems of its own making. In the future, the Committee hopes the Coast Guard will use proven parent craft designs, and design first, then build.

The Subcommittee looks forward to hearing today how the Coast Guard will upgrade and replace its aging shoreside infrastructure and antiquated IT systems, build its largest, most expensive single class of ships, and replace its rapidly aging H-65s over the next 15 years.

While the Coast Guard must be commended for squeezing the most out of its current assets, we owe the men and women of the Coast Guard—from whom we expect so much and always get even more—the adequate tools and resources to do their jobs effectively and safely. Efforts to secure new Polar Security Cutters and Offshore Patrol Cutters are still in relatively early stages. And work is also underway to replace the Service’s inland tender fleet.

The Committee looks forward to learning how these programs are going to be completed.

We are particularly interested in whether the Department of Homeland Security and the Office of Management and Budget support building two Offshore Patrol Cutters each year. Without a two-a-year strategy, which the Coast Guard has long advocated, current Medium Endurance Cutters will age out before replacements are available.

Additionally, unless Polar Security Cutters come online by 2028, the United States polar region presence will be maintained by the then nearly 30-year-old HEALEY, a research icebreaker. Russia and China, not even an Arctic Nation, will both have a significant polar operational presence by then. We should not expect academic fishery biologists and physical oceanographers, however talented they may be, to be the first line of United States sovereignty in the Arctic.

A new fleet of Polar Security Cutters is critical to advancing our Nation’s sovereignty in the polar regions. The program is half a decade behind its unrealistic original schedule. I am optimistic that new leadership at the shipyard is moving the program forward. I look forward to hearing from our witnesses on how the Coast Guard will correct missteps in the procurement and contracting process.

Coast Guard aviation also needs to replace its no-longer-manufactured MH-65s. While the MH-60 is more capable than the MH-65, I oppose the plan to reduce the total number of aircraft. I am also concerned about the proposed MH-60 modifications needed for sea operations.

As the Coast Guard modernizes its aviation assets, hangars and other ground assets also need to keep pace. The Committee will continue to monitor progress as the Coast Guard builds a new hangar at Barbers Point.

Finally, these assets, new and old, require IT and shoreside support. The Coast Guard’s IT infrastructure, including its merchant mariner credentialing system, is antiquated and presents serious limitations.

The Coast Guard Authorization Act of 2023, reported out by this Committee, authorizes \$36.3 million to modernize the Coast Guard’s IT systems, including \$11 million for a new Merchant Mariner Credentialing System. The Subcommittee is also deeply concerned about the limited ability of the Service to access data about

United States documented vessels. As the federal entity tasked with documenting vessels, that information should be at your fingertips.

To our witnesses—thank you for participating today. I look forward to a candid discussion on how Congress can support the Coast Guard’s efforts to modernize its assets, systems, and facilities.

Mr. WEBSTER OF FLORIDA. So, anyway, now I would like to recognize Ranking Member Carbajal for an opening statement for 5 minutes.

You are recognized.

OPENING STATEMENT OF HON. SALUD O. CARBAJAL OF CALIFORNIA, RANKING MEMBER, SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION

Mr. CARBAJAL. Thank you, Chairman Webster, and I will take up the rest of your time that you don’t want to take on.

[Laughter.]

Mr. CARBAJAL. So, today we are gathered here to discuss and review the Coast Guard’s acquisition programs for new cutters, boats, airplanes, helicopters, shoreside infrastructure, and information technology.

Prior to getting started, I would like to echo the concerns expressed by Chairman Webster regarding the Coast Guard’s handling of sexual assault and harassment cases during the 1980s through the early 2000s. The investigation itself, dubbed Operation Fouled Anchor, took place from 2014 through 2020.

After the conclusion of the investigation, the Coast Guard then made the reprehensible and irresponsible decision to hide the investigation—to hide the investigation—and its findings from Congress and the American public, as well. Victim privacy is a paramount concern, but choosing not to disclose to Congress the existence of the investigation and purposely hiding it from any reporting mechanism is shameful, to say the least.

Earlier this week, Ranking Member Larsen, Vice Ranking Member Scholten, and I sent a letter to the GAO requesting they review the Coast Guard’s handling of this investigation and management of their Sexual Assault Prevention, Response, and Recovery Program. I look forward to getting answers and improving Coast Guard procedures.

To all the victims that never saw justice and went unheard for years, we hear you and feel your pain. You were brave for coming forward and deserve closure. We will do our best to remedy this and prevent this from happening to other servicemembers. I am sorry you have to relive this pain again.

Now, turning to the topic of this hearing, the Coast Guard is in the middle of modernizing their fleet, and yet they continue to operate ships that are well past their intended service life. This is in part due to lack of funding from Congress, but also due to delays in production of newer cutters.

As we have learned from multiple GAO reports, the Coast Guard’s acquisitions typically come in delayed and over budget. This is concerning. This is a concerning trend that I hope we can get to the bottom of today, but it is not something that can be fixed overnight.

Improving the acquisition program requires investing more into the Coast Guard so that they can bolster their oversight. It also requires investing more in U.S. shipbuilding to ensure we have shipyards capable of building the assets we need. U.S. shipyards depend on contracts from the Navy and Coast Guard to support their business, but the Coast Guard is often outbid by the size and value of Navy contracts.

We must bring on new cutters, shoreside infrastructure, and IT systems quickly. Not only do modern assets mean improved mission readiness, they also mean better quality of life for our Coasties. Newer cutters mean better connectivity and ability for Coasties to contact their families while at sea, leading to improved mental health and higher retention rates.

Servicemembers want their families to live in the best quality housing. That starts with investing more in shoreside infrastructure and eliminating the estimated \$3 billion backlog.

Ultimately, our servicemembers deserve to live and work in assets that aren't on the brink of failure. Congress and Coast Guard leadership owe it to the personnel to deliver this. That is why we cannot revert to fiscal year 2022 funding levels, and we must fund the Coast Guard at a higher level than requested.

GAO has recognized that the funding typically requested by the Coast Guard underestimates their needs for recapitalization.

Before I conclude, I want to wish Ms. Mak congratulations on a successful career in public service and wish you a happy retirement. You and your team have done important oversight, and I thank you for all your hard work.

With that, I yield back, Mr. Chair.

[Mr. Carbajal's prepared statement follows:]

Prepared Statement of Hon. Salud O. Carbajal of California, Ranking Member, Subcommittee on Coast Guard and Maritime Transportation

Today, we're gathered here to discuss and review the Coast Guard's acquisition programs for new cutters, boats, airplanes, helicopters, shoreside infrastructure and information technology.

Prior to getting started, I would like to echo the concerns expressed by Chairman Webster regarding the Coast Guard's handling of sexual assault and harassment cases during the 1980's through early 2000's. The investigation itself, dubbed "Operation Fouled Anchor," took place from 2014 through 2020.

After the conclusion of the investigation, the Coast Guard then made the irresponsible decision to hide the investigation and its findings from Congress and the American public.

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GAO has recognized that the funding typically requested by the Coast Guard underestimates their needs for recapitalization.

Before I conclude, I want to wish Ms. Mak congratulations on a successful career and wish you a happy retirement. You and your team have done important oversight and I thank you for all of your hard work.

With that, I yield back.

Mr. WEBSTER OF FLORIDA. Now I would like to welcome our witnesses and thank them for being here today.

Briefly, I would like to take a moment to explain our lighting system. When the light is green, you can talk. When it gets yellow, it is about time to wrap it up. And red means stop. So, that is pretty much it.

I also ask unanimous consent that the witnesses' full statements be included in the record.

Without objection, show that ordered.

As your written testimony is made a part of the record, the committee asks that you limit your remarks to 5 minutes.

With that, Vice Admiral Thomas, you are recognized for 5 minutes for your testimony.

**TESTIMONY OF VICE ADMIRAL PAUL F. THOMAS, DEPUTY
COMMANDANT FOR MISSION SUPPORT, U.S. COAST GUARD;
AND MARIE A. MAK, DIRECTOR, CONTRACTING AND NATIONAL
SECURITY ACQUISITIONS, U.S. GOVERNMENT AC-
COUNTABILITY OFFICE**

**TESTIMONY OF VICE ADMIRAL PAUL F. THOMAS, DEPUTY
COMMANDANT FOR MISSION SUPPORT, U.S. COAST GUARD**

Admiral THOMAS. Good afternoon, Chairman Webster, Ranking Member Carbajal, and distinguished members of the subcommittee. Thank you for this opportunity to speak about our Coast Guard's ongoing activities to recapitalize our surface and aviation fleets, our C5ISR and information technology, and our shore infrastructure. On behalf of the Commandant and our entire Coast Guard workforce, I express my sincere appreciation for your oversight and for your continuous support of our Service and our servicemen and servicewomen.

While this hearing's focus is on Coast Guard recapitalization efforts, I must address the recent reports that you have mentioned of our failure to respond properly to sexual assaults that occurred at the Coast Guard Academy between 1988 and 2006.

As you are aware and have mentioned, in 2014, we launched an extensive investigation into incidents alleged to have occurred during that time. And while we took action in cases in which we had jurisdiction, and we informed individual victims of our findings, we did not disclose the investigation or its findings to you, thereby depriving Congress of the opportunity to conduct proper oversight.

I echo our Commandant's recent testimony in saying that was a failure on the part of the Coast Guard, and we own it.

Our Service and our Academy have made much progress in our Sexual Assault Prevention, Response, and Recovery Program. But there is still work to do. This month, the Commandant directed a 90-day accountability and transparency review of our Service, led by a flag officer, and intended to ensure that we are doing absolutely everything possible to provide a culture where everyone is safe and valued.

We are committed to improving our prevention efforts, we are committed to prompt and thorough investigations into reports of sexual assault and harassment, and we are committed to accountability for perpetrators, compassionate support to victims, and full transparency with Congress, our crews, and the American people. We are also committed to our mission and our service to America. And with this subcommittee's continued support, we have made tremendous progress across our portfolio of acquisition programs and shore infrastructure projects.

However, we face tremendous challenges in this regard. Lingering delays from COVID-19, continuing supply chain restrictions, a shrinking labor pool and industrial base, record inflation, and the sheer complexity of the ships, aircraft, and systems that we are acquiring have resulted in risk to cost and risk to schedule across our portfolio. These challenges are not unique to the Coast Guard; our fellow services, Federal partners, and the private sector are facing them, as well.

To meet these challenges and advance the Service's recapitalization efforts while properly planning for mission execution, we must have stable, predictable funding. Our Commandant has stated our Coast Guard must be a \$20 billion organization by 2033. That means a 3- to 5-percent annual budget growth over inflation. Right now, increasing O&S costs caused by inflation reduce our ability to invest in recapitalization.

Simply put, most of our recent funding increases go to running our Service, not to recapitalizing it.

Despite these challenges, we are operating or building our fleet of the future, and delivering systems capability that will double down on our return investment. Our Offshore Patrol Cutter stage 1 contractor is poised to launch the first ship of that class this fall and deliver next year. I visited the shipyard and climbed aboard that ship. These will be tremendous ships that have enduring value for our Nation for years to come.

And alongside the Navy, we are working with the new Polar Security Cutter contractor to accelerate detailed design and ensure

readiness for full-scale production. This month, fabrication of the first prototype module will begin as we prepare for full construction next year. And we are excited that the design for the Waterways Commerce Cutter is progressing well, and we are on track to begin construction next year and deliver the first ship of that class in fiscal year 2026.

We are also delivering new and recapitalized aviation assets, including standardized missionization packages across our fixed-wing fleet. And with your support, we are upgrading and extending life on the 865 and the 860 helicopters while moving to a fleet of all 860s as a bridge to the future vertical-lift capability of the 2040s.

The Service continues to invest in home port upgrades to strategically pair the delivery of new and recapitalized assets with investments in our shore infrastructure. We are taking steps to address the extensive backlog of shore infrastructure projects, and we are committed to investing in these priorities to ensure world-class infrastructure for the world's best Coast Guard.

Thank you for your efforts to provide our women and men in uniform with the mission capability they need to provide mission excellence to our Nation.

I appreciate the opportunity to testify, and I look forward to any questions you may have.

[Admiral Thomas' prepared statement follows:]

**Prepared Statement of Vice Admiral Paul F. Thomas, Deputy Commandant
for Mission Support, U.S. Coast Guard**

INTRODUCTION

Good afternoon, Chairman Webster, Ranking Member Carbajal, and distinguished members of the Subcommittee. Thank you for your continued oversight and strong support of the Coast Guard. I am honored to appear before you today to update you on our ongoing efforts to recapitalize our aging surface and aviation fleets; Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR) systems; and shore infrastructure.

We have never experienced a greater demand for Coast Guard services, and we anticipate this demand to grow in the future. We are focused on delivering capabilities to meet these demands and confront the dynamic and complex challenges that our Coast Guard men and women face. New and more capable Coast Guard cutters, aircraft, boats, and C5ISR systems support mission execution domestically and in some of the most challenging environments around the world, including the Polar Regions, Indo-Pacific, and Persian Gulf.

Our Commandant has spoken about the need to adapt to the ever-increasing pace of change and provide our Coast Guard men and women with modern assets, systems, and infrastructure to support mission execution. In line with this direction, the Service continues to invest in acquisition programs that provide the assets and capabilities the Service needs to execute our missions world-wide. Additionally, the Coast Guard continues to prioritize investments in our shore infrastructure, where every mission begins and ends: the facilities, piers, runways, and buildings, which are as necessary for operations as our ships, boats, aircraft, and C5ISR systems.

Indeed, recapitalization remains a top priority for the Commandant and the Service, and today's efforts to invest in tomorrow's needs will shape the Coast Guard and impact national security for decades. This Subcommittee's continued support has helped us make tremendous progress, and it is that critical we field assets that improve mission execution and deliver the capabilities the Nation needs. Simply put, we must act today to be prepared for tomorrow.

