

August 2024

COAST GUARD

Complete Performance and Operational Data Would Better Clarify Arctic Resource Needs

GAO Highlights

Highlights of GAO-24-106491, a report to congressional committees

Why GAO Did This Study

The United States, by virtue of Alaska, is an Arctic nation with substantial regional interests. Increasing Arctic activity, risks, and geopolitical tensions mean that the Coast Guard and its key federal partners, such as DOD, face growing responsibilities. These include assessing and managing risks to maritime safety, security, and environment, as well as to nonmaritime national security.

The James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 includes a provision for GAO to review Coast Guard Arctic operations and infrastructure. This report addresses (1) the extent to which the Coast Guard has assessed and planned for its Arctic risks, and identified the resources needed to do so, and (2) how the Coast Guard has collaborated with DOD to assess and manage Arctic risks. GAO reviewed and analyzed Coast Guard risk assessment and management and performance documents and interviewed officials from the Coast Guard, DOD, and other relevant Arctic stakeholders, including White House, State of Alaska, and Alaska Native officials.

What GAO Recommends

GAO is recommending that Coast Guard ensure that (1) it collects and reports complete information about resource use and mission performance, and (2) its Arctic implementation plan includes performance measures with associated targets and timeframes for action items. The Department of Homeland Security concurred with both recommendations and identified planned actions to address them.

View GAO-24-106491. For more information, contact Heather MacLeod at (202) 512-8777 or macleodh@gao.gov.

COAST GUARD

Complete Performance and Operational Data Would Better Clarify Arctic Resource Needs

What GAO Found

The Coast Guard has assessed risks, such as from climate change and increased maritime activity, that affect its ability to carry out its missions in the U.S. Arctic region. It has also identified these risks in various planning documents, including the Coast Guard Arctic strategy.

The Coast Guard manages Arctic risks like responding to maritime incidents by forward deploying cutter and aviation assets into the U.S. Arctic region to reduce its transit and response times. The Coast Guard also deploys assets to provide a presence there but has not always been able to meet its planned deployment commitments recently. Coast Guard reports for the region that document asset resource use and mission performance for operational planning did not have complete information from fiscal year 2016 through fiscal year 2021. For example, some years did not include targets for key missions (e.g., maritime law enforcement). Reports were also unavailable for fiscal years 2022 and 2023. Collecting and reporting complete information would better position the Coast Guard to make more informed operational planning decisions for the region.

Additionally, the Coast Guard Arctic implementation plan outlines initiatives and actions that it intends to take to execute strategic objectives identified in its Arctic strategy and to support the national Arctic strategy. However, the plan generally does not include key metrics such as performance measures, targets, or time frames for action items. This may make it difficult for the Coast Guard to plan activities, determine resource needs, assess its progress toward strategic objectives, and ensure its efforts are aligned with national efforts.

Coast Guard Polar Icebreaker Healy



Source: U.S. Coast Guard photo by Petty Officer 3rd Class Briana Carter. | GAO-24-106491

The Coast Guard and Department of Defense (DOD) described collaborating in the Arctic to assess and manage risks in several ways, including sharing relevant information and expertise and providing operational assistance. For example, both agencies collaborated on the development of their Arctic strategies and collaborate to improve domain awareness in the Arctic. They also provide operational support to each other, such as the Coast Guard providing search and rescue coverage for DOD during a biennial exercise.

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Abbreviations

DHS	Department of Homeland Security
DOD	Department of Defense
FY	fiscal year

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W. Washington, DC 20548

August 13, 2024

The Honorable Maria Cantwell Chair The Honorable Ted Cruz Ranking Member Committee on Commerce, Science, and Transportation United States Senate

The Honorable Sam Graves Chairman The Honorable Rick Larsen Ranking Member Committee on Transportation and Infrastructure House of Representatives

The United States, by virtue of Alaska, is an Arctic nation with substantial security and economic interests in the region.¹ In recent years, there has been an escalation of great power competition among the United States, Russia, and China, which has introduced tension into the Arctic's geopolitical environment. The effects of climate change, technological advancements, and economic opportunities have driven increasing interest and activity in the Arctic region, including increased maritime activity. This has also driven increasing risks.

Since the Arctic is largely a maritime domain, the U.S. Coast Guard (Coast Guard), a multimission military service within the Department of Homeland Security (DHS), plays a key role in Arctic policy implementation and enforcement.² As more navigable ocean water has emerged in the Arctic region and human activity increases, the Coast Guard and key federal partners such as the Department of Defense

¹The Arctic Research and Policy Act of 1984 defined the Arctic as "all United States and foreign territory north of the Arctic Circle and all United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas; and the Aleutian chain." Pub. L. No. 98-373, tit. I, § 112, 98 Stat. 1242, 1248 (codified at 15 U.S.C. § 4111).

²For the purposes of this report, we are focusing on the Coast Guard's area of responsibility and operations around the State of Alaska. This area includes a portion of the Arctic (as defined by the Arctic Research and Policy Act of 1984) as well as the region below the Arctic that includes the rest of the State of Alaska, its shoreline, and the surrounding seas. See figure 1.

(DOD) face growing responsibilities to assess and manage risks, including those to maritime safety, security, and the environment, as well as to nonmaritime aspects of national security.³

We were asked to review Coast Guard Arctic operations.⁴ This report addresses (1) the extent to which the Coast Guard has assessed and planned for its Arctic risks, and identified the resources needed to do so, and (2) how the Coast Guard has collaborated with DOD to assess and manage Arctic risks.

To address the first objective, we reviewed and analyzed Coast Guard documents from 2016 through 2023 related to Arctic risk assessment and management as well as planned actions, including the Coast Guard's 2019 *Arctic Strategic Outlook* (Coast Guard Arctic strategy), and its 2023 *Arctic Strategic Outlook Implementation Plan* (Coast Guard Arctic implementation plan).⁵ We also reviewed Contingency Response Concept Plans, Operational Planning Direction documents, and Operational Performance Assessment Reports (performance reports), which included data on Coast Guard Mission resource hours and mission performance targets, for Coast Guard Pacific Area, Atlantic Area, and District 17 in Alaska.⁶ We assessed the reliability of the data used in the Coast Guard performance reports by reviewing related documentation as well as through interviews and written responses from knowledgeable

⁴The James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 includes a provision for us to study Coast Guard Arctic operations and infrastructure and to submit a report on the findings of the study to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives. See Pub. L. No. 117-263, div. K, tit. CXII, subtit. C, § 11220(c), 136 Stat. 2395, 4020.

⁵We selected 2016 as our starting point because our last report on Coast Guard Arctic operations was issued in 2016. See GAO, *Coast Guard: Arctic Strategy Is Underway, but Agency Could Better Assess How Its Actions Mitigate Known Arctic Capability Gaps,* GAO-16-453 (Washington, D.C.: June 15, 2016); United States Coast Guard, *Arctic Strategic Outlook* (Washington, D.C.: Apr. 2019); and United States Coast Guard, *Arctic Strategic Outlook Implementation Plan* (Washington, D.C.: Oct. 3, 2023).

⁶Pacific Area and District 17 are described in the background of this report.

³Federal agencies participating in national Arctic efforts include DHS and some of its components, such as the Federal Emergency Management Agency, the Transportation Security Administration, U.S. Customs and Border Protection, and the Cybersecurity and Infrastructure Security Agency. Non-DHS entities include DOD, the National Oceanic and Atmospheric Administration, the Department of Energy, and the Environmental Protection Agency, among others. For more information, see The White House, *Implementation Plan for the 2022 National Strategy for the Arctic Region* (Washington, D.C.: Oct. 18, 2023).

officials. We determined that the data were sufficiently reliable for reporting on Coast Guard performance information.

