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COAST GUARD

**Observations on the
Fiscal Year 2009 Budget,
Recent Performance, and
Related Challenges**

Statement of Stephen L. Caldwell, Director
Homeland Security and Justice Issues



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Highlights

Highlights of [GAO-08-494T](#), a testimony before the Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

The U.S. Coast Guard, a multi-mission maritime military service within the Department of Homeland Security, has requested more than \$9 billion for fiscal year 2009 to address its responsibilities for homeland security missions (such as undocumented migrant interdiction) and non-homeland security missions (such as environmental protection). Integral to conducting its missions, is the Deepwater program—a 25-year, \$24 billion effort to upgrade or replace vessels and aircraft. This testimony discusses:

- budget request and trends, and performance statistics,
- challenges in balancing operations across multiple missions, and
- Deepwater affordability, management, and its impact on operations.

GAO's comments are based on products issued from 1997 to 2008. This testimony also discusses ongoing work related to patrol boat operations. To conduct its work, GAO analyzed documentation and interviewed relevant officials.

What GAO Recommends

GAO has made recommendations to DHS in prior reports to develop strategic plans, better plan the use of its human capital, establish performance measures, and improve program operations. DHS has generally concurred with these recommendations and is making progress to address them. We provided a draft of this information to DHS and the Coast Guard and incorporated technical comments as appropriate.

To view the full product, including the scope and methodology, click on [GAO-08-494T](#). For more information, contact Stephen Caldwell at (202) 512-9610 or caldwells@gao.gov.

COAST GUARD

Observations on the Fiscal Year 2009 Budget, Recent Performance, and Related Challenges

What GAO Found

The Coast Guard's fiscal year 2009 budget request is approximately 7 percent higher than its fiscal year 2008 enacted budget, generally because of proposed increases in both operating expenses and acquisition, construction, and improvements funding. The Coast Guard expects to meet its performance goals for 6 of its 11 mission areas for fiscal year 2007, similar to the performance it reported for fiscal year 2006. The Coast Guard also continues to develop additional measures to better understand the links between resources expended and results achieved.

The Coast Guard continues to face challenges balancing its various missions with its finite resources and has had difficulties funding and executing both its homeland security and non-homeland security missions. GAO's work has shown that the Coast Guard's homeland security requirements continue to increase and that it has been unable to keep up with these rising security demands. For example, the Coast Guard is not meeting its requirements for providing vessel escorts and conducting security patrols. The Coast Guard is also facing additional requirements to conduct more inspections of maritime facilities and provide security at a growing number of facilities that import hazardous cargos.

The Deepwater acquisition program continues to be a source of challenges and progress for the Coast Guard. In terms of affordability, the magnitude of Deepwater funding—representing about 11 percent of the agency's proposed fiscal year 2009 budget—presents a long-term challenge. In terms of management, the Coast Guard has made changes to improve program management by moving away from reliance on a system integrator, increasing government monitoring of program outcomes and competitively purchasing selected assets. In terms of operations, delays in the procurement of new patrol boats have increased resource requirements to maintain older legacy patrol boats and keep them operating.

The Coast Guard must balance its finite resources across security and other missions.



Source: U.S. Coast Guard.

Madam Chair and Members of the Subcommittee:

I am pleased to be here today to discuss the Coast Guard's fiscal year 2009 budget and related issues. For more than 10 years, we have provided Congress with information and observations on the Coast Guard's budget and related issues.¹ Consistent with this approach, this statement will periodically include information from our prior work to help provide perspective as appropriate. During the last 10 years, the Coast Guard's budget and missions have continued to grow. For example, the Coast Guard's budget was \$3.8 billion for fiscal year 1997 compared to \$9.35 billion for fiscal year 2009. In terms of missions, the terrorist attacks of September 11, 2001 have led to a myriad of additional and complex Coast Guard missions related to homeland security, such as conducting harbor patrols, reducing the flow of undocumented migrants, and participating in global military operations.

To help fulfill its missions, the Coast Guard is implementing a program to modernize its fleet. The Coast Guard's Deepwater program is a 25-year, \$24 billion effort to upgrade or replace existing vessels and aircraft to carry out its missions along our coastlines and farther out at sea. The program is eventually to include 10 major classes of new or upgraded vessels and aircraft, and 5 other classes of projects, including command, control, communications, computer, intelligence surveillance, and reconnaissance systems.

This statement will discuss:

- budget request and trends, and performance statistics on achieving its missions,
- challenges in balancing its operations across its multiple missions, and
- Deepwater affordability, management, and its impact on operations.

The Coast Guard is a multi-mission, maritime military service within the Department of Homeland Security. The Coast Guard's responsibilities fall into two general categories—those related to homeland security missions, such as ports, waterways, and coastal security (including conducting

¹The back of this statement includes a listing of related GAO products, including budget reviews going back to 1997.

harbor patrols and other activities to prevent terrorist attacks), defense readiness, and undocumented migrant interdiction; and those related to non-homeland security missions, such as search and rescue, marine environmental protection (including oil spill response), illegal drug interdiction, and polar ice operations.