THE COAST GUARD ACQUISITION ENTERPRISE

As the Chief Mission Support Officer of the Coast Guard, I lead a talented team of professionals dedicated to building and maintaining a modern force of assets, in-

rastructure, and systems that meet the needs of the Service. Acquisitions require executable strategy which considers the need to plan and scope acquisitions before work begins; to oversee the design and production processes; and to prepare future crews and the maintenance community for the delivery and future operation of new capabilities.

To bolster acquisition oversight, the Coast Guard developed an acquisition governance structure, pursued continued refinement of that structure, strengthened processes, institutionalized the roles of our technical authorities, and focused on recruiting and retaining a highly capable and trained acquisition workforce. We continue to implement initiatives to minimize acquisition risks and maximize affordability within our programs. We leverage the experience and expertise of our partners to perform key functions and guide Coast Guard decision-makers throughout the acquisition life cycle.

STATUS OF KEY ACQUISITION EFFORTS

The Coast Guard continues to make progress in our efforts to recapitalize the Coast Guard fleet and support systems. The Service is taking delivery of new cutters, aviation assets, boats, C5ISR capabilities, and upgraded shore infrastructure and investing in critical mission-enabling service life extensions, major maintenance, and key upgrades of the legacy surface and aviation fleet to enhance mission readiness and performance.

Surface Programs:

With the strong support of this Subcommittee, we are moving forward with the acquisition of the Nation's first new heavy polar icebreakers in over four decades. Polar Security Cutter (PSC) design activities are ongoing, and initial long lead-time material has been delivered to the shipyard. Recognizing the critical need for these assets, the Service is working closely with the prime contractor to mitigate schedule risks and ensure production readiness. When fully operational, PSCs will provide the global reach and icebreaking capability necessary to project U.S. sovereignty and influence, conduct Coast Guard missions in the high latitudes, and advance our national interests in the Arctic and Antarctic regions.

The Offshore Patrol Cutter (OPC) remains a top acquisition priority for the Service and is vital to recapitalizing the capability provided by our legacy fleet of 210-foot and 270-foot Medium Endurance Cutters (MEC). The program is progressing, with production of OPCs 1-4 underway with the Stage 1 contractor. Additionally, the Service is continuing with design activities on the Stage 2 contract, which will lead to the future production of up to 11 additional OPCs. As a bridging strategy to maintain mission capabilities until the OPCs are delivered, the Coast Guard has undertaken a service life extension program (SLEP) that will address key systems and component obsolescence on board the MECs, many of which already exceed 50 years in service.

On October 5, 2022, the Coast Guard awarded the Waterways Commerce Cutter (WCC) contract for the design and future production of the river buoy tender and inland construction tender variants. The contract includes options for production of up to 27 cutters, and a separate effort is planned to deliver three inland buoy tenders to achieve a total fleet of 30 WCCs.

The prime contractor began design activities earlier this year. Investment in our inland fleet is critical to the continued operation of the Nation's Marine Transportation System, which accounts for more than \$4 trillion in annual economic activity. The legacy fleet is approaching obsolescence, maintenance costs are rising, and the vast majority of these cutters do not support mixed-gender berthing. Continued progress toward delivering these new assets and replacing the legacy fleet, which has an average age of over 55 years, is critical to maintaining the Coast Guard's capability to execute this important mission.

The Service continues to deliver National Security Cutters (NSC) and Fast Response Cutters (FRC) to the fleet, providing game changing capabilities to operational commanders and supporting expanded mission demands around the globe. The Coast Guard plans to take delivery of NSC 10, CGC *Calhoun*, later this year and has commissioned 52 FRCs into service (out of a program of record of 65 cutters).

In concert with our efforts to acquire new assets, we are also focused on sustaining and improving our existing fleet through the In-Service Vessel Sustainment (ISVS) program. In recent years, the Coast Guard has completed the SLEP for the 140-foot icebreaking tug class and Coast Guard Cutter *Eagle* at the Coast Guard Yard in Curtis Bay, Maryland. The Service is approaching the completion of Major Maintenance Availability activities for the 225-foot seagoing buoy tenders; the last

cutter is scheduled to leave the Coast Guard Yard in early 2024. After initiating two prototypes of a 270-foot MEC SLEP, industrial work on production began earlier this month.

In addition, the ISVS program is overseeing continued SLEP work on Coast Guard Cutter *Polar Star*, the Service's only operational heavy polar icebreaker. The cutter recently began the third of five planned annual work periods to enable continued operation of the aging cutter and availability for the annual breakout of national facilities in Antarctica's McMurdo Sound.

The Coast Guard is also making investments across the boat fleet, producing the next generation of cutter boats to enhance interdiction capabilities of parent cutters. Additionally, the Service initiated efforts to recapitalize the 52-foot heavy weather boat, a special purpose craft, and achieved Acquisition Decision Event One in April. The Coast Guard is also performing SLEP activities to extend the useful service life of the Service's 47-foot motor lifeboats by replacing obsolete, unsupported, or maintenance-intensive equipment, and standardizing configuration across the fleet.

Aviation Programs:

The Service began production of new MH-60 hull components in March 2023 to support the ongoing SLEP and continued transition of the rotary-wing fleets to a single airframe. When combined with structural fitting and dynamic component replacements through the SLEP, the new hulls will extend the service life of the Coast Guard's vertical lift capability into the 2040s. Service life extension work also continues on the H-65 fleet, including critical avionics upgrades. Nearly 70 upgraded MH-65Es are performing operations at 11 Coast Guard air stations across the Nation.

Acquisition of new C-130J airframes and missionization of the fixed-wing fleet (comprised of HC-130J long range surveillance aircraft and HC-27J/HC-144B medium range surveillance aircraft) are significantly enhancing the Coast Guard's capabilities to conduct airborne surveillance, detection, classification, and identification of vessels and other aircraft missions in coordination with the surface fleet and shoreside facilities.

The Coast Guard is delivering standardized missionization packages based on the U.S. Navy's Minotaur Mission System Suite that improve system performance, address obsolescence concerns, improve cyber security of the mission system, and increase compatibility with Department of Defense and Department of Homeland Security assets and systems.

Additionally, the Coast Guard continues to leverage the use of unmanned aircraft system (UAS) capabilities to support the surveillance and maritime domain awareness capabilities of the NSC fleet. All nine operational NSCs have been equipped with UAS infrastructure and equipment and routinely deploy with UAS capabilities as part of the cutter's total force package.

C5ISR and Information Technology Programs:

The Coast Guard is acquiring C5ISR and Information Technology (IT) systems that enhance the mission capabilities of new and recapitalized Coast Guard assets to operate in challenging environments. The systems provide standardized capability to major cutters and aircraft, enabling assets to receive, evaluate and act upon information, and facilitate interoperability and information sharing inside and outside the Coast Guard. IT efforts like the Coast Guard Logistics Information Management System (CG-LIMS) acquisition program and Cyber and Enterprise Mission Platform address needs to replace and modernize obsolete support systems to improve mission readiness and operational effectiveness.

Shore Infrastructure:

As the Commandant noted in her testimony before the Subcommittee, shore facility maintenance and recapitalization are critical to mission success. New, more capable assets must be paired with investments in our infrastructure needs. With the support of this Subcommittee and others, we are making progress towards addressing the extensive backlog of shoreside infrastructure projects. The Coast Guard is committed to taking a leading-edge approach to project planning and execution to ensure the Service has the modern and resilient infrastructure required to meet the operational demands of today and tomorrow.

CONCLUSION

Since 1790, the Coast Guard has safeguarded our Nation's maritime interests and natural resources on our rivers, in our ports, on the high seas, and around the world. Each day, the Coast Guard carries out its missions to protect lives, protect the environment, secure our maritime borders, and facilitate commerce. Our mission

support and acquisition enterprises are, likewise, working each day to plan and deliver the assets and capabilities needed to support these critical missions.

The cutters, aircraft, boats, C5ISR systems, and shoreside infrastructure we acquire today will provide vital capability for decades to come. We are committed to maximizing the Nation's return on these important investments. Thank you for the opportunity to testify before you today and for all you do for the women and men of the U.S. Coast Guard. I look forward to answering your questions.

Mr. WEBSTER OF FLORIDA. Thank you very much. So, next we have Ms. Mak, and you are recognized for 5 minutes for your testimony.

TESTIMONY OF MARIE A. MAK, DIRECTOR, CONTRACTING AND NATIONAL SECURITY ACQUISITIONS, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. MAK. Good afternoon, Chairman Webster, Ranking Member Carbajal, and members of the subcommittee. Thank you for your kind words, and for inviting me here today to discuss Coast Guard's recapitalization efforts, and for valuing GAO's work over the years.

Thank you also to the Coast Guard for recognizing our role and working with us to improve mission capabilities, how mission capabilities are acquired and delivered.

I first testified before this committee on the same topic back in June 2017. As I reflected back from then to now, there are two constants: one, there is no doubt that these efforts to recapitalize continue to be critical for the Coast Guard to conduct its missions; two, unfortunately, the Coast Guard's highest priority acquisition programs continue on without sound business cases.

A sound business case balances the necessary resources and knowledge needed to transform a chosen concept into a product. Our most recent reports on the Offshore Patrol Cutter (OPC) and Polar Security Cutter (PSC) indicate that the Coast Guard is not on track to deliver new ships on time or at initial estimated cost. This is because, without requisite knowledge, they continue to make optimistic assumptions about what they and their contractors can achieve.

The Coast Guard has time after time prioritized moving quickly through the acquisition life cycle without obtaining critical levels of knowledge at key points in the process, and before making significant investments.

But the Coast Guard is not unique from other military organizations when it comes to generally disappointing acquisition results. Like many other military organizations, the Coast Guard is driven to be overly optimistic, to overpromise performance at unrealistic cost and schedule, and, to put it simply, they do so to obtain funding. These incentives are more powerful than the policies to follow leading acquisition practices such as establishing sound business cases.

The budget process also provides incentives for programs to be funded before sufficient knowledge is available to make key decisions. However, the impact of not taking the time to gain the right knowledge at the right time is costly. The Coast Guard uses the optimistic estimates of cost, schedule, and design maturity to inform its planning and budgets. Then, inevitably, as in most current acquisitions, when the ship's design and construction face challenges

that increase cost and elongate schedules, the Coast Guard has to budget for these overruns, and critical future efforts are pushed off to pay for these overruns.

The lack of sound business cases is also showing up in significant cost growth to sustain its existing assets. The Coast Guard has spent hundreds of millions of dollars on extending the older assets' service lives so that missions can be performed while waiting for the new assets. If this continues, affordability concerns will also continue.

The Coast Guard can continue to remain in this reactive mode, delaying and reducing its capabilities slowly over time. But this is not an optimum approach, to say the least. As the Coast Guard continues modernizing its fleet and sustaining existing assets for much longer than planned, it is important that it develop sound business cases as part of a more strategic and comprehensive approach to managing its acquisition portfolio.

Congress also has a role in demanding realistic business cases through the selection and timing of the programs it chooses to authorize and fund. What Congress does with funding sets the tone for what acquisition practices are acceptable. Congress could consider putting requirements in place to drive better acquisition behavior.

For example, it could require the Coast Guard to fully complete design before shipbuilding construction starts, which is now what the Navy is required to do. This culture of undue optimism when starting programs really needs to shift away from the unrealistic business cases, and instead focusing on sound practices. Without this change, taxpayers are left holding the bill, and operators must make do with aging assets when acquisition programs fail to deliver as promised.

Chairman Webster, Ranking Member Carbajal, members of the subcommittee, this completes my prepared statement. I would be pleased to respond to any questions you may have. Thank you.

[Ms. Mak's prepared statement follows:]

Prepared Statement of Marie A. Mak, Director, Contracting and National Security Acquisitions, U.S. Government Accountability Office

COAST GUARD RECAPITALIZATION: ACTIONS NEEDED TO BETTER MANAGE ACQUISITION PROGRAMS AND ADDRESS AFFORDABILITY CONCERNS

HIGHLIGHTS

Why GAO Did This Study

The U.S. Coast Guard, a component within the Department of Homeland Security, employs a variety of vessels and aircraft, several of which are approaching the end of their intended service lives. Consequently, the Coast Guard plans to invest billions of dollars in two of its highest priority programs—acquiring three heavy icebreakers, known as PSCs, and a fleet of 25 OPCs, which are ships that conduct a variety of missions in offshore waters.

This statement addresses (1) the capabilities provided by the newer Coast Guard surface vessels, (2) the risks and consequences of not establishing sound business cases for two of Coast Guard's highest priority programs—the OPC and PSC, and (3) the overall affordability of the Coast Guard's acquisition portfolio. This statement is largely based on information from GAO-23-105805 and GAO-23-105949. Information about the scope and methodology of prior work on which this statement is based can be found in those products.

What GAO Recommends

GAO made seven recommendations in its 2023 reports on the OPC and PSC to better align the Coast Guard's acquisition policy and the programs' practices with shipbuilding leading practices. DHS and the Coast Guard agreed with five recommendations. Overall, GAO has made 40 recommendations over the past decade, 14 of which remain open. GAO will continue to monitor DHS's and the Coast Guard's progress in addressing these recommendations.

What GAO Found

The Coast Guard is modernizing its vessels and aircraft, an effort known as recapitalization. Its newest cutters—the Offshore Patrol Cutter (OPC) and Polar Security Cutter (PSC)—are intended to deliver greater capability—such as time a ship can spend at sea without returning to port to resupply—than the legacy assets they will replace.

GAO's prior work shows that successful shipbuilding programs use solid, executable business cases to design and build ships. They attain critical levels of knowledge—such as mature technologies, stable designs, and realistic cost estimates—at key points in the shipbuilding process before making significant investments. The Coast Guard, however, continues to face cost growth and schedule delays in some of its newer acquisitions because it has not obtained the right knowledge at the right time.