We evaluated the Coast Guard Arctic implementation plan and the performance reports against the Coast Guard's *Framework for Strategic Mission Management, Enterprise Risk Stewardship,* and *Internal Control* to determine Coast Guard criteria for implementing and tracking progress toward strategic objectives.⁷ We reviewed Coast Guard guidance on standard operational planning and global force management to determine requirements for developing performance reports.⁸ We also interviewed Coast Guard officials about how they assess, manage, and mitigate risks to Coast Guard operations and infrastructure, commercial maritime operations, and the maritime environment in the Arctic region. We conducted a site visit to Juneau, Alaska, to interview officials from Coast Guard District 17 and the Marine Exchange of Alaska.

To address the second objective, we reviewed Coast Guard and DOD collaboration efforts in the Arctic region. These included Arctic risk assessment documents and interagency agreements with DOD, including the DOD service branches and relevant combatant commands—Northern Command, European Command, and Indo-Pacific Command. We also reviewed Arctic strategies from DOD, Air Force, Navy, and Army.⁹ We interviewed DOD officials from headquarters, Northern Command, and Navy about how they collaborate with the Coast Guard on Arctic risk assessments. We also interviewed Coast Guard officials from headquarters and the field about how they collaborate with DOD.

⁷United States Coast Guard, Deputy Commandant for Operations, *Framework for Strategic Mission Management, Enterprise Risk Stewardship, and Internal Control* (Washington, D.C.: July 2020).

⁸United States Coast Guard, *Commandant Instruction 3120.4B: Coast Guard Standard Operational Planning Process/Global Force Management* (Washington, D.C.: Dec. 9, 2021) and United States Coast Guard, *Global Force Management (GFM) 2.0 Process Guide* (Washington, D.C.: Aug. 2023).

⁹Department of Defense, *Report to Congress: Department of Defense Arctic Strategy* (Washington, D.C.: June 2019), Department of the Air Force, *The Department of the Air Force Arctic Strategy: Ensuring a Stable Arctic Through Vigilance, Power Projection, Cooperation, and Preparation* (Washington, D.C.: July 21, 2020), Department of the Navy, *a Blue Arctic: A Strategic Blueprint for the Arctic* (Washington, D.C., Jan. 5, 2021), and Department of the Army, *Regaining Arctic Dominance: The U.S. Army in the Arctic* (Washington, D.C., Jan. 19, 2021).

	To address both objectives, we reviewed the <i>National Strategy for the</i> <i>Arctic Region</i> (national Arctic strategy) to identify Arctic risks. ¹⁰ We reviewed and analyzed the <i>Implementation Plan for the National Strategy</i> <i>for the Arctic Region</i> (national Arctic implementation plan) to identify planned actions relevant to the Coast Guard. ¹¹ We interviewed officials from the Arctic Executive Steering Committee about their coordination with federal agencies on risk assessment, risk management, and agency progress on completing assigned actions from the national Arctic implementation plan. ¹² Finally, we interviewed other relevant stakeholders who have knowledge of or a role in federal Arctic efforts to gain their perspectives. This included officials from the National Oceanic and Atmospheric Administration, the Ted Stevens Center for Arctic Security Studies, the Polar Institute at the Wilson Center, the State of Alaska, the Alaska Federation of Natives, and the Marine Exchange of Alaska. We conducted this performance audit from January 2023 to August 2024 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.
Background	
Coast Guard Roles and Responsibilities	The Coast Guard is responsible for protecting and defending more than 100,000 miles of U.S. coastline and inland waterways. Of these, over 47,300 miles is shoreline throughout Alaska and the U.S. Arctic region. To carry out its missions, the Coast Guard is organized into two commands, Pacific Area and Atlantic Area. Each area oversees multiple districts, and each district oversees multiple sectors, which conduct missions at the local and port level. ¹³ The Coast Guard's District 17,
	¹⁰ The White House, <i>National Strategy for the Arctic Region</i> (Washington, D.C.: Oct. 2022).
	¹¹ The White House, <i>Implementation Plan for the 2022 National Strategy for the Arctic Region</i> .
	¹² We discuss the Arctic Executive Steering Committee later in this report.
	¹³ According to Coast Guard officials, as of October 2023, the area commanders have implemented a unified command and control structure called Coast Guard Task Force-Arctic to carry out Arctic missions that are not specific missions of their districts or sectors.

within Pacific Area, has responsibility for over 3.85 million square miles of territory throughout Alaska and the U.S. Arctic region.¹⁴ For the purposes of this report, when we refer to the U.S. Arctic region we are referring to the area that includes the State of Alaska, its shoreline, and the surrounding seas that generally align with Coast Guard District 17's area of responsibility and operations.¹⁵ See figure 1 below for District 17's area of operations, including key locations within it, and the associated Arctic boundary line.





Source: U.S. Census Bureau, U.S. Coast Guard, Arctic Research Commission, Statistics Canada, UN Office for the Coordination of Humanitarian Affairs (map data). | GAO-24-106491

¹⁴The Pacific Area geographic area of responsibility ranges from the U.S. western states to Asia and from the Arctic to Antarctica.

¹⁵The Coast Guard also has responsibilities and conducts Arctic missions outside the U.S. Arctic region, including in the European Arctic, Canadian Arctic, and north of the Russian Arctic. For example, Coast Guard aircraft conduct reconnaissance flights to locate icebergs in support of the International Ice Patrol, and it also participates in the Arctic Coast Guard Forum, an organization made up of Arctic countries dedicated to fostering safe, secure, and environmentally responsible maritime activity in the Arctic.

Coast Guard Arctic Assets and Operations	The Coast Guard's mission responsibilities for the U.S. Arctic region include marine safety, marine environmental protection, search and rescue, aids to navigation, ice operations, and living marine resources, among others. ¹⁶ It carries out its missions and other operations in the Arctic region using various types of assets and personnel, including polar icebreakers, as well as large ships and aircraft that can operate in harsh conditions.
	The Coast Guard polar icebreaker <i>Healy</i> deploys annually to the Arctic region in support of national objectives and research efforts for several federal agencies (see fig. 2 below). ¹⁷ The other large Coast Guard cutters conducting missions in the region are based both within and outside of District 17's area of responsibility, and they deploy to multiple locations around Alaska and the U.S. Arctic region. ¹⁸ The aircraft operating in this region are mostly long-range fixed wing aircraft and medium-range helicopters. ¹⁹ They are mostly based within District 17 at Air Station Kodiak and Air Station Sitka, which are located below the U.S. Arctic region (see fig. 1 above).

¹⁸According to the Coast Guard, its cutters are vessels 65 feet in length or greater with accommodations for crew to live aboard, and the ability to carry multiple types of smaller craft. Most cutters of more than 200 feet in length are capable of accommodating helicopters.

¹⁹HC-130 fixed wing aircraft and MH-60 helicopters deploy year-round for response missions. MH-60s are also deployed from July through October each year to a forward operating location in Kotzebue, Alaska, to enhance search and rescue capability during periods of increased vessel traffic.

¹⁶See Homeland Security Act of 2002, Pub. L. No. 107-296, tit. VIII, subtit. H, § 888, 116 Stat. 2135, 2249 (codified at 6 U.S.C. § 468). The Coast Guard's other five missions, also conducted in the U.S. Arctic, include ports, waterways, and coastal security; drug interdiction; migrant interdiction; defense readiness; and other law enforcement.

¹⁷In addition to the *Healy*, the Coast Guard operates the polar icebreaker *Polar Star*, which usually conducts operations in Antarctica. For further information, see GAO, *Coast Guard: Observations on Arctic Requirements, Icebreakers, and Coordination with Stakeholders,* GAO-12-254T (Washington, D.C.: Dec. 1, 2011). See also 6 U.S.C § 468(a)(1)(F) (providing for ice operations as one of Coast Guard's missions); Coast Guard and Maritime Transportation Act of 2012, Pub. L. No. 112-213, tit. II, § 217(1), 126 Stat. 1540, 1556 (codified at 14 U.S.C. § 102(4)) (providing for the development, establishment, maintenance, and operation of ice facilities as one of Coast Guard's primary duties).