An assessment of the Coast Guard's fiscal year 2009 budget should be considered in the context of broader federal budgetary issues. As we have reported elsewhere, the federal government's deteriorating long-range financial condition and long-term fiscal imbalance are matters of increasing concern. The nation faces large and growing structural deficits due primarily to rising health care costs and known demographic trends that will constrain the government's ability to pay for other obligations and discretionary expenses.² Addressing this long-term fiscal issue is an overarching challenge. As a result, there is a need to engage in a fundamental review, repriorization, and reengineering of the base of the government. Understanding and addressing the federal government's financial condition and long-term fiscal imbalance are critical to maintain fiscal flexibility so that we can respond to current and emerging social, economic, and security challenges.³

An assessment of the Coast Guard's budget should also be considered in the context of risk management. Risk management is a strategy for helping policy makers to make decisions about allocating finite resources and take actions in the face of uncertainty. The Coast Guard cannot afford to protect all maritime areas and facilities against all possible threats. As a result, it must make choices about how to allocate its resources to most effectively manage risk. Risk management has been widely supported by the President and Congress, as a management approach for homeland security, and the Secretary of Homeland Security has made it the

² See GAO, *Long-Term Fiscal Outlook: Action Is Needed to Avoid the Possibility of a Serious Economic Disruption in the Future*, [GAO-08-411T](#) (Washington, D.C.: Jan. 29, 2008).

³ See GAO, *A Call for Stewardship: Enhancing the Federal Government's Ability to Address Key Fiscal and Other 21st Century Challenges*, [GAO-08-93SP](#) (Washington, D.C.: Dec. 17, 2007).

centerpiece of departmental policy. The Coast Guard has used risk management to develop security plans for port areas.⁴

This statement is based in part on ongoing work being done for this subcommittee and on prior GAO work focusing on the Coast Guard's programmatic and management initiatives completed over the past ten years.⁵ In assessing the Coast Guard's budget resources, we analyzed budget, performance, and acquisitions documents and conducted interviews with Coast Guard officials. With regard to the budget assessment, our scope was limited due to the short time available since the release of the President's fiscal year 2009 budget request. Additionally, this review did not include evaluating whether the proposed funding levels are appropriate for the Coast Guard's stated needs. Our work on homeland security is based on a series of reviews we conducted in the aftermath of 9/11. This work involved discussions with appropriate Coast Guard and other federal officials at headquarters and field units in domestic and international locations, reviews of related program documents, analysis of program databases (including reliability assessments), as well as discussions with other domestic and international stakeholders in the maritime industry.

To assess the status of the Deepwater program, we reviewed key Coast Guard documentation such as the Major Systems Acquisition Manual, acquisition program baselines, and human capital plans. We also conducted interviews with Coast Guard officials, including program managers, contracting officials, and subject matter experts to discuss acquisition planning efforts and actions being taken by the Coast Guard and to obtain information on shipbuilding. In reviewing patrol boat operations and Coast Guard efforts to mitigate the loss of the 123-foot patrol boats, we reviewed reports, memoranda, operational hour data, and other documents. We also interviewed Coast Guard officials responsible for developing and implementing these sustainment and mitigation

⁴ For more information on risk management and the Coast Guard's related efforts, see GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure*, [GAO-06-91](#) (Washington, D.C.: Dec. 15, 2005).

⁵ In conjunction with this testimony, we are releasing two reports: GAO, *Maritime Security: Coast Guard Inspections Identify and Correct Facility Deficiencies, but More Analysis Needed of Program's Staffing, Practices, and Data*, [GAO-08-12](#) (Washington, D.C.: Feb. 14, 2008); and *Status of Selected Aspects of the Coast Guard's Deepwater Program*, [GAO-08-270R](#) (Washington, D.C.: Mar. 6, 2008).

strategies. Finally, we provided a draft of this testimony to DHS and the Coast Guard and incorporated their technical comments as appropriate.

We conducted this performance audit from October 2007 to March 2008 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.

Summary

The Coast Guard's fiscal year 2009 budget request is approximately 7 percent higher than its fiscal year 2008 enacted budget, which continues the upward trend seen in recent years. Major increases in this year's budget are attributable to operating expenses for the funding of additional marine inspectors and new command and control capabilities. Major increases in this year's budget are also attributed to acquisition, construction and improvements for continued enhancement and replacement of aging infrastructure. Within this budget, there are also a number of reallocations that do not impact the total amount of funding. With respect to the agency's performance, the Coast Guard expects to meet its performance goals for 6 of its 11 mission areas for fiscal year 2007, consistent with its performance for fiscal year 2006. The Coast Guard also continues to develop additional performance measures in an effort to capture additional segments of program activity and to develop ways to better understand the links between resources it expends and the results it achieves.

The Coast Guard continues to face challenges balancing its various missions within its finite resources. For several years, we have reported that the Coast Guard has had difficulties fully funding and executing both homeland security missions and its traditional non-homeland security missions. Our work has shown that the Coast Guard's requirements continue to increase in homeland security in part due to additional statutory requirements. In several cases, the Coast Guard has been unable to keep up with these security demands, for example, by not meeting its own requirements for providing vessel escorts and conducting security patrols at some ports. In other cases, the Coast Guard is facing additional requirements to conduct more inspections of maritime facilities or provide security at a growing number of facilities that import hazardous cargos such as Liquefied Natural Gas (LNG). The Coast Guard faces additional

non-homeland security requirements such as updating port plans (as part of an all-hazards approach) and updating regulations related to oil spills and the Oil Spill Liability Trust Fund. The Coast Guard also has additional longer term non-homeland security requirements, such as those related to the protection of marine areas near Hawaii and increased vessel traffic in the Arctic and surrounding areas.