Immature technologies. The critical technology of the first four OPCs—the davit (a crane that deploys and retrieves a cutter's small boats)—is still not matured. Without maturing the davit, the Coast Guard risks delays and costly rework.

Unstable design. The PSC's design is not yet stable, which risks an extended design phase and contributed to a 3-year schedule delay in the shipyard, with the start of construction of the first cutter now planned for March 2024. Starting ship construction without a stable design risks costly rework.

Combined, these two programs are billions of dollars over their initial cost estimates and are more than 2 years behind schedule, increasing the risk of potential capability gaps and putting cost pressure on the overall portfolio. For example, in June 2023, GAO reported that the Coast Guard projects to have a reduced number of cutters available for operation starting in 2024 and through 2039 due to the OPC's delivery delays. Since 2010, the Coast Guard has invested at least \$850 million to maintain the aging Medium Endurance Cutters and *Polar Star*. The Coast Guard is investing \$250 million to extend the service life for six cutters and \$75 million to extend the service life of the almost 50-year-old *Polar Star* until the delayed OPCs and PSCs, respectively, are operational.

Chairman Webster, Ranking Member Carbajal, and Members of the Subcommittee:

I am pleased to be here today to discuss key challenges the U.S. Coast Guard continues to face as it acquires new assets—such as vessels and aircraft—an effort referred to as recapitalization, as well as the overall affordability of the Coast Guard's acquisition portfolio. The U.S. Coast Guard, within the Department of Homeland Security (DHS), is the principal federal agency responsible for maritime safety, security, and environmental stewardship in U.S. ports and waterways, and supports other missions, such as drug and migrant interdiction.

As part of its efforts to modernize its aging fleet of cutters, the Coast Guard is acquiring four new vessels, including Offshore Patrol Cutters (OPC), Polar Security Cutters (PSC), Fast Response Cutters (FRC), and National Security Cutters (NSC). The Coast Guard intends for these new cutters to provide additional capabilities above those offered by the legacy ships. The two more recent acquisition programs—the OPC and PSC—have faced and are continuing to face significant schedule delays and cost increases, spurring concerns about capability and affordability gaps.

My statement today will address (1) the capabilities provided by the newer Coast Guard vessels, (2) the risks and consequences of not establishing sound business cases for two of the Coast Guard's highest priority programs—the OPC and PSC, and (3) the overall affordability of the Coast Guard's acquisition portfolio. This statement is based on our extensive body of work examining the Coast Guard's shipbuilding acquisition efforts spanning the last decade, including our June 2023 report on the OPC and our July 2023 report on the PSC.¹

¹GAO, *Coast Guard Acquisitions: Offshore Patrol Cutter Program Needs to Mature Technology and Design*, GAO-23-105805 (Washington, D.C.: June 20, 2023); *Coast Guard Acquisitions: Polar Security Cutter Needs to Stabilize Design Before Starting Construction and Improve Schedule Oversight*, GAO-23-105949 (Washington, D.C.: July 27, 2023).

For the reports cited in this statement, among other methodologies, we analyzed Coast Guard guidance, data, and documentation, and interviewed Coast Guard officials at its headquarters and field units to determine the extent to which Coast Guard acquisition programs are meeting their cost, schedule, and performance goals. Each of the reports cited in this statement provide further detailed information on our objectives, scope, and methodology for that work.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

THE COAST GUARD’S NEWER VESSELS OFFER GREATER CAPABILITY THAN ITS LEGACY FLEET

The Coast Guard’s newest vessels are intended to deliver greater capability than the legacy vessels they will replace. Some examples of capabilities include range and the time a ship can spend at sea. Table 1 details examples of key characteristics of new Coast Guard assets and the respective legacy assets.

Table 1: Comparison of Coast Guard’s Legacy and New Vessels
Legacy vessels

	High Endurance Cutter	Medium Endurance Cutter		Island Class Patrol Boat	Polar Star
		210-foot	270-foot		
Number in fleet	12	14	13	49	1
Year first-in class cutter commissioned.	1967	1964	1983	1986	1976
Length	378 feet	210 feet	270 feet	110 feet	399 feet
Maximum time at sea without reprovisioning.	45 days	21 days	21 days	5 days	80 days
Range	14,000 miles ..	6,000 miles	9,900 miles	1,900 miles	21,500 miles
Operational tempo	185 days away from home port per year.	185 days away from home port per year.	185 days away from home port per year.	1,800 operational hours per year.	185 days away from home port per year.

New vessels

	National Security Cutter	Offshore Patrol Cutter	Fast Response Cutter	Polar Security Cutter
Number in fleet	11 planned (9 operational).	25 planned (not yet operational).	65 planned (51 operational).	3 planned (not yet operational).
Year first-in class cutter commissioned.	2008	Planned for 2024	2012	Planned for 2028
Length	418 feet	360 feet	154 feet	460 feet
Maximum time at sea without reprovisioning.	60 days	45 to 60 days	5 days	80 days
Range	12,000 miles	8,500 to 9,500 miles	2,500 miles	21,500 miles or more
Operational tempo	185 days away from home port per year.	230 days away from home port per year.	2,500 operational hours per year.	3,300 operational hours per year.

Source: GAO presentation of Coast Guard information. GAO-23-106948

Figure 1 depicts the Coast Guard's OPC and PSC, which are part of this modernization effort.

Figure 1: The Coast Guard's Offshore Patrol Cutter and Polar Security Cutter



Source: Eastern Shipbuilding Group (left image), Bollinger Mississippi Shipbuilding (right image).
GAO-23-106948

As I will discuss in my testimony, delays in delivering these vessels have required the Coast Guard to invest hundreds of millions of dollars, if not more, in trying to maintain and extend the life of its legacy fleet. Further delays in these two programs will increase the risk that the Coast Guard will not have a sufficient number of vessels available to conduct its missions.

**FAILURES TO ESTABLISH SOUND BUSINESS CASES AND FOLLOW LEADING PRACTICES
CONTINUE TO RESULT IN SIGNIFICANT SCHEDULE DELAYS AND COST INCREASES**

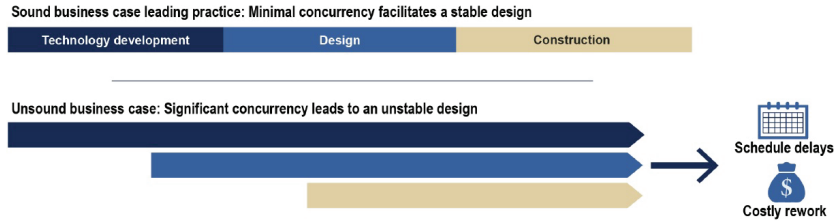
Our prior work has found that successful programs start out with solid, executable business cases before setting program baselines and committing resources.² For the Coast Guard, this would be when a program sets its initial program baseline that establishes cost, schedule, and performance goals. A sound business case requires balance between the concept selected to satisfy user needs and the resources—technologies, design knowledge, funding, and time—needed to transform the concept into a product. At the heart of a robust business case is a knowledge-based approach.

For shipbuilding programs in particular, we have found that successful programs attain critical levels of knowledge at key points in the shipbuilding process before significant investments are made. We found that key enablers of a good business case include mature technologies and plans for a stable design, reliable cost estimates, and realistic schedule targets, among other things.³ Figure 2 depicts a leading practice of developing technology and maturing design prior to construction—as part of a sound business case—and the increased risks for not maintaining a sound business case throughout the acquisition life cycle.

²GAO, *Weapon System Requirements: Detailed Systems Engineering Prior to Product Development Positions Programs for Success*, GAO-17-77 (Washington, D.C.: Nov. 17, 2016); *Best Practices: High Levels of Knowledge at Key Points Differentiate Commercial Shipbuilding from Navy Shipbuilding*, GAO-09-322 (Washington, D.C.: May 13, 2009); and *Defense Acquisitions: Realistic Business Cases Needed to Execute Navy Shipbuilding Programs*, GAO-07-943T (Washington, D.C.: July 24, 2007).

³For the purposes of that review, we did not assess the extent to which the PSC's requirements are firm and feasible. In April 2018, we found that prior to setting program baselines for the PSC, DHS and the Coast Guard revised the program's operational requirements document—a key acquisition document that provides the key performance parameters the program must meet—to make the heavy polar icebreakers more affordable, and the revisions included adjusting the range of operating temperatures; reducing science and survey requirements; and adding space, weight, and power reservations for Navy equipment. GAO, *Coast Guard Acquisitions: Status of Coast Guard's Heavy Polar Icebreaker Acquisition*, GAO-18-385R (Washington, D.C.: Apr. 13, 2018).

Figure 2: A Sound Business Case Reduces Risk in Acquisition Programs



Source: GAO depiction of notional acquisition process. GAO-23-106948

The Coast Guard's shipbuilding programs—specifically the OPC and PSC programs—have struggled with achieving elements for a good business case. As a result of neither maturing technologies nor achieving design stability when called for by leading practices, both programs are well behind schedule. In addition, both programs' cost estimates have increased by billions of dollars for several reasons, including that their initial estimates were either not comprehensive or not well-informed.

Technology maturity and design stability. The Coast Guard's OPC and PSC programs did not follow shipbuilding leading practices with regards to conducting, demonstrating, and achieving technology readiness and design stability. Shipbuilding leading practices state that critical technologies should be proven prior to the award of the detail design and construction contract.⁴ Shipbuilding leading practices also state that programs should not proceed with construction with immature technology and design instability. When programs proceed into construction without maturing and addressing outstanding technology and design challenges, they increase the risk of completing out-of-sequence construction and rework, which can result in increased costs and schedule delays.

Years after we first identified these deficiencies with the OPC and PSC programs, the Coast Guard still has not gained the requisite knowledge for its technologies and designs:

- *OPC:* In October 2020, we found that the Coast Guard did not mature a critical technology—the davit, a crane that lowers and raises a cutter's small boats—before starting construction.⁵ We recommended that the Coast Guard stabilize the OPC's design, including that it mature the davit to a technology readiness level (TRL) of 7—demonstrating it in a realistic environment—prior to the start of construction on OPC 3, and the Coast Guard concurred.⁶ However, the Coast Guard has since started construction on OPC 3 and OPC 4 without maturing the technology, and as of June 2023, the davit remains immature and unproven.⁷

In October 2020, we also found that the Coast Guard failed to complete basic and functional design prior to the start of lead ship construction, contrary to leading practices.⁸ We recommended that program complete basic and functional design prior to the start of construction on OPC 3, and update its acquisition policy to follow shipbuilding leading practices. However, in June 2023, we found that the Coast Guard had not sufficiently updated its acquisition policy,

⁴In the case of OPC, the detail design contract award is the point when the Coast Guard down-selected to one shipbuilder. Generally, detail design includes generating work instructions that show detailed system information and also guidance for subcontractors and suppliers needed to support construction, including installation drawings, schedules, material lists, and lists of prefabricated materials and parts.

⁵GAO, *Coast Guard Acquisitions: Opportunities Exist to Reduce Risk for the Offshore Patrol Cutter Program*, GAO-21-9 (Washington, D.C.: Oct. 28, 2020).

⁶A TRL is a measurement of maturity for each critical technology, numbered 1 through 9 from least to most mature based on demonstrations of increasing fidelity and complexity.

⁷GAO-23-105805.

⁸Basic design includes establishing the hull form, general arrangements of compartments, and outlining significant ship steel structure. Some routing of major equipment and related major distributive systems, including electricity, water, and other utilities is done. It also ensures the ship will meet the performance specifications, informs overall ship cost, facilitates shipbuilders' development of responsive proposals, and identifies major equipment and components that must be purchased in advance. Functional design includes providing a further iteration of the basic design, such as size and positioning of structural components, information on the positioning of major piping and other distributive systems, and outfitting in each block—or basic building unit for a ship. See GAO-23-105805.

and the OPC program still had not completed functional design prior to the start of construction on OPC 4.⁹ Further, we found that significant portions of the design related to distributive systems—systems like water, heating, and cooling that affect multiple zones of the ship—still remained incomplete.

We made a second recommendation that the Coast Guard update its policy in this area—specifically in relation to completing the design of distributive systems prior to construction—so that programs follow shipbuilding leading practices for stabilizing design.¹⁰ The Coast Guard has not fully implemented this recommendation. We also went further to recommend that the Coast Guard complete the routing of distributive systems prior to starting construction on stage 2 ships. While the Coast Guard concurred with our June 2023 recommendation to update its policy, it did not concur with our recommendation to apply this leading practice to the OPC program.

- **PSC:** In September 2018, we found that the Coast Guard did not conduct a technology readiness assessment of PSC’s key technologies, nor did it hold a preliminary design review, prior to approving its program baselines.¹¹ Coast Guard officials said that a technology readiness assessment was not necessary because the technologies they plan to employ had been proven on other ships. However, according to leading practices, such technologies can still pose risks when applied to a different program or operational environment. The program subsequently conducted a technology readiness assessment and established revised baselines in May 2021 after holding its preliminary design review in response to our recommendations.

As of March 2023, the PSC program reported that the functional design was considerably below the desired levels that officials expect to inform a decision to proceed with construction. As of April 2023, program officials said they anticipate holding the production readiness reviews to evaluate design maturity by March 2024. However, since September 2021, with about 49 percent functional design completed, our analysis indicated that the shipyard is completing, on average, approximately three percent of functional design every 6 months. This means that it would take the shipyard approximately 8 years to complete 100 percent of functional design. Therefore, to reach the program’s goal of completing functional design completed prior to March 2024, the shipyard would need to increase its design completion rate significantly. Coast Guard officials said that design completion is further along than the metrics show because the metrics do not factor in progress made on design components that are not complete.