Figure 2: Coast Guard Polar Icebreaker Healy

Source: U.S. Coast Guard photo by Petty Officer 3rd Class Briana Carter. | GAO-24-106491

Coast Guard Planning Process, Resource Allocation, and Performance Reports

To communicate strategic commitments to operational commanders and allocate resources by asset type throughout its chain of command, the Coast Guard uses its Standard Operational Planning Process.²⁰ As part of this process, Coast Guard headquarters develops an annual Strategic Planning Direction, which is the primary mechanism for allocating resources and providing strategic direction to operational commanders. One of the inputs used to develop the Strategic Planning Direction are quarterly performance reports submitted by areas and districts.

According to Coast Guard guidance, the performance reports are quarterly summaries of Coast Guard operations and provide quantitative and qualitative information on mission performance and resource hours expended. These reports are used to identify capability gaps and ways that the Coast Guard can improve its operational effectiveness.

²⁰Strategic commitments are resource allocations that Coast Guard headquarters deems critical to the implementation of national, DHS, and Coast Guard strategic priorities.

National Arctic Strategy and Planning for Federal Efforts	The Arctic Executive Steering Committee was created by executive order in 2015 to provide guidance to executive departments and agencies and enhance coordination of federal Arctic policies across agencies; offices; state, local, and Alaska Native Tribal governments; and other stakeholders. ²¹ In October 2022, the White House issued an updated national Arctic strategy which describes the U.S. agenda and policy in the region over the next 10 years. ²²
	In October 2023, the White House issued the national Arctic implementation plan to describe the methodology, process, and approach for executing the national Arctic strategy, including steps for federal agencies to implement. ²³ According to the Executive Director of the Arctic Executive Steering Committee, the National Security Council and the Arctic Executive Steering Committee co-led the development of the national Arctic implementation plan, which involved over 40 federal entities. Other interagency groups such as the Interagency Arctic Research Policy Committee and the U.S. Committee on the Marine Transportation System have Arctic functions, and the U.S. Department of State serves as the overall lead for U.S. Arctic diplomatic efforts. ²⁴ The Executive Director of the Arctic Executive Steering Committee stated that the level of participation from across the federal government was a key influence on the scope and level of detail in the implementation plan.
	 ²¹See Exec. Order No. 13689, <i>Enhancing Coordination of National Efforts in the Arctic</i>, 80 Fed. Reg. 4191 (Jan. 26, 2015). The Arctic Executive Steering Committee includes the Deputy Secretary or equivalent officer from a range of federal agencies, including DHS. It can also include other agencies or offices as determined appropriate by the Chair. The Coast Guard is involved in Arctic Executive Steering Committee activities. ²²The White House, <i>National Strategy for the Arctic Region</i>. According to the Executive Director of the Arctic Executive Steering Committee, the National Security Council led development of the national Arctic strategy. ²³The White House, <i>Implementation Plan for the 2022 National Strategy for the Arctic Region</i>. ²⁴The Department of State leads U.S. participation in the Arctic Council and coordinates with the other federal agencies in the U.S. delegation. For more information on U.S. priorities in the Arctic and interactions with foreign partners on Arctic issues, see GAO, <i>Arctic Region: Factors That Facilitate and Hinder the Advancement of U.S. Priorities</i>, GAO-23-106002 (Washington, D.C.: Sept. 6, 2023).

agency progress through a tracking tool that includes action items from the national Arctic implementation plan as well as periodically updating the plan to create greater uniformity. Meeting minutes indicate that the status of agency results was discussed at the March 2024 Arctic Executive Steering Committee quarterly meeting. The Executive Director stated that the committee would like to adopt standardized goals with time frames in future updates to the national Arctic implementation plan. The committee plans to start these updates in the summer of 2024 and complete them by early fiscal year 2025.

Coast Guard Has Assessed and Planned for Arctic Risks, but Has Incomplete Information for Determining Resources Needs

Coast Guard Has Identified and Assessed Arctic Risks and Included Them in Various Planning Documents The Coast Guard has identified and assessed risks—such as from climate change and increased maritime activity—that affect its ability to carry out its missions in the Arctic region and included this information in various planning documents.²⁵ These include the Coast Guard's Arctic strategy and region-specific documents, such as all-hazards concept plans for Pacific Area and District 17, which identify risks specific to their operations. Maritime stakeholder committees have also worked in

conjunction with the Coast Guard to identify security and marine

²⁵We focused on Arctic-specific risks that could affect the Coast Guard's operations in that region. We have previously reported on broader challenges to Coast Guard operations such as workforce planning issues, which could affect its Arctic operations, but we do not address these issues in this report. For more information on workforce planning, see GAO, *Coast Guard: Actions Needed to Evaluate the Effectiveness of Organizational Changes and Determine Workforce Needs*, GAO-20-223 (Washington, D.C.: Feb. 26, 2020), GAO, *Coast Guard: Increasing Mission Demands Highlight Importance of Assessing Its Workforce Needs*, GAO-22-106135 (Washington, D.C.: July 27, 2022); and GAO, *Coast Guard: Deployable Operations Group Achieving Organizational Benefits, but Challenges Remain*, GAO-10-433R (Washington, D.C.: Apr. 7, 2010).

environmental risks in planning documents specific to their areas of operation (see table 1).

Planning Document	Description of Document
Coast Guard Arctic Strategy (Participants: Coast Guard)	Identifies a range of risks, including security risks from increased militarization of the Arctic region and potential conflict with Russia or China; and safety risks from more frequent and intense winter storms and greater shipping traffic that raise the risk of potential mass rescue operations. This strategy also identifies environmental risks, such as coastal and river erosion, marine oil spills and other pollution, and damage to the marine ecosystem from illegal, unreported, and unregulated fishing. It also identifies risks to regional communities due to changing availability of and access to subsistence resources.
Coast Guard Arctic Implementation Plan (Participants: Coast Guard)	Consists of 14 interconnected initiatives for carrying out the Coast Guard Arctic strategy with the lead organizations/offices responsible for overseeing implementation, and action items that represent next steps to advance the Coast Guard Arctic strategy. According to Coast Guard officials, the plan is scalable to adapt to the dynamic nature of Arctic challenges and to the U.S. Coast Guard's available resources.
All-Hazards Concept Plans (Participants: Coast Guard)	Describe a range of hazards and contingences, including natural and manmade disasters, assumptions about and potential impacts of an incident, pre-incident preparedness activities by the Coast Guard, and support to and from other agencies. Examples of contingencies include maritime mass rescue operations, maritime transportation system disruptions, and maritime homeland defense.
Area Maritime Security Plans Area Maritime Security Committees (Participants: federal, state, territorial or Tribal government; local public safety, crisis management, and emergency response agencies; the maritime industry; and other port stakeholders)	Identify critical port infrastructure, operations, and security risks, and determine mitigation strategies and implementation methods. According to Coast Guard officials, this is a primary risk assessment that uses a risk analysis model to evaluate the likelihood of security risks. These risks are evaluated by Coast Guard officials and used to conduct Area Maritime Security Assessments and to inform Area Maritime Security Plans.
Area Contingency Plans Area Committees (Participants: federal, Tribal, state, and local government agencies; as well as representatives from industry, environmental, and non-governmental organizations, and oil spill removal organizations)	Identify plans for oil and hazardous substance spill response, incident management, and all-hazards preparedness. The plans serve as a primary risk assessment for marine environmental risks and include more qualitative scenarios and stakeholder involvement to identify emerging risks and prepare responses.