The Deepwater acquisition program continues to present challenges and progress in terms of affordability, management, and operations. With respect to affordability, the Coast Guard faces challenges based on the magnitude of the funding requirements—which represents about 11 percent of the agency’s proposed budget for fiscal year 2009—compared to the agency’s overall and AC&I budgets. For example, Deepwater represents nearly 82 percent of the Coast Guard’s total AC&I budget of \$1.21 billion, leaving little room, in the AC&I budget especially, for other pressing needs such as inland aids to navigation vessels. With respect to the management of the Deepwater program, the Coast Guard has made progress through a number of actions to improve the management of the program. These actions include taking over many of the management functions that the contractor formerly conducted. The Coast Guard also continues to make progress in implementing some of our prior recommendations on how to better manage the program. With respect to operations, the delay in the acquisition of new assets has created challenges in keeping older legacy assets operating until they can be replaced. For example, problems and delays with the Coast Guard’s acquisition of new patrol boats forced the agency to incur additional costs to maintain older patrol boats and incur opportunity costs in terms of lost or reallocated missions. The Coast Guard plans to acquire replacement patrol boats beginning in 2010.

Background

The Coast Guard is an Armed Service of the United States and the only military organization within the Department of Homeland Security (DHS). It is the principle federal agency responsible for maritime safety, security, and environmental stewardship through multi-mission resources, authorities, and capabilities. To accomplish its responsibilities, the Coast Guard is organized into two major commands that are responsible for overall mission execution—one in the Pacific area and the other in the Atlantic area. These commands are divided into 9 districts, which in turn are organized into 35 sectors that unify command and control of field units and resources, such as multimission stations and patrol boats. In its fiscal year 2009 posture statement, the Coast Guard reported having nearly 49,100 full-time positions—about 42,000 military and 7,100 civilians. In

addition, the agency reported that it has about 8,100 reservists who support the national military strategy or provide additional operational support and surge capacity during times of emergency, such as natural disasters. Finally, the Coast Guard reported that it utilizes the services of about 29,000 volunteer auxiliary personnel who conduct a wide array of activities, ranging from search and rescue to boating safety education. The Coast Guard has responsibilities that fall under two broad missions—homeland security and non-homeland security. The Coast Guard responsibilities are further divided into 11 programs, as shown in table 1.

Table 1: Homeland Security and Non-Homeland Security Programs by Mission Area

Mission and program	Activities and functions of each mission-program
Homeland security mission-programs	
• Ports, waterways, and coastal security	Conducting harbor patrols, vulnerability assessments, intelligence gathering and analysis, and other activities to prevent terrorist attacks and minimize the damage from attacks that occur.
• Undocumented migrant interdiction	Deploying cutters and aircraft to reduce the flow of undocumented migrants entering the United States by maritime routes.
• Defense readiness	Participating with the Department of Defense (DOD) in global military operations, deploying cutters and other boats in and around harbors to protect DOD force mobilization operations.
Non-homeland security mission-programs	
• Search and rescue	Operating multimission stations and a national distress and response communication system, conducting search and rescue operations for mariners in distress.
• Living marine resources	Enforcing domestic fishing laws and regulations through inspections and fishery patrols.
• Aids to navigation and waterways management	Managing U.S. waterways and providing a safe, efficient, and navigable marine transportation system, maintaining the extensive system of navigation aids, monitoring marine traffic through vessel traffic service centers.
• Ice operations	Conducting polar operations to facilitate the movement of critical goods and personnel in support of scientific and national security activity, conducting domestic icebreaking operations to facilitate year-round commerce, conducting international ice operations to track icebergs below the 48th north latitude.
• Marine environmental protection	Preventing and responding to marine oil and chemical spills, preventing the illegal dumping of plastics and garbage in U.S. waters, preventing biological invasions by aquatic nuisance species.
• Marine safety	Setting standards and conducting vessel inspections to better ensure the safety of passengers and crew aboard commercial vessels, partnering with states and boating safety organizations to reduce recreational boating deaths.
• Illegal drug interdiction	Deploying cutters and aircraft in high drug-trafficking areas and gathering intelligence to reduce the flow of illegal drugs through maritime transit routes.
• Other law enforcement (foreign fish enforcement)	Protecting U.S. fishing grounds by ensuring that foreign fishermen do not illegally harvest U.S. fish stocks.

Source: Coast Guard.

Note: The Coast Guard's homeland security and non-homeland security missions are delineated in section 888 of the Homeland Security Act of 2002 (P. L. 107-296, 116 Stat. 2135, 2249 (2002)). Starting with the fiscal year 2007 budget, however, the Office of Management and Budget (OMB) designated the Coast Guard's illegal drug interdiction and other law enforcement mission-programs—which were originally homeland security missions—as non-homeland security missions for budgetary purposes.

For each of these 11 mission-programs, the Coast Guard has developed performance measures to communicate agency performance and provide information for the budgeting process to Congress, other policymakers, and taxpayers. The Coast Guard's performance measures are published in

various documents, including the Coast Guard's Posture Statement, which includes the fiscal year 2009 Budget-in-Brief. The Coast Guard's 2009 Budget-in-Brief reports performance information to assess the effectiveness of the agency's performance as well as a summary of the agency's most recent budget request. The performance information provides performance measures for each of the Coast Guard's mission-programs, as well as descriptions of the measures and explanations of performance results.