We also found that the program is experiencing challenges with the design.¹² According to program officials, the design challenges are related to (1) U.S. industry’s general lack of experience designing and building icebreakers, (2) the complexity of PSC’s design, and (3) significant changes from the original design, among other things. Given that there are still portions of the design that are immature, we recommended that the Coast Guard complete functional design prior to approving construction for the lead ship, in line with our recommendation to OPC and Coast Guard policy, as a whole. The Coast Guard concurred with the recommendations, and we will monitor its progress in addressing them.

Cost. Both the OPC and PSC have incurred cost growth above their initial estimates, in part because the programs initially underestimated costs.

- **OPC:** OPC’s acquisition cost estimate increase increased from \$12.5 billion to \$17.6 billion between the program’s 2012 and 2022 life-cycle cost estimates. The Coast Guard attributes the increase to many factors, including restructuring the stage 1 contract—for OPCs 1 through 4—and recomputing the requirement for stage 2—OPCs 5 through 25—in response to a disruption caused by Hurricane Michael, and increased infrastructure costs for homeports and facilities, among other things.¹³ While there are instances of unforeseen costs, there were

⁹ GAO–23–105805.

¹⁰ GAO–23–105805.

¹¹ GAO, *Coast Guard Acquisitions: Polar Icebreaker Program Needs to Address Risks before Committing Resources*, GAO–18–600 (Washington, D.C.: Sept. 4, 2018).

¹² GAO–23–105949.

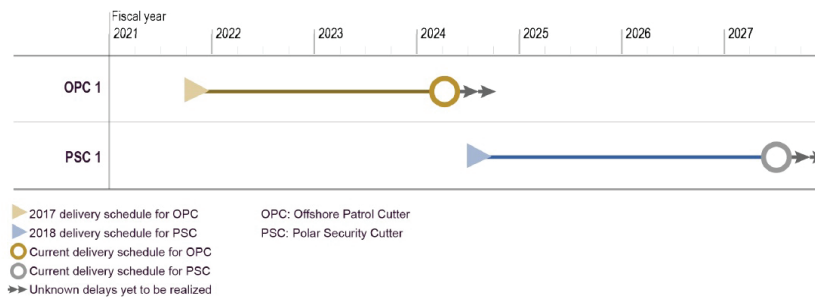
¹³ Following significant disruption caused by Hurricane Michael in October 2018, the Acting Secretary of Homeland Security determined that the OPC is essential to the national defense and authorized up to \$659 million in extraordinary contractual relief to the shipbuilder pursuant to Public Law 85–804 for the design and construction of up to four OPCs, an effort the Coast Guard refers to as stage 1. As part of this determination, the Acting Secretary also directed the Coast Guard to recompute the requirement for the remaining 21 cutters.

some costs that were either based on unrealistic assumptions or not fully accounted for in the Coast Guard’s initial cost estimate. Specifically, OPC’s facilities acquisition cost estimate—including homeports and shore facilities—increased from \$431 million to \$1.4 billion from 2012 to 2022 because Coast Guard officials said they originally assumed that the Coast Guard could utilize existing Navy bases to homeport the OPC, which did not come to fruition.¹⁴ In addition, the OPC’s initial acquisition cost estimate increased by about \$1 billion, most of which happened after the program settled which Navy-provided combat system equipment would go on the OPC. Lastly, the OPC’s initial acquisition cost estimate did not include costs for some outfitting and post-delivery work that includes the sensitive compartmented information facility on the cutter, the Combat System Equipment Guide, and technical manuals. The sensitive compartmented information facility accounted for about 98 percent of a \$1 billion increase in the estimate for outfitting and post-delivery work.

- **PSC:** From 2018 to 2021, the program’s total life-cycle cost estimate increased by about 35 percent, from \$9.8 billion to \$13.3 billion. Most of the cost increase was driven by increased operations and maintenance costs, resulting from the increased ship size and use of additional historical data to reevaluate projected annual maintenance costs in the later estimate. The program’s additional analysis of historical maintenance costs in its January 2021 cost estimate addressed, in part, a recommendation we made in 2018 to update the cost estimate in accordance with leading practices in cost estimating. Specifically, in September 2018, we found that the PSC’s life-cycle cost estimate that informed the program’s \$9.8 billion cost baseline substantially met GAO’s leading practices for being comprehensive, well-documented, and accurate, but only partially met leading practices for being credible.¹⁵ The cost estimate did not quantify the range of possible costs over the entire life of the program. As a result, the cost estimate was not fully reliable and may have underestimated the cost. Consequently, the Coast Guard may have provided decision makers with incomplete data to make a decision on total funding needed for the program.

Schedule. The Coast Guard relied on optimistic schedules for both the PSC and OPC programs, and both have experienced schedule delays of 2 years or more (see fig. 3). The two programs’ schedule challenges have been exacerbated by a lack of reliable schedule data from the contractors responsible for building these ships.

Figure 3: Delivery Delays with the Lead Ship in the Polar Security Cutter and Offshore Patrol Cutter Programs, as of 2023



Source: GAO analysis of U.S. Coast Guard and Department of Homeland Security documentation. GAO-23-106948

- **OPC:** In October 2020, we found that prior to the construction award for OPC 1, the OPC contractor’s schedule contained deficiencies that were contrary to GAO-identified leading practices for developing schedules. Further, we found the revised post-hurricane delivery dates for the first four OPCs were optimistic and did not fully incorporate schedule risks, increasing the likelihood that the OPCs will not be delivered when promised. In a review of the shipbuilder’s schedule, the Defense Contract Management Agency and the Coast Guard found deficiencies, such as that the shipbuilder could not produce a valid critical

¹⁴ Facilities acquisition costs are funded by the Coast Guard’s Major Acquisition Systems Infrastructure Program and the Office of Civil Engineering.

¹⁵ GAO-18-600.

path—or the path of longest duration through the sequence of activities. We recommended that the Coast Guard fully address the deficiencies identified in the contractor’s schedule. As of July 2023, the recommendation remains open. In June 2023, we found that the schedule is still optimistic given that the program is still addressing a manufacturing issue with shafting and delays with development of the davit.¹⁶ In total, the program is experiencing at least a 2.5-year delay in delivery of the lead ship.

- **PSC:** In September 2018, we found that the PSC’s planned delivery dates were not informed by a realistic assessment of shipbuilding activities. Instead, the schedule was driven by the potential gap in icebreaking capabilities once the Coast Guard’s only operating heavy polar icebreaker—the *Polar Star*—reaches the end of its service life.¹⁷ We recommended that the program develop a schedule in accordance with leading practices for project schedules to set realistic schedule goals for all three PSCs before the lead ship contract option was awarded. However, we closed the recommendation as not implemented because the program proceeded with the award in April 2019 without developing a realistic schedule. In July 2023, we found the program had yet to establish a realistic schedule.¹⁸ The program’s current schedule estimates that delivery of the lead ship will occur in 2027, which is 3 years later than its previous estimate, but this could further slip after the contractor reassesses and revises its schedule.

Without a sound business case, acquisition programs are at risk of breaching the cost, schedule, and performance baselines set when the program was initiated—in other words, experiencing cost growth, schedule delays, and reduced capabilities. Even after a program has established its acquisition program baseline, information about the soundness of a program’s business case is helpful for Congress as the Coast Guard requests funding through the acquisition life cycle.

SCHEDULE DELAYS INCREASE THE RISK OF CAPABILITY GAPS AND AFFORDABILITY CONCERNS

The delays in the OPC and PSC programs have increased the likelihood of operational capability gaps. Further, it has forced the Coast Guard to invest at least \$325 million to extend the life of its legacy assets, the Medium Endurance Cutters (MEC) and the *Polar Star*, in addition to the \$850 million it has spent to maintain them over the last decade.¹⁹ Further, the Coast Guard is confronted with a costly backlog of shore infrastructure projects—such as piers, docks, boat stations, air stations, and housing units—but has requested funding that falls short of its estimated infrastructure needs. The affordability of the Coast Guard’s surface fleet is in jeopardy, given the increasing costs to maintain legacy assets, costs for the OPC and PSC acquisition programs, and the overall infrastructure needs to support Coast Guard assets.

Capability Gaps Are Exacerbated by Delays in Acquisition Programs

Since April 2017, we have reported that full operational capability dates have been delayed for several Coast Guard acquisition programs. For example, the OPC’s full operational capability (FOC) date has been delayed until at least 2039 due to the ongoing issues with design and construction. See table 2 for initial FOC dates for the Coast Guard’s recapitalization programs, 2017 updates, and current estimates.

¹⁶ GAO–23–105805.

¹⁷ GAO–18–600.

¹⁸ GAO–23–105949.

¹⁹ These expenditures include Medium Endurance Cutter depot-level maintenance costs from 2010 through 2021, and depot-level maintenance costs for the *Polar Star* from 2014 through 2017. The *Polar Star*’s expenditures are calculated from 2014 to 2017 since it was in a reactivation period prior to 2014 and was not operational, and we have not reported on depot-level maintenance expenditures since 2017.

Table 2: Delays in Full Operational Capability (FOC) of Coast Guard Recapitalization Programs

	Initial DHS-approved FOC date	FOC date (as of January 2017)	Current FOC date ^a
Offshore Patrol Cutter	2034	2035	2039
Fast Response Cutter	2022	2027	2027
National Security Cutter	2016	2020	TBD
Polar Security Cutter	2029	N/A	2031
Waterways Commerce Cutter ^c	N/A	N/A	2032
Medium Range Surveillance Aircraft (HC-144A/C-27J)	2020	2025	2032
Long Range Surveillance Aircraft (HC-130J)	2017	2027	2030 ^b
Medium Range Recovery Helicopter (MH-60T) ^c	N/A	N/A	TBD
Short Range Helicopter (H-65)	2020	2020	2024

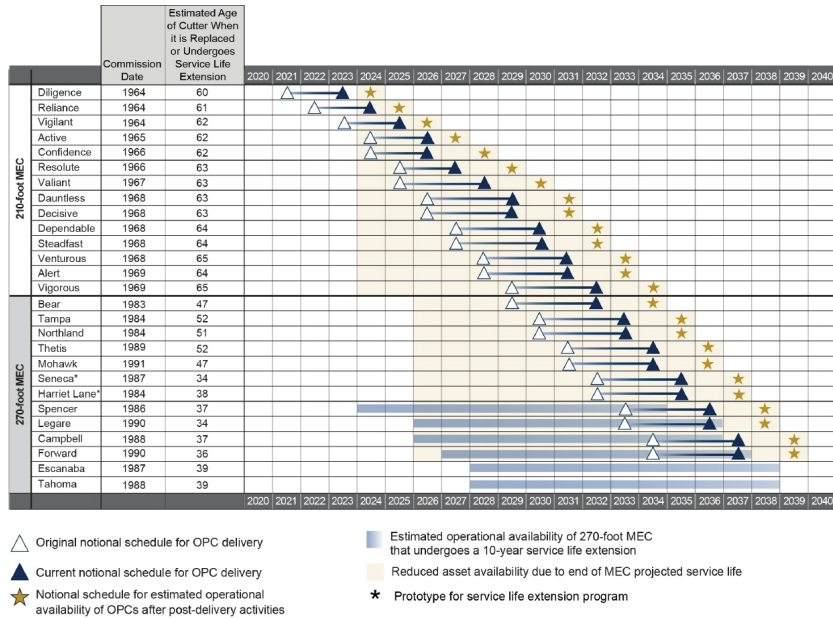
Source: GAO presentation of Coast Guard information. GAO-23-106948
 Legend: DHS = Department of Homeland Security; TBD = to be determined; N/A = not applicable
^aAll dates are program estimates. The FOC date for the Offshore Patrol Cutter is as of June 2023. FOC dates for the Waterways Commerce Cutter, Medium Range Surveillance Aircraft, Long Range Surveillance Aircraft, and MH-60T Aircraft are as of April 2023. The FOC date for the Polar Security Cutter is as of December 2022. FOC dates for the Fast Response Cutter, National Security Cutter, and H-65 Aircraft are as of March 2022.
^bThe Long Range Surveillance Aircraft program's acquisition program baseline specifies a full operational capability date of 2033. However, according to program officials, the program was able to receive funding 3 years ahead of schedule, which has allowed for an accelerated schedule.
^cAs of April 2023, the Waterways Commerce Cutter program and MH-60T program did not have official DHS approved baselines.

Specifically, with the surface assets, the risk of having an operational gap increases as the new ships are delayed because the legacy ships they are replacing continue to age and face increasing risk of mechanical failure. For example, in June 2023, we reported that given the delays in delivery of the OPC, the Coast Guard projects to have a reduction in asset availability—or a reduction in the number of cutters available for operations—starting in 2024 and through 2039.²⁰ This operational gap is at risk of increasing if the OPC delivery delays are realized and pushed further to the right.

See figure 4 for the Coast Guard's notional estimated decommissioning dates for the MECs based on commissioning date compared with the current OPC delivery schedule. While the MECs may not be decommissioned in the order depicted depending on the condition of each ship at the time, this figure helps depict the sequence of commissioning of the OPCs and decommissioning of the MECs.

²⁰ GAO-23-105805.

Figure 4: U.S. Coast Guard’s Estimated Medium Endurance Cutter (MEC) Service Life Dates Compared with Offshore Patrol Cutter (OPC) Delivery



Source: GAO analysis of Coast Guard documents. GAO-23-106948

The reduction of asset availability could be further exacerbated if the Coast Guard does not effectively mitigate OPC schedule risks:

- *Design and manufacturing issues for OPC stage 1.* The program is experiencing ongoing delays due to a propeller shafting manufacturing issue that requires re-manufacturing of some of these shafts.
- *Delays in the award of OPC stage 2.* The program will delay delivery of OPC stage 2 ships by at least 6 months due to the delays of the contract award and subsequent bid protest. The stage 2 shipbuilder also needs to complete a detail design for the stage 2 ships, and the Coast Guard needs to approve the design, before the shipbuilder can begin construction.²¹

Given these challenges, the Coast Guard will likely need to further maintain and keep the MECs in service longer or otherwise face a reduction of assets. Coast Guard officials told us that they do not anticipate the need to employ alternative options to meet mission requirements. However, officials stated that if the Coast Guard needs to decommission cutters earlier than planned, they could reallocate cutters to support emergent needs, employ other cutters to support missions previously handled by MECs, or extend the date for other planned decommissions to support continued operations.