Table 1: Coast Guard Planning Documents, Descriptions, and Participants

Sources: GAO analysis of Coast Guard documents and interviews with Coast Guard officials. | GAO-24-106491

Coast Guard Has Taken Steps to Manage Arctic Risks but Limited Asset Availability and Incomplete Data Hinder These Efforts

Coast Guard Has Two Key Approaches for Mitigating Operational Risks in the Arctic Region The Coast Guard mitigates operational risks in the Arctic region by forward deploying assets to the area and by participating in exercises with its partners. To help plan its risk mitigation efforts, the Coast Guard has established strategic commitments for maintaining a presence in the Arctic region (including and beyond the U.S. Arctic region) using its various assets, including its personnel, cutters, and aircraft. To help meet these commitments and better manage its operations, given the region's vast geographic area and often harsh weather conditions, the Coast Guard forward deploys assets to key locations in the U.S. Arctic region. See figure 3 for a depiction of the long air and sea distances required to reach the north Alaska coastline. These assets are forward deployed to the Arctic from other locations—such as California, Hawaii, Washington, and elsewhere in Alaska-reducing transit times for carrying out its missions in the summer and fall when maritime activity peaks in the region. According to Coast Guard officials, this annual effort-known as Operation Arctic Shield-allows the Coast Guard to allocate resources, support communities in the Arctic, conduct missions, and identify areas where the Coast Guard needs support from partners.²⁶ The Coast Guard also forward deploys Maritime Safety and Security Teams to support **Operation Arctic Shield.**²⁷

²⁶Operation Arctic Shield is intended to provide the Coast Guard with the opportunity to conduct its missions and activities, broaden partnerships in support of its Arctic operations, and enhance and improve its preparedness, prevention, and response capabilities in the Arctic. See GAO, *Arctic Capabilities: Coast Guard is Taking Steps to Address Key Challenges, but Additional Work Remains*, GAO-20-374t (Washington, D.C.: Feb. 5, 2020).

²⁷The Coast Guard Maritime Safety and Security Teams are maritime security antiterrorism forces that are managed as national deployable units responsible for safeguarding the public and protecting vessels, harbors, ports, facilities, and cargo in U.S. territorial waters. The teams are one component of the Coast Guard's Deployable Specialized Forces, which deploy from their home locations, such as major U.S. port areas, to conduct operations in U.S. coastal waters and internationally. For more information, see GAO, *Coast Guard: Assessing Deployable Specialized Forces' Workforce Needs Could Improve Efficiency and Reduce Potential Overlap or Gaps in Capabilities*, GAO-20-33 (Washington, D.C.: Nov. 21, 2019).

Figure 3: Air and Sea Travel Distances in Alaska



Sources: GAO analysis of National Oceanic and Atmospheric Administration and U.S. Coast Guard information, Map Resources (map). | GAO-24-106491

The Coast Guard also manages operational risk by participating in exercises in the U.S. Arctic with DOD, other federal agencies, and international partners. For example, according to Coast Guard officials, the Coast Guard provides standby search and rescue support for Operation Arctic Edge, DOD's joint biennial exercise with the Canadian Armed Forces. The Coast Guard also helps plan for and participates in the Alaska National Guard's recurring Arctic Eagle-Patriot exercise to train for homeland security and emergency response missions in and around the Arctic.

The Coast Guard, DOD, and international partners also conduct exercises outside the U.S. Arctic. For example, Exercise Argus is an annual international training event for Arctic search and rescue and Limited Asset Availability Hinders Efforts to Meet U.S. Arctic Region Strategic Commitments marine environmental incidents. In 2023, this training exercise included Greenland, Denmark, and France. Another training exercise, Operation Nanook, is an annual Canadian Armed Forces Arctic exercise with international partners, including the U.S. Navy and Coast Guard.

The Coast Guard has multiple strategic commitments for operations in the U.S. Arctic region but has been unable to meet all of them in recent years for a variety of reasons. For example, the Coast Guard has maintained a strategic commitment to have a 365-day major cutter presence in U.S. Arctic waters, specifically the Bering Sea, but it has not always been able to meet this commitment recently due to asset availability challenges. Specifically, in fiscal year (FY) 2022, mechanical problems prevented the Coast Guard from deploying a major cutter to the Bering Sea as planned, resulting in a 27-day coverage gap.

The Coast Guard has a separate strategic commitment to provide a seasonal major cutter presence in U.S. Arctic waters north of the Bering Strait,²⁸ which the Coast Guard was also unable to meet in FY 2016 and from FY 2019 through FY 2023.²⁹ See figure 4 below for Coast Guard cutter deployment days in the U.S. Arctic region. Coast Guard officials told us that the agency was unable to meet its strategic commitments in the U.S. Arctic region at various times because of the COVID-19 pandemic, mechanical problems, and a lack of reserve major cutters. Separately, Coast Guard documents identified competing demands for major cutters in other areas, such as the Indo-Pacific region. In addition, Coast Guard officials told us that environmental factors such as the presence of sea ice can limit the ability of major cutters to access areas north of the Bering Strait, which may result in reduced deployment days in the region.

The Coast Guard polar icebreaker *Healy* has also been deployed to, among other missions, help manage risks in the Arctic by providing a seasonal Coast Guard presence in the region (see fig. 4).³⁰ However, this ship's ability to carry out its planned deployments has varied. For

²⁸The Bering Strait, within the Bering Sea, is located between Alaska and Russia and is a key convergence point for trans-Arctic routes that connect the Northwest Passage and the Northern Sea Route to the Pacific Ocean.

²⁹In FY 2016, the Coast Guard deployed a cutter to this region for 86 days, just missing its strategic commitment of 90 days.

³⁰The *Healy* primarily supports the research efforts of several federal agencies in the Arctic but can also carry out Coast Guard missions, such as search and rescue.

instance, in FY 2019, the *Healy* helped to manage risk north of the Bering Strait by deploying to the U.S. Arctic region for 124 days, according to Coast Guard planning documents. However, its FY 2020 deployment was shortened from a planned 105 days to 26 days due to a propulsion motor fire. As a result, the Coast Guard deployed its other polar icebreaker, the Polar Star, to the U.S Arctic region for 78 days between December 2020 and February 2021.³¹

Figure 4: Coast Guard Strategic Commitments and Cutter Deployment Days to the U.S. Arctic Region, fiscal years 2016–2023



- - O - - Strategic commitment, Pacific Area mandated priority, or Pacific Area commitment

Not to exceed limit

Source: GAO analysis of Coast Guard Strategic Planning Directions, Operational Planning Directions, Operational Performance Assessment Reports, and Coast Guard Arctic Winter West Summer 2016 Cruise report. | GAO-24-106491

Notes: Days deployed exceeds 365 days in some fiscal years because multiple cutters were deployed to the region and their combined days deployed are cumulative. "No data" means that the Coast Guard was unable to provide information on the number of days its cutters or icebreaker were deployed during that fiscal year. "North of the Bering Strait" refers to the Chukchi, Barents, and Beaufort Seas. Strategic commitments are resource allocations that Coast Guard deems critical to the implementation of national, Department of Homeland Security, and Coast Guard strategic priorities. The Coast Guard did not establish a strategic commitment for Arctic icebreaker deployments until fiscal year 2019. Pacific Area is one of two Coast Guard commands, and its

³¹Coast Guard officials stated that the agency was able to deploy the *Polar Star* to the Arctic to cover for the *Healy* because the *Polar Star*'s annual Antarctic mission for FY 2020 was canceled due to the COVID-19 pandemic.

geographic area of responsibility ranges from the U.S. western states to Asia and from the Arctic to Antarctica.

^aThe polar icebreaker *Healy* deploys annually to the Arctic region in support of national objectives and research efforts for several federal agencies. The *Healy*'s fiscal year 2020 deployment was shortened from a planned 105 days to 26 days due to a motor fire. The Coast Guard's other polar icebreaker, Polar Star, typically conducts annual Antarctic missions. It was deployed to the Arctic for 78 days in fiscal year 2021 when its Antarctic mission was canceled. This deployment is not included in the figure above.

Coast Guard officials noted that the agency's operational challenges in the U.S. Arctic region are amplified by limited infrastructure and logistics capabilities in Alaska. In addition to major cutters and icebreakers, the Coast Guard also forward deploys helicopters to the U.S. Arctic region as part of Operation Arctic Shield. The Coast Guard operates these helicopters from a leased Alaska National Guard aircraft hangar in Kotzebue, Alaska, because it lacks such infrastructure in the Arctic region. Coast Guard officials also told us that it can take weeks to transport large spare parts, such as helicopter rotor blades, to their destinations in the region because they must be shipped by barge over long distances. These logistical challenges can further limit Coast Guard assets' availability to conduct missions.