To carry out these missions, the Coast Guard has a program underway—called the Deepwater program—to acquire a number of assets such as vessels, aircraft, and command, control, communications, computer, intelligence surveillance, and reconnaissance systems. Appendix I provides additional details on specific vessels and aircraft. The Coast Guard began the Deepwater program in the mid-1990s and it is the largest acquisition program in the agency's history. Rather than using a traditional acquisition approach of replacing individual classes of legacy vessels and aircraft through a series of individual acquisitions, the Coast Guard chose a system-of-systems strategy, that would replace the legacy assets with a single, integrated package.⁶ To carry out this acquisition, the Coast Guard decided to use a systems integrator—a private sector contractor responsible for designing, constructing, deploying, supporting, and integrating the various assets to meet projected Deepwater operational requirements at the lowest possible costs, either directly or through subcontractors. In June 2002, the Coast Guard awarded the Deepwater systems integrator contract to Integrated Coast Guard Systems (ICGS)—a business entity led and jointly owned by Lockheed Martin and Northrup Grumman Ship Systems. For 10 years, we have reviewed the Deepwater program and have informed Congress, the Departments of Transportation and Homeland Security, and the Coast Guard of the risks and uncertainties inherent in such a large acquisition.⁷

⁶ The Coast Guard's "system of systems" approach integrates ships, aircraft, sensors, and communication links together as a system to accomplish mission objectives.

⁷ For example, see *Coast Guard Acquisition Management: Deepwater Project's Justification and Affordability Need to be Addressed More Thoroughly*, [GAO/RCED-99-6](#) (Washington, D.C.: Oct. 26, 1999).

Budget Increases are for Both OE and AC&I, Recent Performance is Steady

The Coast Guard's fiscal year 2009 budget is about 6.9 percent higher than its 2008 enacted levels.⁸ Major increases in this year's budget are attributable to operating expenses for the funding of additional marine inspectors and new command and control capabilities. Major increases in this year's budget are also attributed to acquisition, construction and improvements for continued enhancement and replacement of aging vessels, aircraft, and infrastructure. The Coast Guard expects to meet 6 of 11 performance targets for fiscal year 2007, the same level of performance as fiscal year 2006.

Overall Budget Request is 6.9 Percent Higher than Previous Year's Enacted Budget

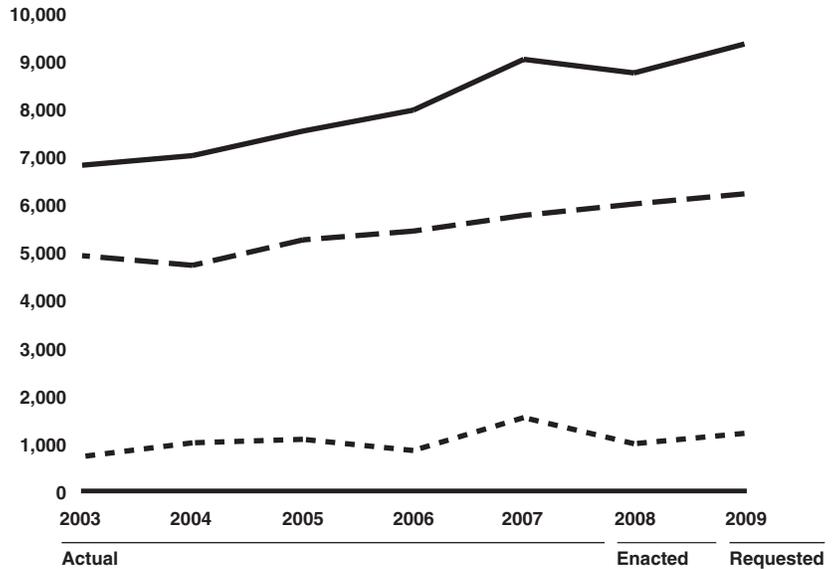
The Coast Guard's budget request in fiscal year 2009 is \$9.35 billion, or 6.9 percent more than the enacted fiscal year 2008 budget (see fig. 1).⁹ About \$6.2 billion, or approximately 66 percent, is for operating expenses. This operating expense funding supports 11 statutorily identified mission-programs and increases in salaries, infrastructure and maintenance costs. This also includes increased funding for additional marine inspectors, new and existing command and control and intelligence capabilities, and to address rulemaking projects. The greatest change from the previous year is in the AC&I request, which at \$1.2 billion reflects about a 35 percent increase from fiscal year 2008. This increase includes funding for such things as Deepwater program enhancements to the Coast Guard's operational fleet of vessels and aircraft, and for continued development of new assets, as well as emergency maintenance. The remaining part of the overall budget request consists primarily of retiree pay and health care fund contributions. If the Coast Guard's total budget request is granted, overall funding will have increased by over 37 percent (or 17 percent after inflation) since fiscal year 2003. Looking back further, overall funding will have increased by approximately 143 percent (or 87 percent after inflation) since fiscal year 1997.

⁸ According to Coast Guard officials, when also taking into account supplemental funding appropriated for fiscal year 2008, such as operating expenses emergency funding, the fiscal year 2009 increase is 4.6 percent.

⁹ GAO's analysis of the Coast Guard's fiscal year 2009 budget request is presented in nominal terms. Supplemental funding received during fiscal year 2008 is not included in the analysis.