Similarly, as noted earlier, according to the PSC program schedule, the delivery of the lead ship is now delayed until at least 2027—3 years behind the original plan in its 2018 schedule—and all three ships are expected to be operational by at least 2031.²² In April 2023, a Coast Guard fleet mix analysis indicated that the service in fact needed a mix of eight or nine heavy and medium polar icebreakers to meet its projected requirements. The Coast Guard currently only has one heavy polar icebreaker, the *Polar Star*, and one medium polar icebreaker, the *Healy*, and therefore already has an operational gap. The *Polar Star* is well beyond its planned operational service life and has become more complicated and costly to maintain as it

²¹ Generally, detail design includes generating work instructions that show detailed system information and also guidance for subcontractors and suppliers needed to support construction, including installation drawings, schedules, material lists, and lists of prefabricated materials and parts.

²² GAO-23-105949.

ages. Based off the Coast Guard's fleet mix analysis, its icebreaker fleet will remain in a deficit even after all three PSCs on the current contract are delivered.

Service Life Extension Programs Will Help Relieve Some Pressure, but Legacy Assets Are Expensive and Challenging to Maintain

To help mitigate the delays of the OPC and PSC, the Coast Guard began two service life extension programs (SLEP) for its legacy assets—the 270-foot Medium Endurance Cutters, and the *Polar Star*—for an estimated \$325 million. The Coast Guard initiated the MEC SLEP in 2018 and the *Polar Star* SLEP in 2021. They are aimed to extend the service life of six MECs and the one *Polar Star* by 10 years and 4 to 5 years, respectively (see table 3).

Table 3: The Coast Guard's Current and Recent Maintenance History of the Medium Endurance Cutter and Heavy Polar Icebreaker

Vessel	Design service life	Average age	Major maintenance history
270-foot Medium Endurance Cutter.	30 years	36 years ..	The 270-foot Medium Endurance Cutters completed a Mission Effectiveness Project in 2014. This effort was intended to minimize maintenance costs and maximize the reliability of critical systems, but not increase the service life of the cutters. The Coast Guard initiated another program to extend the service life of six of the 13 270-foot Medium Endurance Cutters. This service life extension project is projected to cost \$250 million, and intended to extend service life for up to 10 years and close the gap in capability until the Offshore Patrol Cutter is operational.
Heavy polar icebreaker: <i>Polar Star</i> .	30 years	46 years ..	The <i>Polar Star</i> completed a reactivation maintenance period in 2013 that was intended to add an additional 7–10 years to its service life from the time of reactivation. The Coast Guard initiated another service life extension program in 2021 to span 5 years and focus on upgrades or replacements of different systems. The Coast Guard completed the second year of this 5-year program in 2022, and plans on investing \$75 million in total to perform work from fiscal years 2021 through 2025 toward this effort. Ultimately, the service life extension program is intended to extend the service life of the <i>Polar Star</i> by 4 to 5 years, or, according to Coast Guard officials, until at least 2029 or 2030.

Source: GAO presentation and analysis of Coast Guard data. GAO–23–106948

In addition, we previously found that these legacy assets are getting harder and more expensive to maintain. In July 2018, we found that it is unclear how the Coast Guard will be able to fund planned SLEPs on several aging assets in order to sustain them—that is, keep them operating at acceptable levels—until replacement assets are available.²³ We found that several of the Coast Guard's aging cutters have spent more on depot-level maintenance than was planned. Combined, these cutters—the 210-foot and 270-foot MECs, and the *Polar Star*—expended about \$550 million, more than twice what was originally estimated (standard support levels), from 2010 to 2017.²⁴ In June 2023, we reported that depot-level maintenance costs for the MECs totaled about \$300 million from 2018 through 2021.²⁵

In addition to increased maintenance costs, Coast Guard operators have had to make do with deteriorating legacy assets.

- **MEC:** The MECs have generally met or remained within target levels for operational and materiel availability. However, we found that maintenance being conducted was on significant systems that were resulting in casualties for the cutters.²⁶ For example, in fiscal year 2021, MEC crews reported 317 casualties with their propulsion system's main diesel engines, generators, and the hull. Some of these casualties rendered the cutters disabled for multiple days. In addition, habitability remains a concern for both 210-foot and 270-foot MECs. Crews experience problems maintaining heating, venting, and air conditioning (HVAC) systems and those HVAC inefficiencies have led to high levels of condensation and mold in crew living spaces, such as berthing areas. Coast Guard crews told us they try to address these issues as they occur, but the number

²³ GAO, *Coast Guard Acquisitions: Actions Needed to Address Longstanding Portfolio Management Challenges*, GAO–18–454 (Washington, D.C.: July 24, 2018).

²⁴ The *Polar Star*'s expenditures are calculated from 2014 to 2017 since it was in a reactivation period prior to 2014 and was not operational.

²⁵ GAO–23–105805.

²⁶ GAO–23–105805.

and frequency of maintenance issues, in addition to their regular mission duties, make living in these conditions a fact of life.

- *Heavy polar icebreaker*: In July 2023, we found that the *Polar Star* continues to face similar maintenance issues.²⁷ From 2019 through 2021, the Coast Guard reported that some of the top cost drivers for maintenance on the *Polar Star* included components like the main diesel engines, engine cylinders, a propulsion shaft, and fuel pumps. Electrical systems have also posed problems. For example, during the *Polar Star*'s 2019–2020 mission to Antarctica, the crew reported a cutter-wide loss of power. *Polar Star* crew told us that a cutter-wide loss of power can sometimes take an hour to fully resolve as they have to manually reset each system since older systems lack centralized digital controls. Further, during the 2021–2022 deployment, a propulsion control failure placed the cutter at risk of colliding with another vessel in Puget Sound.

The *Polar Star* SLEP, which began in 2021 and is conducted annually during dry dock, has made upgrades to the *Polar Star* such as improvements to its propulsion control system. However, habitability remains a health concern for its crew. For example, annual assessments of the cutter's condition noted the need to remove asbestos and lead paint from compartments of the cutter, and a past assessment also found that systems to produce fresh water and filter air for the crew were barely functional. The *Polar Star* crew also told us that the heaters in some operational spaces are inadequate to combat Antarctic temperatures.

When combined with the challenges facing the acquisition portfolio noted above, the Coast Guard will likely struggle to pay for the maintenance of older assets, a situation that could lead to deferred maintenance and lost operational capability.

Coast Guard Has Not Effectively Managed the Backlog of Shore Infrastructure Projects

In February 2019, we found that the Coast Guard is confronted with a costly backlog of shore infrastructure projects—such as piers, docks, boat stations, air stations, and housing units—that is contributing to concerns of affordability for its recapitalization and related sustainment efforts.²⁸ We found that 45 percent of the Coast Guard's shore infrastructure was beyond its service life. For example, at least 53 percent of piers—all of which the Coast Guard has identified as mission-critical assets—were past their service lives as of 2017.

Also at this time, the Coast Guard rated its overall shore infrastructure condition as mediocre. For example, the waterfront asset line—which includes piers, wharfs, boathouses, and small boat lifts—was rated as mediocre and showing signs of deterioration and increasingly vulnerable to risk. The industrial asset line—which includes maintenance shops, corrosion control facilities, and ship lifts—was rated as poor to fair condition and mostly below standard. This is in part because the eight of the nine assets that are part of the Coast Guard Yard in Baltimore, Maryland—the only Coast Guard facility that can perform dry dock maintenance on large Coast Guard ships—are more than 5 years beyond their service life.

We also found that the Coast Guard had not provided accurate information about its requirements-based budget targets for shore infrastructure in its budget requests.²⁹ According to the Coast Guard, a requirements-based budget is an estimate of the cost to operate and sustain its shore infrastructure portfolio of assets over the life cycle of the asset, from initial construction or capital investment through divestiture or demolition.³⁰ We found that Coast Guard targets for recapitalization of shore assets exceeded \$290 million annually. However, its budget requests for fiscal years 2012 through 2021 ranged from about \$5 million to about \$99 million annually, and allotments ranged from about \$5 million to about \$266 million annually (see fig. 5).

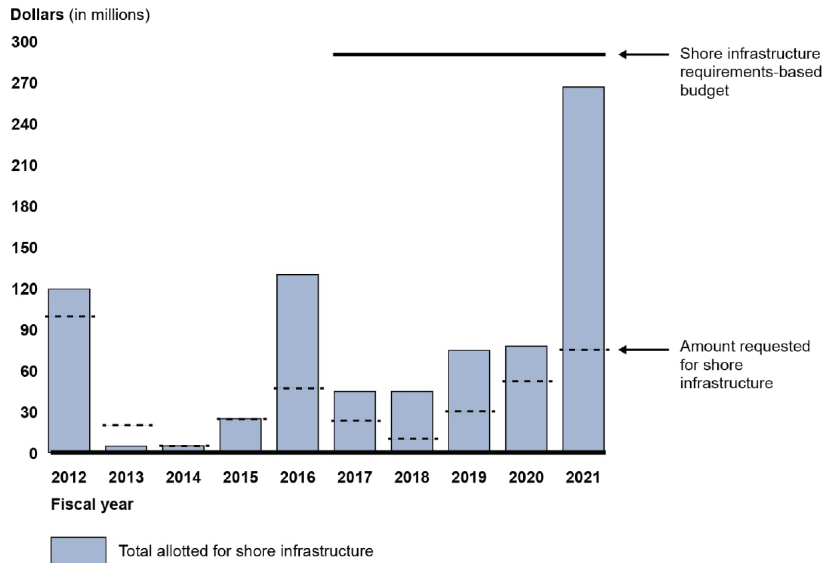
²⁷ GAO–23–105949.

²⁸ GAO, *Coast Guard Shore Infrastructure: Applying Leading Practices Could Help Better Manage Project Backlogs of at Least \$2.6 Billion*, GAO–19–82 (Washington, D.C.: Feb. 21, 2019).

²⁹ GAO–19–82.

³⁰ According to Coast Guard officials, the Coast Guard's requirements-based budget planning is based on industry standards and aligns with the National Academy of Sciences benchmarks for sustainable facility and infrastructure management. National Research Council of the National Academy of Sciences, *Stewardship of Federal Facilities: A Proactive Strategy for Managing the Nation's Public Assets* (Washington, D.C.: National Academies Press, 1998).

Figure 5: Coast Guard's Allotments for Shore Procurement, Construction and Improvements from Its Appropriations and Shore Infrastructure Requirements-based Budget, Fiscal Years 2012 through 2021



Source: GAO analysis of Coast Guard documents. GAO-23-106948

Notes: Reported in current-year dollars. Beginning in fiscal year 2019, the President's budget requests refer to Procurement, Construction and Improvements, which previously referred to Acquisitions, Construction, and Improvements in the annual fiscal year appropriations.

^a Beginning in 2016, the Coast Guard started using a requirements-based budget to determine shore infrastructure budget needs and applied it for the first time with its fiscal year 2017 submission. According to this budgeting approach and Coast Guard officials, the Coast Guard's targets for recapitalization of shore infrastructure exceeded \$290 million annually as determined by the U.S. Coast Guard.

^b "Amount requested" represents the amount requested in the President's budget, as identified in the Coast Guard's fiscal year congressional justifications.

^c Values for 2013 reflect sequestration.

To address the backlog, we found that the Coast Guard could increase budget transparency for shore infrastructure. Specifically, we found the Coast Guard's budget requests had (1) not clearly identified funding allotted for routine shore infrastructure maintenance needs, and (2) not generally addressed deferred maintenance and repair deficiencies, resulting in increases to its backlogs. In addition, the Coast Guard had not included information in its Unfunded Priorities Lists and other related reports that clearly articulated trade-offs among competing project alternatives, as well as the impacts on missions conducted from shore facilities in disrepair.³¹ This information could help to inform decision makers of the risks posed by untimely investments in maintenance and repair backlogs.

We recommended that the Coast Guard include supporting details about competing project alternatives and report trade-offs in congressional budget requests and related reports. The Coast Guard agreed with our recommendation, but noted that addressing this recommendation is challenging due to limitations imposed by the Office of Management and Budget and DHS. As of May 2023, the Coast Guard was working toward publishing some related information on its website, according to officials. Without such information about Coast Guard budgetary requirements, Congress will lack critical information that could help to prioritize funding to address the Coast Guard's shore infrastructure backlogs.

³¹ The term "unfunded priority" means a program or mission requirement that (1) has not been selected for funding in the applicable proposed budget; (2) is necessary to fulfill a requirement associated with an operational need; and (3) the Commandant would have recommended for inclusion in the applicable proposed budget had additional resources been available, or had the requirement emerged before the budget was submitted. 14 U.S.C. § 5108.

Over the last decade, we have made 40 recommendations to DHS and the Coast Guard on how to better manage the Coast Guard's acquisition programs. Currently, we have 14 recommendations that remain open and that the Coast Guard has not fully addressed—many discussed above—and six others that have not been acted upon by the Coast Guard over several years or overcome by events. Addressing the open recommendations will help the Coast Guard better manage its recapitalization efforts.

Additionally, we recommended two matters to Congress in June 2023. Specifically, we recommended that you consider requiring the Coast Guard to update its acquisition policy to establish that all shipbuilding programs should (1) mature critical technologies—including those that are developmental or that are novel in application or form, fit, and function—to a TRL 7 (successfully demonstrating critical technologies in a realistic environment) prior to a program's contract award for detail design and construction; and (2) achieve 100 percent completion of basic and functional design, including the routing of all distributive systems, prior to lead ship construction. Doing so will help ensure that future Coast Guard acquisitions follow leading practices and will help get these programs on a sound footing.