To address operational challenges in this and other regions, the Coast Guard plans to acquire 28 new cutters,³² including at least three new icebreakers.³³ However, in the interim, the Coast Guard has projected it will have a reduced number of ships available for operations through FY

³²GAO has an ongoing review about the planned new Polar Security Cutters. GAO expects to issue a report on the results of its review in fall 2024.

³³In addition to these three new icebreakers, the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 includes a provision that authorized \$150 million for the acquisition or procurement of a United States built available icebreaker. See Pub. L. No. 117-263, div. K, tit. CXI, § 11104(a)(5), tit. CXII, subtit. C, § 11223(a), 136 Stat. at 4004, 4021. The Further Consolidated Appropriations Act, 2024 includes a provision appropriating over \$1.41 billion for necessary expenses of the Coast Guard for procurement, construction, and improvements, including vessels and aircraft. See Pub. L. No. 118-47, div. C, tit II, 138 Stat. 460, 600. The joint explanatory statement for the act includes a provision specifying that \$125 million is provided for procurement of a commercially available polar icebreaker. See Staff of H.R. Comm. on App., 118th Cong., Joint Explanatory Statement for Division C—Department of Homeland Security Appropriations Act 31 (Comm. Print 2024).

2039.³⁴ Until these new ships enter service, cutter and icebreaker shortages may continue to challenge the Coast Guard's ability to meet its strategic commitments in the U.S. Arctic region and other regions.

Key District 17 Resource and Performance Information is Incomplete or Missing Key Coast Guard operational performance reports for FY 2016 through FY 2021 that identify resource hour use and mission performance information for District 17 were partially complete or incomplete.³⁵ Further, Coast Guard officials said they could not locate District 17's performance report for FY 2022 and were not able to create one for FY 2023. See table 2 below. Coast Guard guidance requires field units to complete these reports, which are used as part of its annual planning process. This process is the Coast Guard's primary mechanism for allocating resources and providing strategic direction to operational commanders.

Coast Guard documentation for FY 2016 through FY 2020 had complete information on resource hour use by mission. However, the documentation had either incomplete or partially complete information on mission performance for these years.³⁶ For example, these reports did not consistently include mission performance targets for key District 17 missions, such as maritime law enforcement.³⁷

District 17 performance reports also identified data system limitations that may have affected the accuracy of resource hour use and mission

³⁴Both the Offshore Patrol Cutter and the Polar Security Cutter acquisitions programs have been delayed. For more information, see GAO, *Coast Guard Acquisitions: Offshore Patrol Cutter Program Needs to Mature Technology and Design [Reissued with revisions on Aug. 1, 2023]*, GAO-23-105805 (Washington, D.C.: June 20, 2023) and GAO, *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).

³⁵Resource hour use is the amount of time that Coast Guard aircraft, cutters, and small boats spent conducting missions and exercises during the fiscal year. Mission performance information is quantitative targets and results for different Coast Guard missions.

³⁶When we evaluated the reports, "complete" meant that elements of the performance reports contained complete resource hour or mission performance data for all missions executed in District 17. "Partially complete" meant that elements of the performance reports contained data for some missions but not others. "Incomplete" meant that elements of the performance reports lacked data for all missions. "Unavailable" meant that we could not evaluate performance reports because Coast Guard could not provide those reports.

³⁷Quantitative targets for Coast Guard's maritime law enforcement missions include, for example, the interdiction rate of foreign fishing vessels violating U.S. waters, and the percent of federal fisheries found to be in compliance with laws and regulations.

performance data. For instance, the reports described data system malfunctions and miscategorized multimission cutter patrol hours. These reports stated that District 17 officials were working to correct erroneous records.³⁸

Fiscal Year	Resource Hour Use	Mission Performance Targets
2016	Complete	Incomplete
2017	Complete	Partially Complete
2018	Complete	Partially Complete
2019	Complete	Partially Complete
2020	Complete	Partially Complete
2021	Incomplete	Incomplete
2022	Unavailable	Unavailable
2023	Unavailable	Unavailable

Table 2: Completeness of Coast Guard District 17 Performance Report Elements

Source: GAO analysis of Coast Guard data | GAO-24-106491

Note: Coast Guard District 17 is responsible for over 3.85 million square miles of territory throughout Alaska and the U.S. Arctic region, including over 47,300 miles of shoreline. Resource hour use refers to the amount of time that Coast Guard aircraft, ships, and small boats spent conducting missions and exercises. Mission performance targets refer to Coast Guard's quantitative goals for its various missions. "Complete" means that elements of the performance reports contained complete resource hour or mission performance data for all missions executed in District 17. "Partially Complete" means that elements of the performance reports lacked data for all missions. "Incomplete" means that elements of the performance reports lacked data for all missions. "Unavailable" indicates that we could not evaluate performance reports because Coast Guard could not provide those reports. According to Coast Guard officials, District 17's fiscal year 2022 performance report was lost during a data migration. Additionally, District 17 stated it could not produce a performance report for fiscal year 2023 due to a shortage of qualified personnel.

³⁸We previously reviewed a key Coast Guard data system that it uses to track and report results for nearly all of its missions and identified several data issues in Coast Guard records including data errors, incomplete or missing records, and inconsistent data entry practices. We made four recommendations to the Coast Guard, including a recommendation to assess and address the causes of data errors and inconsistent data entry. In January 2021, Coast Guard told us that it completed its review of data errors and planned to carry out a project to merge duplicate records. Coast Guard said that that it would reassess data errors and inconsistent entries after completing this project. In June 2023, Coast Guard officials stated that they expected to complete this project in fiscal year 2024. We continue to monitor actions the Coast Guard takes to fully implement all four of our recommendations. GAO, *Coast Guard: Actions Needed to Ensure Investments in Key Data System Meet Mission and Used Needs*, GAO-20-562 (Washington, D.C.: July 16, 2020). Coast Guard guidance specifies area and district responsibilities.³⁹ Specifically, Coast Guard guidance states that district commanders are responsible for consolidating, developing, and submitting required performance report products.⁴⁰ Other Coast Guard guidance further states that reliable performance measures provide baselines and benchmarks for assessing progress toward achieving mission purposes and program objectives.⁴¹

The Coast Guard informed us that there were several reasons for why District 17 performance reports were unavailable or incomplete. Specifically, Coast Guard officials stated that District 17's FY 2022 report was lost during a data migration, and that District 17 was unable to produce a performance report for FY 2023 due to a shortage of qualified personnel. They further stated that personnel shortages also contributed to the incomplete and partially complete performance reports in earlier fiscal years. Coast Guard headquarters officials also said that preparing performance reports is a collateral duty and that personnel routinely rotate positions across the Coast Guard making the tracking of performance information more difficult. These factors may have contributed to the deficiencies in District 17's performance reports. Coast Guard officials from District 17 told us in April 2024 that they filled vacant District 17 positions in August 2023 to carry out the performance report oversight process and prevent future issues.⁴²

The Coast Guard's performance reports are a key input in its operational planning process because they enable the agency to quantitatively assess its mission performance, identify capability gaps, and forecast future operational requirements. Filling vacant positions in District 17 may help address the reasons that performance reports were unavailable or incomplete. However, these issues were present for multiple years from

⁴⁰United States Coast Guard, *Global Force Management (GFM) 2.0 Process Guide*.

⁴¹United States Coast Guard, Deputy Commandant for Operations, *Framework for Strategic Mission Management, Enterprise Risk Stewardship, and Internal Control.*

⁴²We have previously testified on Coast Guard recruitment and retention challenges. See GAO, *Coast Guard: Recruitment and Retention Challenges Persist*, GAO-23-106750 (Washington, D.C.: May 11, 2023).

³⁹United States Coast Guard, *Commandant Instruction 3120.4B: Coast Guard Standard Operational Planning Process/Global Force Management*. This document was developed in response to GAO recommendations. See GAO, *Coast Guard: Actions Needed to Improve Strategic Allocation of Assets and Determine Workforce Requirements*, GAO-16-379 (Washington, D.C.: May 24, 2016). This instruction replaced *Commandant Instruction 3120.4A*, which was originally published in December 2009.