Figure 1: Coast Guard Budget from Fiscal Year 2003 to Fiscal Year 2009

Dollars in millions (in nominal terms)



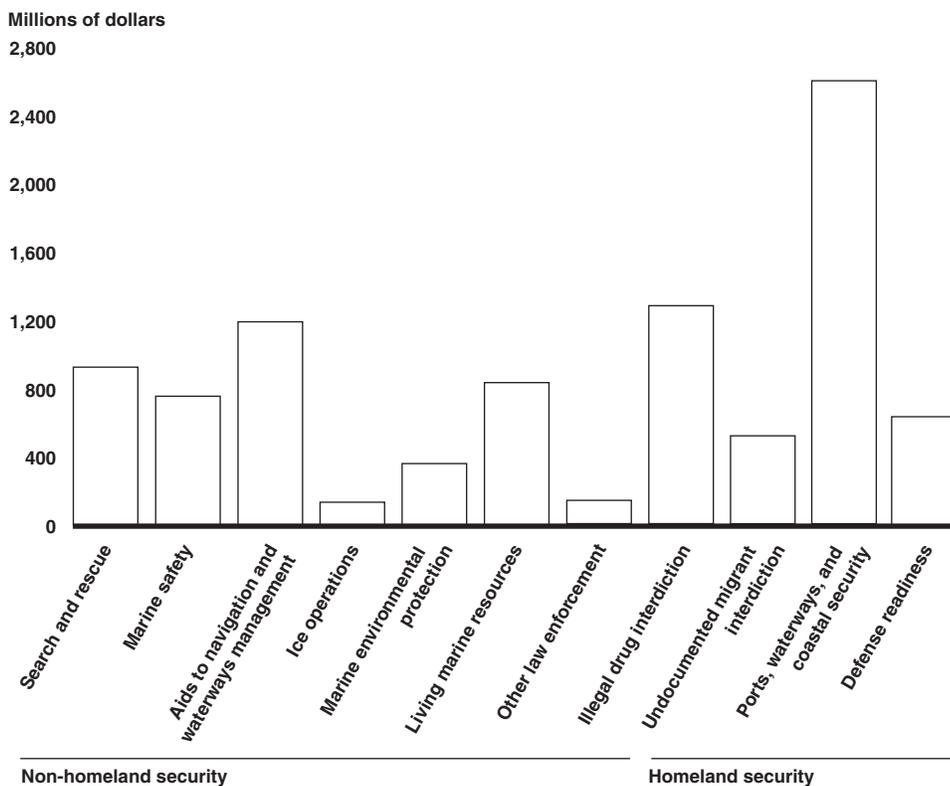
Source: GAO analysis of Coast Guard data.

Note: The Coast Guard's budget consists of discretionary and mandatory funding line items. The operating expenses and acquisition, construction, and improvements line items make up the biggest portion of discretionary funding. Other line items in the Coast Guard's discretionary budget include environmental compliance and restoration, health care contributions, research and development, and reserve training costs. Retiree pay is the largest item in the Coast Guard's mandatory funding budget, and the Coast Guard is requesting \$1.23 billion for retiree pay in 2009. Other mandatory funding line items include boating safety, the Oil Spill Liability Trust Fund, and the gift fund.

Overall, the Coast Guard's budget request for homeland security missions represents approximately 40 percent of the overall budget, with the non-homeland security funding representing approximately 60 percent. However, the Coast Guard does not request funding by mission; it does so by appropriation account. Nonetheless, the Coast Guard provides a comparison of homeland security versus non-homeland security funding as part of the President's fiscal year budget request. According to the Coast Guard, an activity-based cost model is used to estimate homeland security versus non-homeland security funding for its missions. This is done by averaging past expenditures to forecast future spending, and these amounts are revised from the estimates reported previously. Although the Coast Guard reports summary financial data by homeland

security and non-homeland security missions to the Office of Management and Budget, as a multi-mission agency, the Coast Guard can be conducting multiple mission activities simultaneously. For example, a multi-mission asset conducting a security escort is also monitoring safety within the harbor and could be diverted to conduct a search and rescue case. As a result, it is difficult to accurately detail the level of resources dedicated to each mission. Figure 2 shows the estimated funding levels for fiscal year 2009 by each mission program. However, actual expenditures are expected to vary from these estimates, according to the Coast Guard.

Figure 2: Coast Guard Fiscal Year 2009 Budget Request by Mission-Program as Estimated by the Coast Guard’s Mission Cost Model



Source: GAO analysis of Coast Guard data.

Performance Remains Steady

The Coast Guard expects to meet 6 of 11 performance targets in fiscal year 2007, the same overall level of performance as 2006, and overall performance trends for most mission-programs remain steady.¹⁰ In fiscal year 2007, as in fiscal year 2006, the Coast Guard met 5 targets—Ports, Waterways, and Coastal Security; Undocumented Migrant Interdiction; Marine Environmental Protection; Other Law Enforcement; and Ice Operations—and agency officials reported that the Coast Guard expects to meet the target for one additional program, Illegal Drug Interdiction, when results become available in August 2008.¹¹ This potentially brings the number of met targets to 6 out of 11. In addition, the Coast Guard narrowly missed performance targets for 3 of its non-homeland security mission-programs, Search and Rescue, Living Marine Resources, and Aids to Navigation; and more widely missed performance targets for two other mission-programs, Marine Safety and Defense Readiness. Performance in 6 of 11 Coast Guard mission-programs improved in the last year, although improvements in the Marine Safety and Search and Rescue mission-programs were insufficient to meet 2007 performance targets. Alternatively, while performance decreased for the Ports, Waterways, and Coastal Security program, the performance target was still met. Meanwhile, three mission-programs that did not meet 2007 performance targets, Defense Readiness, Living Marine Resources, and Aids to Navigation, demonstrated lowered performance in 2007 compared to 2006 performance. (See App. II for more information on Coast Guard performance results.)