Chairman Webster, Ranking Member Carbajal, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

Mr. WEBSTER OF FLORIDA. Thank you both for appearing, I appreciate that. And now it turns to the time we ask questions. I will start it off with 5 minutes' worth of questions.

And so, Admiral Thomas, can you provide an update on programs toward a new hangar at Barbers Point to accommodate the new C-130J aircraft?

Admiral THOMAS. Thank you, Mr. Chairman, for the question, and thanks for support, particularly at Barbers Point. I was there recently, and we have a C-130 that can fit the nose in the hangar and the tail is hanging out. That is suboptimal.

So, we do have about \$46 million that's set aside for a project for a hangar, and we have started that project to install a membrane hangar that can hold two of our aircraft in there, and we can do full maintenance. I don't know right now if that is going to be enough money. We have to do an environmental assessment. We do know there is PFAS on that site. And as we get those results, we will be able to determine how far that money will go. But we do appreciate continued support on that project.

Mr. WEBSTER OF FLORIDA. So, the Coast Guard has previously communicated that it had all the resources it needed for the construction of a new hangar. So, how would you explain that?

Admiral THOMAS. Well, I think I mentioned in my statement that the economic conditions that we see now are not what we saw 4 years ago. There are all sorts of supply chain issues. There are inflation issues that are driving the cost of projects up across our portfolio and, as well, environmental remediation is always a wild card that you can't really price until you have stuck a shovel in the ground.

Mr. WEBSTER OF FLORIDA. Compared to other programs, the Waterways Commerce Cutter acquisition program has been on track, which is very encouraging. Can you provide an update on the milestones that program has achieved to date?

Admiral THOMAS. Yes, thank you for the question.

So, we awarded that contract in October of last year. We experienced some delays because of GAO protest, but we were able to push ahead with the work on March 1st, or the notice to proceed to the contractor, and they are proceeding well with the detailed

design. And as I mentioned in my statement, we expect to begin construction next year.

Mr. WEBSTER OF FLORIDA. So, are there milestones you are trying to hit in the future that would keep it on track?

Admiral THOMAS. Yes, sir, there are. Before we go to construction, as Ms. Mak mentioned, we will do a design review, final critical design review, and then we will do a production readiness review. And we are on track to hit those milestones.

Mr. WEBSTER OF FLORIDA. What would be the result or the impact of operations and costs if the acquisition were delayed?

Admiral THOMAS. Well, it depends on the nature of delay, Congressman. If we were somehow caused to recompete this contract, the delay would be about 2 years, the cost would be about \$150 million, and I would imagine we would be in the exact same place we are today in 2 years, which, we would have a contract award, and we would have appeals ongoing.

Mr. WEBSTER OF FLORIDA. Ms. Mak, the Coast Guard appears to have systemic issues in effectively executing major acquisitions. Are there requirements placed on the Coast Guard, either by regulation or statute, that impair the Coast Guard's contracting and acquisition abilities and capabilities?

Ms. MAK. No requirements on legislation that I am aware of, but I still think it is important that the Coast Guard focus on doing the things the right way the first time around when it comes to better business case and getting the design done before construction, and figuring out where you are going to go when it comes to what requirements, how you do that, and how you manage the contractors, oversight.

Mr. WEBSTER OF FLORIDA. So, is that happening?

Ms. MAK. I would say with the OPC and the PSC, based on our recent reports, they could do a lot better when it comes to design.

They are starting—OPC started construction for all four ships, for the first four ships, well before the design. And we are hoping—we have made recommendations to address for stage 2 that they complete that design because it is having a lot of different challenges.

For instance, the davit, which is on the OPC, that is critical. That is where they use the small boats to go down and do their mission, and that—davits have found problems in terms of, like, the electrical cabinet. It was supposed to fit on the interior of the OPC, and now they can't fit that in the interior, so, part of it has to go in the exterior and part of it has to go in the interior. That is to power the davit.

So, if some of it is going to go outside instead of inside, it has got a lot more weather, environmental issues that it has got to address. So, it is better not to move on to stage 2 until you have those design issues addressed.

Mr. WEBSTER OF FLORIDA. My time is expired. Thank you so much for your answers, both of you, and I will turn it over to Mr. Carbajal.

Mr. CARBAJAL. Thank you, Mr. Chairman.

Admiral Thomas, while there are several factors that have contributed to the vessel acquisition issues that you are having, shipyards' capacity and availability is certainly a factor. That said,

where would the Coast Guard vessel procurement be without the Jones Act and the sustained commercial business that the shipyards have?

Admiral THOMAS. Thank you, Congressman, for the question.

I mean, the Coast Guard has long recognized the significance of the Jones Act in ensuring our national security in several different ways. One of those is ensuring we retain an industrial base that can build and service our ships.

Our ships are getting larger. We are now in competition with the Navy for drydocks. We need to invest in our own capabilities at our Coast Guard Yard, but we certainly need the Jones Act to remain in place so we retain that capability as a Nation.

Mr. CARBAJAL. Thank you.

Ms. Mak, how can Congress better support the Coast Guard's major acquisition programs moving forward?

Ms. MAK. I think, as I mentioned in my oral statement, that programs generally tend to overpromise and underbid costs to secure funding for the programs. To minimize that, Congress may want to consider restricting or fencing off certain amounts of funding until you see a sound, realistic business case.

Or Congress could require more information, which I know we have talked about a little bit on the shore infrastructure side, but it applies the same thing for acquisitions. They have priorities for homeporting needs for the ongoing acquisitions and recapitalization efforts such as the OPC, the PSC, the WCC, and the information that is needed for Congress to provide the appropriate information and funding is impacts to operations, should the funding not be available.

And what are the timeframes? What are the impacts when you don't get that funding? I think that is important for Congress to be able to make better decisions.

Mr. CARBAJAL. Thank you. I have heard of underpromise and overdeliver, but I have never really understood the opposite approach, as you said takes place.

Admiral Thomas, the Army typically chooses to retire their helicopters at 20,000 hours. Why does the Coast Guard refurbish and use your helicopters well past the age?

And has the Coast Guard explored the option of purchasing new helicopters?

Admiral THOMAS. Well, thank you for the question. We are in the midst of extending the service life on both our 65s and our 60s. We are able to do that organically at our Aviation Logistics Center. We are able to take Navy hulls that don't have many hours on them and put them into a Coast Guard configuration.

While we haven't done the business case yet on purchasing fully built-out helicopters or buying new hulls from the OEM, and then we are changing them out ourselves, that is something we would consider, although we are currently on a pace to increase the size of our 60 fleet, which is about right for the Service. It doesn't need to be accelerated.

Mr. CARBAJAL. Thank you.

Ms. Mak, do you have anything to add to that?

Ms. MAK. The largest concern about increasing their fleet is going to come back to the infrastructure that is needed to support

that. There is definitely going to be expected growth and significant investments in the facilities at both the Aviation Logistics Center and at air stations. So, that needs to be planned for and determined, what priorities when.

Mr. CARBAJAL. Thank you.

Mr. Chair, I am going to use my prerogative with my remaining time to recognize my intern, Jasmine Oang, who is here. She might be interested in the Coast Guard, so, she is here checking you guys out, interviewing if you are the service she might be interested in. So, I just want to recognize it.

Raise your hand, Jasmine.

Mr. Chair, with that I yield back.

Mr. WEBSTER OF FLORIDA. Mr. Babin, you are recognized for 5 minutes.

Dr. BABIN. Thank you, Mr. Chairman, I appreciate that. And I also thank Admiral Thomas and Ms. Mak for being here.

My questions are going to be for you, Admiral Thomas.

But Ms. Mak, if you feel like you need to jump in, please feel free.

In April of 2019, the Coast Guard issued a contract for the construction of a new polar icebreaker. What is the status of the design and construction of this vessel?

And are there outstanding issues with the proposed propulsion system used for this vessel?

Please bring us up to speed, and give me your take on the propulsion system issues.

Admiral THOMAS. Thanks for your interest in our Polar Security Cutter program. It is a significant program for our Nation, as you well know.

We are 4 years into what was supposed to be a 1-year design cycle on the Polar Security Cutter, and we are frustrated by that. It is my top priority to get this project back on track. We have a new primary contractor now, and I meet with the senior leadership of that shipyard myself personally once a week, along with my colleague from the Navy. Our focus is on getting to design maturity and making sure the yard is ready for production.

I was at the shipyard just recently to look at some of the capital expenditures they had put in place in order to build this ship. It is impressive, the robotic welding, the preheating—just what it takes to bend the steel that thick.

At the end of the day, we need these ships, but we also need the shipyard. It will bring tremendous capability to our Nation. And as I mentioned, we have begun prototype fabrication.

With regard to the propulsion system, I am not aware that we have concerns. It will be a complex system. We are making sure that we build the control systems ashore first so that we can make sure it is fully integrated before we go on the ship. But we have not yet identified specific concerns with our propulsion system.

Dr. BABIN. OK, thank you. I am also interested in discussing some of the Coast Guard's air assets.

The Coast Guard is currently recapitalizing your vertical lift platforms in addition to acquiring additional C-130s. However, I am curious about the Coast Guard's lack of medium-altitude, long-endurance assets such as the MQ-9. In my district we proudly host

the Air National Guard unit of the MQ-9s, and they are extremely capable aircraft.

However, I recently found out that the MQ-9B, an upgraded, all-weather and Maritime Domain-aware aircraft, is being operated right now by the Japanese Coast Guard. These have the capability to perform Maritime Domain Awareness, patrolling for illegal shipping, drug interdiction, search and rescue, and illegal trafficking.

I wanted to ask if the Coast Guard has any plans to modernize its aviation fleet with assets such as the MQ-9 Reaper. And if not, why not, and is it simply a budgetary issue?

Admiral THOMAS. We are very much aware of the capabilities of unmanned aerial systems. We employ them off of our National Security Cutters. We intend to do the same off of our OPCs when they are in the fleet, and we operate other MQ-9s with CBP.

We have just recently issued our unmanned systems strategy, and that is the beginning of our efforts to build a program of record that will bring capability like MQ-9s to the Coast Guard. We do not yet have a program of record to do that.

Dr. BABIN. OK, thank you very much. Last question: Can you briefly mention the changes that you have made following the Coast Guard's internal review of Operation Fouled Anchor?

We have got to protect our Coasties. And for our part, we need to know the changes you have already implemented before Congress starts developing any new recommendations. What changes have you made?

How will you all do a better job of protecting Coasties while ensuring that Congress is up to speed on important issues and able to perform its oversight role?

Admiral THOMAS. Thank you. We are very much focused, and have been for a very long time, on improving the culture in the Coast Guard and providing a safe environment for our members.

Thanks to the actions of Congress over the last several years, and in concert with our sister services, we have been focused on improvements to reporting processes, support to our victims, investigation and accountability, and prevention programs. And just quickly, some of the things we have done, we have instituted a restricted and nonrestricted reporting structure that gives options to victims on how they want to report, we have taken care of what is called collateral misconduct associated with sexual assaults, and we participate in the DoD's CATCH program that allows us to identify repeat offenders.

With regard to support to victims, we have professional sexual assault response coordinators. We now have a sexual assault prevention program office and program leadership. We have volunteer and professional victims advocates in the field, special victims councils out there to help through the legal process, and we have a policy in place that allows members to ask for a transfer if they or their spouses have been affected by sexual violence.

Again, we have improved investigations and accountability. Every single case of sexual assault must be investigated by our Coast Guard Investigative Service.

And really, the key thing is to prevent these from happening. And we have done a lot to build a culture of prevention. We need to do more there. Other services have thousands of people working

for primary prevention in the field. We have one at Coast Guard headquarters. We don't need thousands, but we need dozens, and I am going to work hard to get them in place.

Dr. BABIN. Thank you, Admiral. I appreciate that very much.

I am out of time, Ms. Mak, and I am sorry you didn't get a chance to say anything.

I yield back, Mr. Chairman.

Mr. WEBSTER OF FLORIDA. OK. Well, the chair has been notified that there is a vote series on the floor, and the committee will stand in recess not subject to the call of the chair, but we are going to call as soon as you get done. Don't come back too giddy. It is not over yet.

[Laughter.]

Mr. WEBSTER OF FLORIDA. But come back if you wanted to ask questions.

So, we are in recess.

[Recess.]

Mr. WEBSTER OF FLORIDA. I thank the witnesses for staying, and now we are back at it again, and we will get done here.

Mr. Ezell, you are recognized for 5 minutes.

Mr. EZELL. Thank you, Mr. Chairman.

Vice Admiral Thomas and Ms. Mak, thank you for being here today.

From protecting our ports and waterways to assisting our communities during hurricanes, the Coast Guard is an indispensable asset to southern Mississippi. I proudly represent Port Security Guard 308, the Gulfport Coast Guard Station, and the Coast Guard personnel at Pascagoula Naval Station. I also take pride in representing the shipbuilders of southern Mississippi that build many of the world-class vessels the Coast Guard sails every day.

One of these vessels being constructed is the Polar Security Cutter, which is essential to the project of our sovereignty in the Arctic against our adversaries in China and Russia. I have spoken with the shipyard in my district constructing these vessels, and they have assured me they are working diligently with the Coast Guard to expedite the program. It brings me pride to say the workforce of southern Mississippi will be responsible for building the most superior and technologically advanced polar cutters in the entire world.

In addition, the *Legend* class National Security Cutters utilized by the Coast Guard are built in my district at Ingalls Shipbuilding. This cutter has been referenced as the most capable and advanced cutter in the Coast Guard's fleet. Vice Admiral Thomas, how vital has that *Legend* class cutter been in the Coast Guard's operations?

Admiral THOMAS. Well, thank you for your support of our people in your home State and your district. I know they really enjoy seeing you.