	FY 2016 through FY 2023, even though the performance reports indicate that the same staff member was completing the documents for at least 3 of these years. Collecting and reporting complete information from District 17 about resource use and mission performance in accordance with Coast Guard guidance would better position the agency to monitor its activity and make more informed operational planning decisions for the Arctic region.
Coast Guard Has Developed an Arctic Implementation Plan, but It Does Not Include Key Metrics	The Coast Guard's Arctic implementation plan outlines initiatives and actions intended to execute Coast Guard strategic objectives and to support national Arctic efforts. These actions include efforts to manage and mitigate risks, such as risks from climate change and increased maritime activity. Coast Guard officials stated that they have examined the national Arctic strategy and the Coast Guard Arctic strategy to ensure alignment between both strategies and the Coast Guard implementation plan. ⁴³ Coast Guard officials also noted that full execution of the plan is contingent upon additional Coast Guard and whole-of-government investments in technologies, capabilities, resources, and personnel. While the Coast Guard Arctic implementation plan includes numerous action items, the items generally do not include key metrics. Specifically, of the 97 action items, none have associated quantitative performance measures and targets. ⁴⁴ Three have time frame descriptions, two have partial time frame descriptions, and the remaining 92 do not have time frame descriptions (see fig. 5 below). ⁴⁵ Other action items refer to time frames for part of an action item, but not for all of it. For example, one
	 were aligned because they were developed at the same time. Coast Guard officials stated that they have completed a document mapping the national Arctic strategy to the Coast Guard Arctic strategy. The Coast Guard provided documentation showing high-level alignment between the national Arctic strategy objectives and the Coast Guard Arctic strategy initiatives. ⁴⁴For example, one initiative describes the Coast Guard's involvement in joint Arctic operations and exercises along with planned action items to develop and implement a unified Pacific Area and Atlantic Area campaign plan to increase operations, coordination, and exercises across the region. However, the initiative does not include metrics for doing
	so. ⁴⁵ For example, some action items included partial time frames, such as conducting bilateral/regional exercises and annual communication drills as necessary. Coast Guard officials stated that some action items do not include time frames because they are ongoing actions. For example, one action item describes enhancing Coast Guard engagement with federally recognized Tribes and Alaska Native Claims Settlement Act corporations to build relationships and gain knowledge.

action item describes coordinating with DHS and the U.S. Department of State to: 1) implement, strengthen, exercise, and update Arctic-Specific Joint Contingency Plans and Arctic Letters of Intent, 2) conduct bilateral/regional exercises, and 3) conduct annual communication drills. In this case, only annual communication drills included a time frame.

Figure 5: Analysis of Coast Guard Arctic Implementation Plan Action Items



Source: GAO analysis of the Coast Guard Arctic Strategic Outlook Implementation Plan. | GAO-24-106491

^aInitiatives describe how the Coast Guard intends to accomplish its strategic objectives in the Coast Guard Arctic strategy.

^bAction items describe what the Coast Guard considers to be critical next steps to advance efforts in the Coast Guard Arctic strategy.

[°]Performance measures and targets provide baselines and benchmarks for assessing progress toward objectives. "None" means that an action item did not include performance measures or targets.

^dTime frame descriptions identify when actions will be taken. "Full" means that an action item included time frames. "Partial" means that an action item included some mention of time frames, such as for one element of the item, but not for all elements. "None" means that there was no mention of time frames.

The Coast Guard's *Framework for Strategic Mission Management*, *Enterprise Risk Stewardship*, *and Internal Control* states that an appropriate metric system makes setting performance standards and gauging progress toward achievement possible.⁴⁶ It draws from federal

⁴⁶United States Coast Guard, Deputy Commandant for Operations, *Framework for Strategic Mission Management, Enterprise Risk Stewardship, and Internal Control.*

guidance and international standards.⁴⁷ It also describes development of strategic initiatives and states that a thorough scoping of implementation requirements is important. This guidance further states this should include identifying major steps and tasks, corresponding schedules, timelines, and critical paths as well as developing suitable measures, controls, targets, milestones, and feedback mechanisms. Past GAO work has also highlighted the use of milestones as a way to assess performance and progress, especially when using quantitative assessments is not feasible.⁴⁸

Coast Guard officials stated that the agency plans to coordinate with the Arctic Executive Steering Committee to ensure alignment between the Coast Guard Arctic implementation plan and the national Arctic implementation plan while measuring and reporting progress.⁴⁹ According to these officials, the Coast Guard's new Polar Coordination Office will be responsible for carrying out these efforts.⁵⁰ Coast Guard officials also stated that they wrote the Coast Guard Arctic implementation plan as a general planning document. Specifically, the plan articulates action items to advance the Coast Guard and national Arctic strategies. These officials also said that they intend to conduct annual internal assessments that will inform Coast Guard leadership about what the Coast Guard was and was not able to accomplish. The assessments will then form the basis for future resource proposals. The officials added that once they obtain

⁴⁷The framework states that it incorporates best practices and the latest direction drawn from federal guidance and the international standards from which the federal guidelines are established, including GAO's *Standards for Internal Control in the Federal Government*, and the Office of Management and Budget Circular No. A-11 and No. A-123, among others.

⁴⁸GAO, *Managing For Results: Agencies Should More Fully Develop Priority Goals under the GPRA Modernization Act*, GAO-13-174 (Washington, D.C.: Apr. 19, 2013).

⁴⁹Regarding agency plan alignment with the national Arctic implementation plan, the Executive Director of the Arctic Executive Steering Committee stated that the committee does not approve federal agencies' Arctic strategies or implementation plans. However, if the committee noticed a significant issue with one, it would raise the issue with the relevant agency.

⁵⁰The Coast Guard Arctic implementation plan includes action items under Initiative 14: Formalize the U.S. Coast Guard Polar Enterprise, which states that the Coast Guard will "develop a framework to inform U.S. Coast Guard leadership on progress in advancing the 2019 *Arctic Strategic Outlook* and this Implementation Plan" as well as "conduct annual assessments of the initiatives and brief U.S. Coast Guard leadership on future goals."

	dedicated funding for applicable action items, they would be able to identify completion dates and performance measures. ⁵¹
	The Coast Guard Arctic implementation plan is intended to outline planned actions to execute its strategic objectives and support national Arctic efforts. However, if its action items do not include an appropriate metric system, such as performance measures, targets, and time frames, it will be difficult for the Coast Guard to effectively align its activities in the region with its strategic objectives. This includes determining its resource needs for both the near and long term, assessing its progress toward achieving Coast Guard strategic objectives, and ensuring that its efforts are aligned with the national Arctic implementation plan.
	Coast Guard officials stated that they intend to track their efforts through annual internal assessments, which they would use to inform Coast Guard leadership of what they were and were not able to accomplish. However, this approach does not provide a high-level roadmap that could help the Coast Guard more effectively plan for its near- and longer-term Arctic priorities, determine the type and timing of its Arctic-related resource needs, and help ensure that the Coast Guard is both making progress toward achieving its strategic objectives and remaining aligned with the national Arctic efforts.
Coast Guard and the Department of Defense Collaborate on Arctic Issues in Various Ways	Coast Guard and DOD documents and officials described collaborating in several ways to assess and manage risks in the Arctic region. For example, the Coast Guard and DOD have an interagency agreement that specifies how the two agencies will collaborate to address marine salvage and pollution incidents, such as oil spills. Officials described having a generally collaborative working relationship where they share relevant information and expertise, provide operational and exercise assistance, and coordinate on joint projects.
Shared Information and Expertise	Arctic strategy input. Both Coast Guard and DOD officials stated that they collaborated on the development of their Arctic strategies. DOD
	⁵¹ In 2016, we recommended that the Coast Guard develop measures for gauging how its actions helped to mitigate Arctic capability gaps and to design and implement a process to systematically assess the extent to which actions taken agency-wide have helped mitigate the gaps for which it has responsibility. Although DHS agreed with our two recommendations, to date, the Coast Guard has not addressed them. To fully address these recommendations, the Coast Guard will need to finalize the development of measures that would enable it to gauge how its actions have helped to mitigate Arctic capability gaps and then use these measures to assess how its actions have helped to mitigate Arctic capability gaps. See GAO-16-453.

officials told us that the Coast Guard was part of a collaborative working group that helped DOD develop its 2019 Arctic strategy.⁵² According to DOD officials, the Navy, Air Force, and Coast Guard formed a collaborative working group to facilitate development of each of their most recent Arctic strategies, which were issued between 2019 and 2021. The Coast Guard also provided input into the development of the Army's Arctic strategy.⁵³

Risk information sharing. Coast Guard officials stated that they regularly evaluate Arctic risks and work with federal, state, and local partners to conduct risk assessments, although not all of these assessments result in formal reports. For example, officials stated that District 17 conducts daily and seasonal risk assessments, and the intelligence community, which includes Coast Guard and DOD entities, completes detailed threat assessments. A Coast Guard liaison officer with the Navy stated that risk assessment collaboration between the Coast Guard and DOD occurs more commonly at the operational and tactical levels, and for the Coast Guard it is carried out by districts and sectors.