In 2006, we completed an examination of the Coast Guard's non-homeland security performance measures to assess their quality.¹² We reported that while the Coast Guard's non-homeland security measures are generally sound and the data used to collect them are generally reliable, the Coast Guard had challenges associated with using performance measures to link resources to results. Such challenges included comprehensiveness (that is, using a single measure per mission-program may not convey complete information about overall performance) and external factors outside of the

¹⁰ For each major Coast Guard mission-program, the Coast Guard reports on both a performance measure target and actual performance achieved, by fiscal year. In addition, performance results are based upon targets that may change from year to year.

¹¹ The Other Law Enforcement mission-program is also known as U.S. Exclusive Economic Zone Enforcement, and is referred to accordingly in Appendix II.

¹² GAO, *Coast Guard: Non-Homeland Security Performance Measures Are Generally Sound, but Opportunities for Improvement Exist*, [GAO-06-816](#) (Washington, D.C.: Aug. 16, 2006).

agency's control (such as weather conditions, which can, for example, affect the amount of ice that needs to be cleared or the number of mariners who must be rescued). According to Coast Guard officials, new performance measures are currently under development to further capture performance for its mission-programs, and that link resources to results. For example, officials described efforts to develop a new measure that captures an additional segment under its search and rescue mission-program, called Lives Unaccounted For. Also, two new measures are under development to further capture the Coast Guard's risk management efforts and link resources to results under the ports, waterways and coastal security mission-program. As we have reported, the Coast Guard appears to be moving in the right direction with these efforts. However, since these efforts are long-term in nature, it remains too soon to determine how effective the Coast Guard's larger efforts will be at clearly linking resources to performance results as certain initiatives are not expected to be implemented until 2010.¹³

Coast Guard Continues to Face Challenges in Balancing Its Homeland Security and Non-Homeland Security Missions

After the September 11, 2001 terrorist attacks, the Coast Guard's priorities and focus had to shift suddenly and dramatically toward protecting the nation's vast and sprawling network of ports and waterways. Coast Guard cutters, aircraft, boats and personnel normally used for non-homeland security missions were shifted to homeland security missions, which previously consumed only a small portion of the agency's operating resources. Although we have previously reported that the Coast Guard was restoring activity levels for many of its non-homeland security mission-programs, the Coast Guard continues to face challenges in balancing its resources among each of its mission-programs. Further complicating this balance issue is the understanding that any unexpected events—a man-made disaster (such as a terrorist attack) or a natural disaster (such as Hurricane Katrina)—could result in again shifting resources between homeland security and non-homeland security missions. It is also important to note that assets designed to fulfill homeland security missions can also be used for non-homeland security missions. For example, new interagency operational centers (discussed in more detail below) can be used to coordinate Coast Guard and other federal and non-federal participants across a wide spectrum of activities, including non-homeland security missions.

¹³ For more details on the Coast Guard's efforts to match resources to performance results, see [GAO-06-816](#) (App. III).

Homeland Security Mission Requirements Continue to Increase

The Coast Guard's heightened responsibilities to protect America's ports, waterways, and waterside facilities from terrorist attacks owe much of their origin to the Maritime Transportation Security Act (MTSA) of 2002.¹⁴ This legislation, enacted in November 2002 established, among other things, a port security framework that was designed to protect the nation's ports and waterways from terrorist attacks by requiring a wide range of security improvements. The SAFE Port Act, enacted in October 2006, made a number of adjustments to programs within the MTSA-established framework, creating some additional programs or lines of efforts and altering others.¹⁵ The additional requirements established by the SAFE Port Act have added to the resource challenges already faced by the Coast Guard as described below:

- **Inspecting domestic maritime facilities:** Pursuant to Coast Guard guidance, the Coast Guard has been conducting annual inspections of domestic maritime facilities to ensure that they are in compliance with their security plans. The Coast Guard conducted 2,126 of these inspections in 2006. However, Coast Guard policy directed that they be announced in advance. The SAFE Port Act added additional requirements that inspections be conducted at least twice per year and that one of these inspections be conducted unannounced. More recently, the Coast Guard has issued guidance requiring that unannounced inspections be more rigorous than before. In February 2008, we reported that fulfilling the requirement of additional and potentially more rigorous inspections, may require additional resources in terms of Coast Guard inspectors. Thus, we recommended that the Coast Guard reassess the adequacy of its resources for conducting facility inspections. The Coast Guard concurred with our recommendation.¹⁶
- **Inspecting foreign ports:** In response to a MTSA requirement, the Coast Guard established the International Port Security Program to assess and, if appropriate, make recommendations to improve security in foreign ports. Under this program, teams of Coast Guard officials conduct country visits to evaluate the implementation of security measures in the host nations' ports and to collect and share best practices to help ensure a comprehensive and consistent approach to

¹⁴ Pub. L. No. 107-295, 116 Stat. 2064 (2002).

¹⁵ Pub. L. No. 109-347, 120 Stat. 1884 (2006).