Look, the National Security Cutters have been game-changing. They have been game-changing in our interdiction missions, they have been game-changing in our missions in competitive space with the Chinese and others. So, very, very capable ships. We have been very happy with them. And we really, really appreciate your support of that program.

Mr. EZELL. Yes, sir. Thank you, Admiral. I do have some concerns regarding the MH-65 replacement program.

The Coast Guard plans to replace the MH-65 fleet with a notably smaller number of MH-60s. This approach is centered on the fact that the 60s are larger helicopters with a longer range. However, I worry that downsizing the fleet would dangerously limit the Coast Guard's ability to respond to simultaneous emergencies like those that come after hurricanes.

Can you assure me that the new fleet of less MH-60s will have the same response capabilities as the current mixed fleet?

Admiral THOMAS. So, our current fleet of approximately 146 rotary-wing aircraft split between the 60s and 65s is roughly one-third 60s and two-thirds 65s. We will transition to all 60s at, at least, 127 aircraft. That number is not set. That is the current program of record. We are currently required to do a review of our aircraft laydown by the NDAA, and that work is ongoing.

Mr. EZELL. Thank you. I also have some concerns with the Coast Guard's intention to have that single model helicopter fleet.

Last year, we saw the Army ground its entire fleet of Chinook helicopters due to engine fire concerns. If an unfortunate event like this were to happen with the 60s in the future, the Coast Guard might be left with no helicopter capabilities.

Moreover, I believe there are multiple air intercept missions where a smaller helicopter would be a more practical platform.

Vice Admiral, can you explain why you think a single model helicopter fleet is advantageous for the Coast Guard?

Admiral THOMAS. Yes. Again, thank you for the question.

I mean, there are a lot of advantages to operating a single fleet. It is easier to maintain them, it is easier to train people. You have full cross-decking of crews. I can't put a 65 qualified crewmember on a 60 right now. And the 60 is aircraft that all of our sister services operate. There are thousands of them in service. Our Airbus helicopters, we are the largest operator of those helicopters right now.

So, we think the right thing to do is to move to a single rotary-wing fleet. Thank you.

Mr. EZELL. Thank you, Admiral.

Mr. Chairman, I yield back.

Mr. WEBSTER OF FLORIDA. Mr. Auchincloss, you are recognized for 5 minutes.

Mr. AUCHINCLOSS. Thank you, Chairman.

Ms. Mak has laid forward in her written testimony, very substantively and specifically, examples of the over-concurrence of technology development, design, and construction that seems to be a feature of the last 15 years in the Coast Guard, and has, I think, been a primary driver—Ms. Mak, if you would agree—in the cost overruns and delays.

Yet, Admiral, you have been mostly pointing to exogenous factors—inflation, supply chain snarls, workforce—as being the primary reason. Of course, everyone is facing those issues. Would you accept that some of this is endogenous, that some of this is because of Coast Guard decisionmaking and the over-concurrence of those issues?

Admiral THOMAS. What I would accept is the premise that if you want to drive risk to cost and schedule during construction to zero, you don't start until you have 100 percent design.

The problem is we have to manage more than just risk to cost and schedule during construction. We have to manage the operational risk. We have to manage the financial risk to the contractor. And in both cases that Ms. Mak talked about, those contractors would go broke if we were not able to begin construction with a well-developed design, but not a fully developed design.

Mr. AUCHINCLOSS. So, then, in particular, in her written testimony, she has the example with the Offshore Patrol Cutter that the GAO recommended that you wait until the davit gets to TRL 7 before starting construction on OPC 3, and that the Coast Guard actually concurred.

But now the Coast Guard has started construction on OPC 3, and the davit is not at TRL 7. What explains that?

Admiral THOMAS. Well, again, we would love to have all of the critical technology at TRL 7 before we begin construction. We have a mitigation plan for the davits, and we are comfortable enough with that mitigation plan that we need to move ahead with the construction.

The Nation needs these ships. Our—

Mr. AUCHINCLOSS [interrupting]. I agree that the Nation needs the ships, but it sounds like the Nation is not getting these ships partly because the technology development is underdeveloped, relative to the design and construction timeline. So, we are all in a hurry here, but it doesn't seem like we are going—there is an old saying in the Marine Corps, "Slow is smooth, smooth is fast." And it seems like we are not being very smooth here, and hence we are not being very fast.

Admiral THOMAS. So, we are confident that the davit will be at the right TRL level when we need it on the current construction timeline.

Mr. AUCHINCLOSS. Ms. Mak, are you confident in that?

Ms. MAK. No, obviously not. That is why we made the recommendation that we did.

I mean, in general, when it comes to acquisitions, accelerating plans without the appropriate knowledge is going to cause a lot of rework and extend your schedule anyway. It does not equate to the ability to deliver on those plans.

Mr. AUCHINCLOSS. And has that rework leading to delays been a feature since 2007 of the Coast Guard procurement plans?

Ms. MAK. I would say as far back as I have been looking at them since 2017, yes.

Mr. AUCHINCLOSS. And now it seems like we are seeing the same thing with the polar cutters here, where design is not yet complete prior to construction for the lead ship in line with the recommendation that you have made.

Admiral, what are the reasons why you are confident that, even though you are more concurrent than has been recommended, that you are going to be able to do it?

Admiral THOMAS. Well, again, there are a lot of risks that we are balancing.

I agree, if we want to drive risk to cost and schedule during construction to zero, we would probably not begin construction until we are 100 percent designed. But we have mitigation measures in place. We have authorized a number of special studies that have allowed the contractor to understand what it is going to take to build this ship with this material that they have never worked with before. We have helped them with capital investments that will allow them to work with the material, with things like robotic welders and induction heaters for the material. And we are moving ahead with prototype fabrication, prototype module fabrication, that will allow them to continue their learning.

We have not yet begun construction on the polar cutter.

Mr. AUCHINCLOSS. Ms. Mak, do you think that these measures are going to be sufficient?

Ms. MAK. At this point it is really hard to tell, because the Polar Security Cutter—they are saying that it is going to be delivered by 2027. But as of right now, the contractor does not have sufficient business systems to be able to address the schedule. So, it is optimistic.

We don't think the data is very accurate at this point. So, until we get a little more accurate data, we don't know if they are going to be able to meet that timeline, either. I mean, back in 2018, when we looked at it, we were supposed to have an icebreaker, a heavy polar icebreaker, by 2024.

Mr. AUCHINCLOSS. Right. Admiral, I would submit that it seems like the Coast Guard is not fully internalizing the lessons of the last 15 years. Is there a big learning that you have taken forward from what has happened in the last 15 years that you are going to adopt to do things differently?

Admiral THOMAS. Well, let me just address the delivery schedule.

We are currently doing the work with a new contractor to re-baseline this project so that we can truly understand cost and schedule, and we will have those numbers. There is no question the schedule has slipped, probably into at least 2028, and the costs will rise.

Mr. AUCHINCLOSS. But what is your biggest learning over the last 15 years that you are going to do differently?

Admiral THOMAS. I think Ms. Mak hit on what needs to be done differently in terms of how funding comes to the services for major acquisition, and—

Mr. AUCHINCLOSS [interrupting]. But why would we say more money is the answer when part of the problem clearly is in the concurrency of technology, development, design, and construction that Ms. Mak has pointed out? That is not a money problem. That sounds like a program management problem.

Admiral THOMAS. Again, the issue of managing risk across the entire acquisition as opposed to managing only risk associated with cost and construction—or cost and schedule during construction is the challenge.

Mr. AUCHINCLOSS. The chairman has been indulgent, I appreciate it. Thank you.

Mr. WEBSTER OF FLORIDA. The gentleman yields back. No one else is here to ask a question, but I have got one, just one more.

Turning to the Offshore Patrol Cutter program, the Coast Guard has long stated that after completion of the initial ship in the class, it must build two per year in order to limit the loss of the mission capabilities as Medium Endurance Cutters go offline. Fiscal year 2022–2023 capital improvement plans envision that a full rate of production will happen. Is that going to happen? That is the real question.

Admiral THOMAS. Well, the full rate of production will happen for stage 1, which will be delivering cutters on 1-year centers. In stage 2, we will reach a full rate of production of two per year. And from what I have seen of that particular shipyard, they may actually produce more than that.

But your concern about the Medium Endurance Cutters is a valid one. Last year, we lost about 3½ cutters' worth of time due to unscheduled repairs, which is why it is so important that we get the OPCs into our fleet.

Mr. WEBSTER OF FLORIDA. Do you have anything to add to that, Ms. Mak?

Ms. MAK. Nothing other than, yes, they need this as fast as they can do it, but they've got to do it right the first time. Before you build more OPCs on the stage 2, make sure you have some of the design issues addressed.

I mean, like I mentioned, that electrical cabinet which is in the davit, if you don't have that right, you are going to go back and you are going to have to redo all the ones you have already done. That is going to take more time, and it is going to take a lot more money.

Mr. WEBSTER OF FLORIDA. Thank you so much. Well, I don't think there is any other testimony. Any other questions?

Do you have any other questions?

I gave you a little extra time [to Mr. Auchincloss].

[Laughter.]

Mr. AUCHINCLOSS. I just want to let the admiral one more time—is the biggest learning of the last 15 years on your design, tech development, and construction process really just that you need more money? There is no other learning that you want to present to Congress?

Admiral THOMAS. I think the biggest learning that the Coast Guard has had in our acquisition history has to do with the system integrator and the use of system integrators, which we tried and we will never do again.

Mr. AUCHINCLOSS. Thank you.

Mr. WEBSTER OF FLORIDA. OK. Any other questions?

Thank you both for appearing. I appreciate your testimony, and I ask unanimous consent that the record of today's hearing remain open for such time as our witnesses have provided answers to any questions that may be submitted to them in writing.

Without objection, show that ordered.

I also ask unanimous consent that the record remain open for 15 days for any additional comments or information submitted by the Members or witnesses to be included in the record of today's hearing.

Without objection, show that ordered.

The subcommittee stands adjourned.

[Whereupon, at 3:42 p.m., the subcommittee was adjourned.]

SUBMISSIONS FOR THE RECORD

Prepared Statement of Hon. Rick Larsen of Washington, Ranking Member, Committee on Transportation and Infrastructure

Thank you, Chair Webster, for holding this important oversight hearing.

OPERATION FOULED ANCHOR

Before we get into the substance of today's hearing, I want to take a moment to address Operation Fouled Anchor.

In 2020, the Coast Guard completed a 6-year secret investigation into sexual assaults at the Coast Guard Academy between 1990 and 2006. The results and recommendations of Operation Fouled Anchor were hidden from Congress, the public and not distributed widely within the Coast Guard.

While I'm still parsing the details of the investigation and awaiting documentation, the Coast Guard's lack of transparency is unacceptable. Congress and, more importantly, members of the Coast Guard cannot trust the system if these types of violent crimes are kept behind closed doors.

Congress cannot conduct oversight and the Coast Guard cannot improve its Sexual Assault Prevention Program when the results and recommendations of a six year/20,000 hour operation are kept secret. The Coast Guard can and must do better.

COAST GUARD CUTTER ACQUISITIONS

Today's hearing is an opportunity for this Committee to receive an update on the Coast Guard's now 16-year-old recapitalization plan which was enacted in 2007. Included in this plan, and the subsequent update in 2017, are National Security Cutters, Fast Response Cutters, Offshore Patrol Cutters, Polar Security Cutters, Waterways Commerce Cutters, and HC130J aircraft.

Several of these acquisition programs have gone well but others have faced significant cost increases and delivery delays.

For instance, after awarding the Service's largest acquisition contract to a shipyard that had never had a government contract, the Coast Guard determined that the program was so far delayed and over budget that it recompeted the contract and awarded the construction of all but four cutters to another shipyard.

The Polar Security Cutter is facing similar issues. The original projected delivery date was 2024 but the detailed design remains at 50 percent and the Coast Guard has been unable to commit to a delivery date in this decade.

While it's appropriate to scrutinize the Coast Guard's decisions, we in Congress must consider our own actions and the structural impediments facing the Service. Inadequate resources and irregular procurement programs result in cutting corners and inexperience.

We cannot deliver vessels without access to shipyards.

Diminished shipbuilding capacity as well as increased competition from the Navy has left the Coast Guard with limited options—we must all work together to resolve this shortage to keep our seas safe.

While I'm confident the Coast Guard will complete the ongoing recapitalization effort, I am concerned that Congress and the Administration are not providing the resources to support the women and men who operate these vessels and aircraft.

SHORESIDE INFRASTRUCTURE BACKLOG

The growing shoreside infrastructure backlog has real world consequences for Coasties. During my recent visit to the Coast Guard Academy, I saw firsthand the unacceptable living conditions of cadets. No cadet should live in fear that moving

their desk chair the wrong way could scratch the floor and expose them to asbestos, but that is the reality.

Now that Congress has funded the construction of assets, we need to ensure that Coasties get the shoreside support they deserve. This includes workstations, housing, health care, and childcare. We need to do better.

MS. MAK'S RETIREMENT AND CLOSING

I'd like to end by recognizing Ms. Marie Mak testifying before us today from the GAO. Your distinguished 37-year career in government service has resulted in a stronger Navy, a stronger Coast Guard and a better-informed Congress which has led to better laws. Thank you for your service and I hope you enjoy your next chapter.

Thank you, Chairman Webster, and I look forward to today's discussion.

APPENDIX

QUESTIONS FROM HON. MIKE EZELL TO VICE ADMIRAL PAUL F. THOMAS, DEPUTY COMMANDANT FOR MISSION SUPPORT, U.S. COAST GUARD

Question 1. The PSU 308 is a deployable special forces unit that is specifically equipped to provide support to any port in the world in under 96 hours. However, they have been stationed in trailers on the Stennis Airport grounds for the past ten years and there is uncertainty on their ability to stay in this location in the future. Can you please provide the Coast Guard's plan to rehouse this unit in a permanent facility without interrupting the unit's mission?