Arctic domain awareness. According to the national Arctic implementation plan, DHS, through the Coast Guard, will collaborate with DOD to improve domain awareness in the Arctic.⁵⁴ Specifically, DOD is to lead efforts to modernize systems that detect and track potential airborne and maritime threats, and the Coast Guard is to support DOD's efforts. The Coast Guard is to provide effective maritime security, law

⁵³United States Coast Guard, *Arctic Strategic Outlook*. Department of the Air Force, *The Department of the Air Force Arctic Strategy* (Washington, D.C.: July 21, 2020). Department of the Army, *Regaining Arctic Dominance: The U.S. Army in the Arctic* (Washington, D.C: Jan. 19, 2021). Department of the Navy, *a Blue Arctic: A Strategic Blueprint for the Arctic* (Washington, D.C.: Jan. 5, 2021).

⁵⁴Elements of domain awareness include maritime and air, among others. According to Coast Guard, maritime domain awareness is the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of the United States. According to DHS, air domain awareness is the understanding of everything in the air, including the detection, tracking, and identification of manned and unmanned aircraft.

⁵²In August 2023, DOD officials told us that they are reviewing and developing an update to this Arctic strategy. According to the officials, the Coast Guard received a draft of the updated DOD Arctic strategy and had an opportunity to provide informal input. Department of Defense, *Report to Congress Department of Defense Arctic Strategy*, (Washington, D.C.: June 2019).

enforcement, search and rescue, and emergency response.⁵⁵ According to the national Arctic implementation plan, Coast Guard efforts are to include expanding its icebreaker fleet to support increased presence in the Arctic, and DOD is to support these efforts.

One way that the Coast Guard and DOD have collaborated on domain awareness in the Arctic region is through the U.S. National Ice Center. This multiagency organization is composed of officials from the Coast Guard, Navy, and the National Oceanic and Atmospheric Administration, and provides sea ice forecasts and other environmental intelligence products to government agencies. According to U.S. National Ice Center officials, these products can be tailored to meet the mission needs of federal agencies. For instance, when the Coast Guard polar icebreaker *Healy* conducts operations in the Arctic region, the ship's commander obtains information about sea ice conditions from the National Ice Center.

Another domain awareness collaboration between Coast Guard and DOD involves their efforts to monitor foreign naval exercises that are regularly conducted in the Arctic region.⁵⁶ To ensure that communications are maintained between Coast Guard and DOD, Coast Guard officials stated that they meet quarterly with DOD officials and plan to change this to monthly meetings in the future.⁵⁷

⁵⁷Coast Guard officials said that there was an incident in 2020 where Russia conducted an exercise within the U.S.'s exclusive economic zone in the Bering Sea and the Coast Guard did not inform U.S. mariners operating in the region ahead of time. The Coast Guard stated that this was not a result of failed communication between Coast Guard and DOD officials. After the incident, communication between Coast Guard and DOD improved, and they began meeting quarterly.

⁵⁵To inform these missions, Coast Guard contracts with the Marine Exchange of Alaska, which enables the Coast Guard to access the Marine Exchange of Alaska's data showing the location of vessels along with other vessel status information that enables the Coast Guard to better monitor vessels in the region.

⁵⁶In addition, the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 directed the Commandant of the Coast Guard, in consultation with the Secretaries of Defense and State as well as commercial fishing industry participants, to "develop and publish on a publicly available website a plan for notifying United States mariners and the operators of United States fishing vessels in advance of" (1) military exercises in the exclusive economic zone, or (2) other military activities that will impact recreational or commercial activities. See Pub. L. No. 117-263, div. K, tit. CXIII, subtit. D, § 11323, 136 Stat. at 4094 (codified at 14 U.S.C. § 504 note). The term exclusive economic zone refers to an area up to 200 nautical miles from the territorial sea baseline where a country has sovereign rights to natural resources such as fishing and energy production.

	Shared strategic expertise. According to the national Arctic strategy, the Ted Stevens Center for Arctic Security Studies (Stevens Center) is an institution that will advance expertise and cooperation in the Arctic. ⁵⁸ According to the Stevens Center, it was established in 2021 to promote integrated, collaborative responses to transnational threats; foster common perspectives on regional security challenges; and strengthen binational and multinational institutional relationships. Stevens Center officials we interviewed in July 2023 stated that the center has worked to build in Coast Guard requirements and requests into its roadmap of programmatic and planning decisions. However, at that time the center had not yet reached its full operating capacity and was still developing its programs.
Operational and Exercise Assistance	Operational support. The Coast Guard and DOD assist each other by leveraging their specialized expertise and unique operational capabilities. According to District 17 officials, the Coast Guard assists DOD with transportation, can assist Navy ships if needed, and shares its subject matter expertise about Arctic operations with DOD. DOD has assisted the Coast Guard by, for example, providing parachute-trained medics to help deliver medical care to people in the Aleutian Islands.
	Search and rescue coordination. Both Coast Guard and DOD play unique roles in the federal government's plan for coordinating domestic and international search and rescue operations. The <i>National Search and</i> <i>Rescue Plan of the United States</i> describes the roles and responsibilities of Coast Guard and DOD, as well as other agencies, in different search and rescue situations. ⁵⁹ According to this plan, the Coast Guard has overall responsibility for coordinating, establishing, and providing maritime search and rescue services. For example, Coast Guard officials told us that they provide search and rescue coverage during Operation Arctic Edge, a biennial exercise DOD conducts with the Canadian Armed Forces. Additionally, the plan states that DOD can provide unique search
	⁵⁸ The Stevens Center is one of DOD's Regional Centers for Security Studies and is located in Anchorage, Alaska. These centers are operated by DOD as international venues for bilateral and multilateral research, communication, exchange of ideas, and

located in Anchorage, Alaska. These centers are operated by DOD as international venues for bilateral and multilateral research, communication, exchange of ideas, and training involving military and civilian participants. See generally Floyd D. Spence National Defense Authorization for Fiscal Year 2001, Pub. L. No. 106-398, tit. IX, subtit. B, § 912, 114 Stat. 1654, 1654A-228-30 (codified as amended at 10 U.S.C. § 342).