¹⁶ [GAO-08-12](#).

maritime security in ports worldwide. The SAFE Port Act established a minimum number of assessments and congressional direction has called for the Coast Guard to increase the pace of its visits to foreign ports. However, to increase its pace, the Coast Guard may have to hire and train new staff, in part because a number of experienced personnel associated with this inspection program are rotating to other positions as part of the Coast Guard's standard personnel rotation policy. Coast Guard officials also said that they have limited ability to help countries build on or enhance their own capacity to implement security requirements because—other than sharing best practices or providing presentations on security practices—the program does not currently have the resources or authority to directly assist countries with more in-depth training or technical assistance.¹⁷

- **Fulfilling port security operational requirements:** The Coast Guard conducts a number of operations at U.S. ports to deter and prevent terrorist attacks. Operation Neptune Shield, first issued in 2003, is the Coast Guard's operations order that sets specific security activities (such as harbor patrols and vessel escorts) for each port. As individual port security concerns change, the level of security activities also change, which affects the resources required to complete the activities. As we reported in October 2007, many ports are having difficulty meeting their port security requirements, with resource constraints being a major factor.¹⁸ Thus, we made a number of recommendations to the Coast Guard concerning resources, partnerships, and exercises. The Coast Guard concurred with our recommendations.¹⁹
- **Meeting security requirements for additional LNG terminals:** The Coast Guard is also faced with providing security for vessels arriving at four domestic onshore LNG import facilities. However, the number of LNG tankers bringing shipments to these facilities will increase considerably because of expansions that are planned or underway. For example, industry analysts expect approximately 12 more LNG facilities to be built over the next decade. As a result of

¹⁷ For more information on these foreign port inspections, see GAO, *Information on Port Security in the Caribbean Basin*, [GAO-07-804R](#) (Washington, D.C.: June 29, 2007).

¹⁸ See GAO, *Maritime Security: The SAFE Port Act: Status and Implementation One Year Later*, [GAO-08-126T](#) (Washington, D.C.: Oct. 30, 2007).

¹⁹ The details of this recommendation are contained in a report that is restricted from public release and cannot be further disclosed.

these changes, Coast Guard field units will likely be required to significantly expand their security workloads to conduct new LNG security missions. To address this issue, in December 2007 we recommended that the Coast Guard develop a national resource allocation plan that addresses the need to meet new LNG security requirements. The Coast Guard generally concurred with our recommendation.²⁰

- **Boarding and inspecting foreign vessels:** Security compliance examinations and boardings, which include identifying vessels that pose either a high risk for non-compliance with international and domestic regulations, or a high relative security risk to the port, are a key component in the Coast Guard's layered security strategy.²¹ According to Coast Guard officials and supporting data, the agency has completed nearly all examinations and boardings of targeted vessels. However, an increasing number of vessel arrivals in U.S. ports may impact the pace of operations for conducting security compliance examinations and boardings in the future. For example, in the 3-year period from 2004 through 2006, distinct vessel arrivals rose by nearly 13 percent and, according to the Coast Guard, this increase is likely to continue.²² Moreover, officials anticipate that the increase in arrivals will also likely include larger vessels, such as tankers, that require more time and resources to examine. Similarly, the potential increase in the number of arrivals and the size of vessels is likely to impact security boardings, which take place 12 miles offshore, and are consequently even more time- and resource-intensive. While targeted vessels remain the priority for receiving examinations and boardings, it

²⁰ For additional information on the challenges the Coast Guard faces with regard to energy commodity shipments, see GAO, *Maritime Security: Federal Efforts Needed to Address Challenges in Responding to Terrorist Attacks on Energy Commodity Tankers*, GAO-08-141 (Washington, D.C.: Dec. 10, 2007) and *Maritime Security: Public Consequences of a Terrorist Attack on a Tanker Carrying Liquefied Natural Gas Need Clarification*, GAO-07-316 (Washington, D.C.: Feb. 22, 2007).

²¹ Security compliance examinations are integrated into the Coast Guard's Port State Control program and are carried out by marine inspectors, who are also responsible for ensuring compliance of safety and environmental regulations. These examinations may be completed in port or at-sea depending on the relative risk factors of the vessel. Security boardings are a related, but separate, effort conducted by armed law enforcement officers. Security boardings are typically carried out at-sea before the vessel arrives at a U.S. port.

²² "Distinct" vessel arrivals include vessels, greater than or equal to 500 gross tons, which called upon at least one U.S. port during the calendar year. It also includes passenger vessels carrying more than 12 passengers on an international voyage. A vessel that called upon numerous U.S. ports in a given year only counts as one distinct arrival.

is unclear to what extent increased resource demands may impact the ability of the Coast Guard field units to complete these activities on all targeted vessels.²³

- **Establishing interagency operational centers:** The SAFE Port Act called for the establishment of interagency operational centers (command centers that bring together the intelligence and operational efforts of various federal and nonfederal participants), directing the Secretary of Homeland Security to establish such centers at all high-priority ports no later than 3 years after the Act's enactment.²⁴ The Act required that the centers include a wide range of agencies and stakeholders, as the Secretary deems appropriate, and carry out specified maritime security functions. Four existing sector command centers the Coast Guard operates in partnership with the Navy are a significant step toward meeting these requirements, according to a senior Coast Guard official. The Coast Guard is also piloting various aspects of future interagency operational centers at existing centers and is also working with multiple interagency partners to further develop this project.²⁵ The Coast Guard estimates that the total acquisition cost of upgrading sector command centers into interagency operational centers at the nation's 24 high priority ports will be approximately \$260 million. This includes investments in information systems, sensor networks, and facilities upgrades and expansions. Congress funded a total of \$60 million for the construction of interagency operational centers for fiscal year 2008. The Coast Guard

²³ According to Coast Guard officials, they have revised the targeting matrix for security boardings, which has resulted in a reduction in the number of vessels boarded. Coast Guard officials noted that other factors may also decrease the need for the number of required examinations and boardings over time. These factors include increased awareness by vessel operators of the security code requirements as well as enhancements to the Coast Guard's own maritime domain awareness, such as the Automatic Identification System—which uses a device to electronically track vessels—that they anticipate will provide more information on vessel activities.