ANSWER. The Coast Guard is conducting the planning required to relocate Port Security Unit 308 into a permanent facility. The general timeline to complete a project from concept, through planning, budgeting, design, and execution is approximately eight years and largely depends on the timing of Major Shore Procurement Construction & Improvement funding.

Question 2. The Coast Guard's stated rotary-wing plan is to phase out the standard shipboard-deployable, short range recovery helicopter in favor of an all medium-range recovery helicopter fleet. The medium-range recovery helicopter requires significant modifications and additional equipment to deploy shipboard. Has the Coast Guard conducted operational testing and evaluation to ensure it effectively operates on, and in conjunction with, all USCG assets capable of supporting rotary-wing aircraft and mission profiles? What were the results?

ANSWER. The Coast Guard can operate the MH-60T from seven of its 13 Famous Class Medium Endurance Cutters and from all its National Security Cutters (NSC). Additionally, the Coast Guard designed its newest medium endurance and polar ice-breaking cutters, the Offshore Patrol Cutter (OPC), and the Polar Security Cutter, to enable MH-60T operations. The Coast Guard successfully completed operational testing and evaluation of blade-fold, tail-fold equipment and will configure the entire MH-60T fleet to be blade-fold, tail-fold capable to ensure that deployed MH-60Ts will fit into hangars on both the NSC and the OPC.

Question 3. Has the Coast Guard explored new, more cost-effective aircraft currently in production to improve budget challenges, rather than continuing to reinvest in aging and costly legacy platforms? If not, would the Coast Guard consider conducting an analysis of alternatives of existing DoD inventory aircraft to enhance operational capabilities and reduce current personnel and budget constraints?

ANSWER. The Coast Guard is actively exploring new rotary wing aircraft in concert and lock step with the U.S. Department of Defense Future Vertical Lift Program (FVL). The Service looks forward to FVL aircraft joining our ranks and retiring aging and costly legacy platforms.

QUESTIONS FROM HON. HILLARY J. SCHOLTEN TO VICE ADMIRAL PAUL F. THOMAS, DEPUTY COMMANDANT FOR MISSION SUPPORT, U.S. COAST GUARD

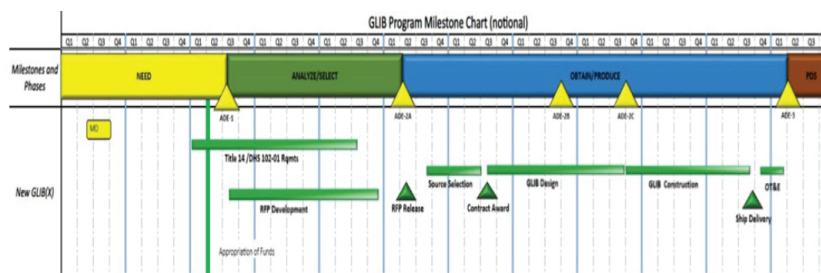
Question 1. As we work to productively recapitalize assets and modernize the Coast Guard's capabilities, it's incumbent upon Congress to ensure American tax dollars are spent wisely so we set our Coast Guard up for success for future generations. As a Michigander, I know how much my state's economy and our nation's economy depends on safe and sustainable Great Lakes.

Question 1.a. We have heard that the construction of a new heavy Great Lakes icebreaker will take 10 years, yet the need is now. What can Congress do to expedite the delivery of this much needed asset?

Question 1.b. To follow up, if Congress funds the additional \$20 million for the Great Lakes icebreaker in the Coast Guard's Unfunded Priorities List, would this help deliver this icebreaker faster than just funding the \$55 million in the budget request?

ANSWER to 1.a. & 1.b. Until an acquisition is formally initiated, schedules and projected delivery timelines are notional as they are dependent on receipt of an appropriation and the shipbuilding industrial base's capacity, interest, and availability to meet program requirements. As part of the Analyze/Select Phase, comprehensive industry engagement and analyses are conducted to identify opportunities and risks for executing the acquisition and to establish a baseline schedule.

Initial examination of the Federal Acquisition Regulations yielded few opportunities to accelerate the Great Lakes icebreaker (GLIB) acquisition timeline. The Coast Guard is consulting with its lawyers and acquisition professionals to find efficiencies in the Acquisition Lifecycle Framework to improve upon initial GLIB delivery timeline projections, provided in the below graphic. Funding of the additional \$20 million for the GLIB on the Coast Guard's unfunded priorities list would not help deliver this icebreaker faster but would mitigate the potential for schedule delays in out-years.



Question 2. Last year's Coast Guard authorization bill directed the Coast Guard to establish and maintain a database on Great Lakes icebreaking operations and commercial vessel and ferry voyages during ice season. This has the potential to be a useful tool not only for the Coast Guard, but also for organizations that rely on its capabilities, such as our Lake Carriers. Where is the Coast Guard on establishing this database?

ANSWER. The Coast Guard is actively working to develop and refine the technical requirements of the database. As required by the Coast Guard Authorization Act (CGAA) of 2022, the Coast Guard consulted operators of Great Lakes commercial vessels to gather input on current industry data collection, methodology used to assess the impact of delays caused by ice conditions, and ways industry can contribute to the Coast Guard data collection.

While the database development efforts started upon enactment of the CGAA, the mild ice season this past winter/ice season (2022–2023) did not afford the Coast Guard opportunities to collect or analyze the necessary data to construct requirements based on industry's input. Looking forward to the upcoming winter/ice season (2023–2024), the Coast Guard will continue working with industry to collect required data and use existing enterprise applications to refine the database's technical requirements. This effort will assist in the future acquisition of a sustainable database solution.

QUESTIONS FROM HON. RICK LARSEN ON BEHALF OF HON. PATRICK RYAN TO VICE ADMIRAL PAUL F. THOMAS, DEPUTY COMMANDANT FOR MISSION SUPPORT, U.S. COAST GUARD

Question 1. How did the United States Coast Guard (USCG) come to decide to redefine the boundaries of the Port of New York?

ANSWER. The Coast Guard did not redefine the Port of New York's boundaries; it reaffirmed codified authorities and regulations. Since the language in Marine Safety Information Bulletin (MSIB) 2015–14 was unclear, the Coast Guard, via MSIB 2023–01, clarified the Port of New York's definition and applicable regulations.

Question 2. How does the new definition fit into USCG's broader responsibility to regulate anchoring in the Hudson in a way that protects navigational safety for commercial vessels, the interests of other waterway users, and the environment?

ANSWER. The Coast Guard did not redefine the Port of New York's boundaries; it reaffirmed codified authorities and regulations. Section 8437 of the Elijah E. Cummings Coast Guard Authorization Act of 2020 suspended the establishment of new anchorage grounds on the Hudson River between Yonkers, NY and Kingston, NY. As such, the Coast Guard has no legal authority to establish new anchorage grounds in this region.

Question 3. Why was this decision made when the Port and Waterway Safety Assessment (PAWSA) in 2017 did not find that additional commercial anchorages were needed for navigational safety?

ANSWER. The Coast Guard currently has no legal authority to establish any new anchorages in this region. Section 8437 of the Elijah E. Cummings Coast Guard Authorization Act of 2020 suspended the establishment of new anchorage grounds on the Hudson River between Yonkers, NY and Kingston, NY.

The Coast Guard published Marine Safety Information Bulletin (MSIB) 2023-01 to clarify the Port of New York's definition and applicable regulations.

Question 4. How is the USCG working in collaboration with local government and non-governmental organizations to ensure that its activities in the region support the abundant and highly-prized natural resources in the river that are critical to the economy and way of life of waterfront communities and create a safe environment for all users of the river?

ANSWER. To address issues that may include the safety, security, mobility, and environmental protection of a port or waterway, the Coast Guard leverages its Harbor Safety Committees to collaborate amongst and with local and non-governmental organizations in the area. Membership is open to all interested parties and typically comprised of representatives of governmental agencies, maritime labor, industry organizations, and public interest groups.

The Coast Guard collaborates extensively with the Hudson River Safety Navigation and Operations Committee (HRSNOC) concerning the safe, secure, and environmentally sound usage of the Hudson River. The HRSNOC is a consensus-driven forum for coordination, collaboration, and decision making among private and public stakeholders on the Hudson River.

Question 5. In the Coast Guard's work with local government and non-governmental organizations, how has it sought to balance the voices of stakeholders to ensure that environmental and ecological goals in the Hudson River are addressed?

ANSWER. The Coast Guard works extensively with the HRSNOC concerning the safe, secure, and environmentally responsible usage of the Hudson River. The HRSNOC is a consensus-driven forum for coordination, collaboration and decision making among private and public stakeholders on the Hudson River.

Question 6. What studies were conducted before the geographic limits of the Port of New York were changed?

ANSWER. The Coast Guard did not redefine the Port of New York's boundaries; it reaffirmed codified authorities and regulations. Since the language in MSIB 2015-14 was unclear, the Coast Guard, via MSIB 2023-01, clarified the Port of New York's definition and applicable regulations.

**QUESTION FROM HON. MIKE EZELL TO MARIE A. MAK, DIRECTOR,
CONTRACTING AND NATIONAL SECURITY ACQUISITIONS, U.S. GOVERNMENT ACCOUNTABILITY OFFICE**

Question 1. Section 11233 of the Don Young Coast Guard Authorization Act of 2022 tasks the GAO with assessing USCG's past and future efforts to upgrade or recapitalize its aviation fleets. Has GAO begun the study, how is it progressing, and have there been any initial findings shared with the USCG?

ANSWER. GAO began the review of the Coast Guard's aircraft operational availability and modernization in late calendar year 2022. We have completed much of our planned field work, and are now in the early stages of developing a draft report. We have not shared our initial findings with the Coast Guard. We plan to do so during our exit conference with the Coast Guard this fall. Please contact Heather MacLeod, Director in our Homeland Security and Justice team, if you have any further questions about this topic area.

QUESTIONS FROM HON. HILLARY J. SCHOLTEN TO MARIE A. MAK,
DIRECTOR, CONTRACTING AND NATIONAL SECURITY ACQUISITIONS,
U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Question 1. As we work to productively recapitalize assets and modernize the Coast Guard's capabilities, it's incumbent upon Congress to ensure American tax dollars are spent wisely so we set our Coast Guard up for success for future generations. As a Michigander, I know how much my state's economy and our nation's economy depends on safe and sustainable Great Lakes.

Question 1.a. We have heard that the construction of a new heavy Great Lakes icebreaker will take 10 years, yet the need is now. What can Congress do to expedite the delivery of this much needed asset?

Question 1.b. To follow up, if Congress funds the additional \$20 million for the Great Lakes icebreaker in the Coast Guard's Unfunded Priorities List, would this help deliver this icebreaker faster than just funding the \$55 million in the budget request?

ANSWER to 1.a. & 1.b. In February 2019, we found that the annual Unfunded Priorities List does not clearly articulate prioritization decisions, including information about trade-offs among competing project alternatives, as well as the impacts on missions conducted from projects that had not been prioritized in previous years.¹ According to Coast Guard officials, and as we previously reported, such information is not included in the Unfunded Priorities List because it is not statutorily required.² These information shortcomings are consistent with previous findings and recommendations that the DHS Office of Inspector General has made.³

However, regardless of whether Congress funds the Great Lakes icebreaker, the Coast Guard needs to provide a good business case, which includes setting firm requirements. Further, the Coast Guard needs to have the adequate knowledge to move through the acquisition cycle—this means reducing concurrency between technology development, design, and construction. If technologies are not fully developed and the design stabilized prior to construction, this could lead to further delays in the Coast Guard obtaining an icebreaker to meet mission needs in the Great Lakes. Instead of funding the icebreaker, potentially before other Coast Guard priorities, it might be beneficial for Congress to consider requiring Coast Guard to complete these activities, such as determining the requirements, by an established timeframe.

The fiscal year 2023 National Defense Authorization Act included a provision for GAO to review Coast Guard icebreaking operations in the Great Lakes, including assessing proposed standards for icebreaking. We plan to report on this topic around winter 2024. However, the Coast Guard should be able to respond about its acquisition and construction timelines, as well as the total costs associated with a new heavy icebreaker. Please contact Heather MacLeod, Director in our Homeland Security and Justice team, if you have any further questions about this topic area.

QUESTIONS FROM HON. RICK LARSEN ON BEHALF OF HON. PATRICK
RYAN TO MARIE A. MAK, DIRECTOR, CONTRACTING AND NATIONAL
SECURITY ACQUISITIONS, U.S. GOVERNMENT ACCOUNTABILITY OF-
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Question 1. How did the United States Coast Guard (USCG) come to decide to redefine the boundaries of the Port of New York?

ANSWER. GAO has not conducted any audit work in this area, and therefore cannot provide a response.

Question 2. How does the new definition fit into USCG's broader responsibility to regulate anchoring in the Hudson in a way that protects navigational safety for commercial vessels, the interests of other waterway users, and the environment?

ANSWER. GAO has not conducted any audit work in this area, and therefore cannot provide a response.

¹ GAO, *Coast Guard Shore Infrastructure: Applying Leading Practices Could Help Better Manage Project Backlogs of At Least \$2.6 Billion*, GAO-19-82 (Washington, D.C.: Feb. 21, 2019).

² GAO, *Coast Guard Acquisitions: Actions Needed to Address Longstanding Portfolio Management Challenges*, GAO-18-454 (Washington, D.C.: July 24, 2018).

³ Department of Homeland Security Office of Inspector General, *Maintenance, Rehabilitation, and Upgrading of Shore Facilities in Support of United States Coast Guard Missions*, OIG-08-24 (Washington, D.C.: February 14, 2008).

Question 3. Why was this decision made when the Port and Waterway Safety Assessment (PAWSA) in 2017 did not find that additional commercial anchorages were needed for navigational safety?

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