⁵⁹National Search and Rescue Committee, *National Search and Rescue Plan of the United States*, (Washington, D.C.: 2016).

	and rescue capabilities, specialized expertise, and facilities to support a wide variety of search and rescue operations.
	Oil spill response. The Coast Guard and Navy have an interagency agreement that facilitates their collaboration on marine salvage and pollution incidents, including oil spill response. According to DOD officials, the U.S. Navy Supervisor of Salvage and Diving maintains equipment in Alaska that is made available to the Coast Guard when needed to respond to an oil spill or to conduct exercises. The Coast Guard and Navy also collaborate, along with other federal, state, and local partners, and industry, to conduct oil spill response exercises in Alaska. ⁶⁰
Project Coordination	Polar Security Cutter acquisition program. The Coast Guard and the Navy are jointly managing the Coast Guard's Polar Security Cutter acquisition program. As we reported in July 2023, the Coast Guard plans to invest at least \$11.6 billion for the acquisition, operations, and maintenance of these cutters. ⁶¹ Navy officials provide acquisition, contracting, engineering and design, cost-estimating, and executive support to the program.
Conclusions	The Coast Guard has a key role in Arctic policy implementation and enforcement and faces growing responsibilities to assess and manage risks to maritime safety and security, national security, and the maritime environment as regional conditions continue to change. The Coast Guard has taken actions to manage these risks by deploying cutters and aircraft into the U.S. Arctic region during peak maritime activity. It has also initiated plans to acquire new major cutters and polar icebreakers to enhance its capabilities in the region.
	However, the new assets will not be available for years and major cutter deployments north of the Bering Strait have been limited in recent years—an indicator of the resource constraints that affect the Coast Guard's ability to meet its strategic commitments in the U.S. Arctic region. In addition, most District 17 performance reports—essential to the Coast Guard's strategic planning process—are not complete, which affects the
	⁶⁰ Coast Guard and Navy have a 2015 memorandum of agreement regarding interservice cooperation in oil spill response and salvage operations. The agreement outlines procedures for requesting each other's assistance, reimbursing associated costs, and specific responsibilities.
	⁶¹ For more information on the Polar Security Cutter program, see GAO, <i>Coast Guard Acquisitions: Polar Security Cutter Needs to Stabilize Design Before Starting Construction and Improve Schedule Oversight</i> , GAO-23-105949 (Washington, D.C.: July 27, 2023).

	Coast Guard's ability to allocate resources and provide direction to operational commanders. Ensuring that District 17 collects and reports complete information would enable the Coast Guard to better monitor its resource use and mission performance in the U.S. Arctic. This, in turn, would enable better operational planning decisions and more accurate assessments of the Coast Guard's future resource needs to meet its strategic commitments.
	The Coast Guard's Arctic implementation plan also has limitations that can affect the Coast Guard's ability to plan for its strategic objectives in the Arctic region, carry them out, and support national Arctic efforts. Coast Guard officials stated that its Arctic implementation plan is not where they intend to track progress on Arctic efforts. Instead, they intend to track their efforts through annual internal assessments, which they would use to inform Coast Guard leadership of what they were and were not able to accomplish, and to support future resource proposals. Annual assessments and reporting on results have value. However, this approach does not provide a high-level roadmap with performance measures, targets, and time frames that could help the Coast Guard more effectively plan for its near- and longer-term Arctic priorities, determine the type and timing of its Arctic-related resource needs, and help ensure that the Coast Guard is both making progress toward achieving its strategic objectives and remaining aligned with the national Arctic efforts.
Recommendations for	We are making two recommendations to the Coast Guard:
Executive Action	The Commandant of the Coast Guard should ensure that District 17 collects and reports complete information about resource use and mission performance in accordance with Coast Guard guidance. (Recommendation 1)
	The Commandant of the Coast Guard should ensure that the Coast Guard's Arctic implementation plan includes performance measures with associated targets and time frames for the action items described in the plan in accordance with Coast Guard guidance. (Recommendation 2)
Agency Comments and Our Evaluation	We provided a draft of this report to DHS, DOD, NOAA, and the AESC for review and comment. DOD, NOAA, and the AESC did not have comments on the report. DHS concurred with our recommendations, and its response is reproduced in appendix I.
	In response to our first recommendation that the Coast Guard ensure that District 17 collects and reports complete information about resource use

and mission performance in accordance with Coast Guard guidance, DHS stated that District 17 has integrated the practice of reviewing Operational Assessment Report statuses and deadlines during bi-weekly leadership meetings to ensure cross-department visibility and collaboration. DHS's response further stated that guidance contained in the Operation Planning Direction will be condensed and distributed to subordinate operational units on a quarterly basis. According to DHS, this will better enable the collection and reporting of complete information about resource use and mission performance in accordance with Coast Guard guidance.

In response to our second recommendation that the Coast Guard ensure its Arctic implementation plan includes performance measures with associated targets and time frames for action items described in the plan, DHS stated that the Coast Guard's Polar Coordination Office will coordinate action to address this recommendation by incorporating milestones into the program and project execution plans associated with action items described in its Arctic implementation plan as they are developed. DHS also stated that the Polar Coordination Office will capture the advancement of Arctic strategic objectives, which will be tracked and shared with Coast Guard leadership, as appropriate. We maintain that including performance measures with associated targets and time frames for its Arctic implementation plan action items could help the Coast Guard coordinate its Arctic efforts more effectively and better inform related resource requests.

DHS also provided technical comments on our report, which we have incorporated as appropriate.

We are sending copies of this report to appropriate congressional committees; the Departments of Homeland Security, Defense, and Commerce; the Office of Science and Technology Policy; and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8777 or macleodh@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Heather MacLeod, Director, Homeland Security and Justice

Appendix I: Comments from the Department of Homeland Security

	Let a la l	Washington, DC 20528
BY EI	LECTRONIC SUBMISSION	Security
	July 31, 2024	
Directo U.S. G	er MacLeod or, Homeland Security and Justice overnment Accountability Office Street, NW	
	ngton, DC 20548-0001	
Re:	Management Response to Draft Report GAO-24-10 Complete Performance and Operational Data Would Needs"	
Dear N	As. MacLeod:	
Homel	you for the opportunity to comment on this draft reportant Security (DHS or the Department) appreciates the 's (GAO) work in planning and conducting its review	e U.S. Government Accountabil
and as inclusi operati	eadership is pleased to note GAO's recognition of U.S sess risks that affect its ability to carry out its mission on in various strategic planning documents. The Coa ional risks in the Arctic region by forward deploying a ne industry partnerships to maintain its presence amo	s in the Arctic region and its ist Guard continues to mitigate assets to the area and strengtheni
Enclos technic	aft report contained two recommendations with which sed find our detailed response to each recommendation cal comments addressing several accuracy, contextual for GAO's consideration, as appropriate.	n. DHS previously submitted
	, thank you for the opportunity to review and commen contact me if you have any questions. We look forwa ure.	•
	Sincerely,	
	JIM H CRUMPACKEF	Digitally signed by JIM H CRUMPACKER Date: 2024.07.31 15:56:54 -04'00'
	JIM H. CRUMP	
	Director	AO-OIG Liaison Office

Enclosure: Management Response to Recommendations Contained in GAO-24-106491		
GAO recommended that the	Commandant of the Coast Guard:	
	re that District 17 collects and reports complete information about rformance in accordance with Coast Guard guidance.	
Assessment Report statuses cross-department visibility a Operation Planning Directio units on a quarterly basis. T complete information about	t 17 has integrated the practice of reviewing Operational and deadlines during bi-weekly leadership meetings to ensure and collaboration. In addition, guidance contained in the on will be condensed and distributed to subordinate operational 'hese actions will better enable the collection and reporting of resource use and mission performance in accordance with Coast d Completion Date (ECD): December 31, 2024.	
	re that the Coast Guard's Arctic implementation plan includes associated targets and timeframes for action items described in th ast Guard guidance.	
intended to be a "metric syst specific project deliverables coordinate alternative action the program and project exe they are developed. CG-PC	Arctic Strategic Outlook Implementation Plan (ASIP) is not tem" that sets performance standards and gauges progress toward c, Coast Guard's Polar Coordination Office (CG-PCO) will us to address this recommendation by incorporating milestones int cution plans associated with action items described in ASIP as O will capture the advancement of Artic strategic objectives, nared with Coast Guard leadership, as appropriate. ECD:	

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact	Heather MacLeod, (202) 512-8777 or macleodh@gao.gov
Staff Acknowledgments:	In addition to the contact named above, Dawn Hoff (Assistant Director); Steve Komadina (Analyst-in-Charge); Nasreen Badat; Pete Haderlein; Eric Hauswirth; Samantha Lyew; Amanda Miller; Janet Temko-Blinder; and Haley Wall made key contributions to this report.

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