²⁴ For additional information on these centers, see GAO, *Maritime Security: New Structures Have Improved Information Sharing, but Security Clearance Processing Requires Further Attention*, GAO-05-394 (Washington, D.C.: Apr. 15, 2005).

²⁵ According to the Coast Guard, these multiple interagency partners include Customs and Border Protection, Immigration and Customs Enforcement, Department of Defense, the Secure Border Initiative Network (SBInet) Program Office, and State and local partners. A pilot interagency operational center located in Charleston, South Carolina, known as Project Seahawk, is managed by the Department of Justice. It was created through an appropriation in the fiscal year 2003 Consolidated Appropriations Resolution (Pub. L. No. 108-7, 117 Stat. 11, 53 (2003.)). The Department of Justice has committed to funding Project Seahawk through fiscal year 2009.

has not requested any additional funding for the construction of these centers as part of its fiscal year 2009 budget request. However, the Coast Guard is requesting \$1 million to support its Command 21 acquisition project (which includes the continued development of its information management and sharing technology in command centers).²⁶ So, while the Coast Guard's estimates indicate that it will need additional financial resources to establish the interagency operational centers required by law, its current budget and longer term plans do not include all of the necessary funding.

- **Updating area maritime security plans:** MTSA, as amended, required that the Coast Guard develop, in conjunction with local public and private port stakeholders, Area Maritime Security Plans. The plans describe how port stakeholders are to deter a terrorist attack or other transportation security incident, or secure the port in the event such an attack occurs. These plans were initially developed and approved by the Coast Guard by June 2004. MTSA also requires that the plans be updated at least every five years. The SAFE Port Act added a requirement to the plans specifying that they include recovery issues by identifying salvage equipment able to restore operational trade capacity. This requirement was established to ensure that the waterways are cleared and the flow of commerce through United States ports is reestablished as efficiently and quickly as possible after a security incident.²⁷ The Coast Guard, working with local public and private port stakeholders, is required to revise their plans and have them completed and approved by June 2009. This planning process may require an investment of Coast Guard resources, in the form of time and human capital at the local port level for existing plan revision and salvage recovery development, as well as at the national level for the review and approval of all the plans by Coast Guard headquarters. In December 2007, we recommended that the Coast Guard develop national level guidance that ports can use to plan for addressing

²⁶ The Coast Guard's fiscal year 2009-2013 Five Year Capital Investment Plan does not include funds for the construction of these interagency operational centers, but the plan does include a total of \$40 million in future requests to support the Command 21 acquisition project. According to the Coast Guard, they are using the Command 21 effort as the vehicle to deliver interagency operational capacity to its existing command centers.

²⁷ Coast Guard officials have noted that any changes to the recovery sections of these plans need to be consistent with the national protocols developed for the SAFE Port Act, such as DHS's Strategy to Enhance the International Supply Chain released in July 2007. This strategy contains a plan to speed the resumption of trade in the event of a terrorist attack on our ports or waterways, in response to a SAFE Port Act requirement.

economic consequences, particularly in the case of port closures. The Coast Guard generally concurred with this recommendation.²⁸

Non-Homeland Security Mission Requirements Also Continue to Increase

While the Coast Guard continues to be in the vortex of the nation's response to maritime-related homeland security concerns, it is still responsible for rescuing those in distress, protecting the nation's fisheries, keeping vital marine highways operating efficiently, and responding effectively to marine accidents and natural disasters. Some of the Coast Guard's non-homeland security mission-programs are facing the same challenges as its homeland security mission-programs with regard to increased mission requirements as detailed below:

- **Revising port plans into all hazard plans:** In February 2007, we reported that most port authorities conduct planning for natural disasters separately from planning for homeland security threats.²⁹ However, port and industry experts, as well as recent federal actions, are now encouraging an all-hazards approach to disaster planning and recovery—that is, disaster preparedness planning that considers all of the threats faced by the port, both natural (such as hurricanes) and man-made (such as a terrorist attack). For homeland security planning, federal law provides for the establishment of Area Maritime Security Committees with wide stakeholder representation, and some ports are using these committees, or another similar forum with wide representation, in their disaster planning efforts. Federal law also provides for the establishment of separate committees (called Area Committees) for maritime spills of oil and hazardous materials.³⁰ We recommended that the Secretary of Homeland Security encourage port stakeholders to use existing forums such as these that include a range of stakeholders to discuss all-hazards planning efforts.³¹ Revising area

²⁸ [GAO-08-141](#).

²⁹ See *Port Risk Management: Additional Federal Guidance Would Aid Ports in Disaster Planning and Recovery*, [GAO-07-412](#) (Washington, D.C.: Mar. 28, 2007).

³⁰ The Oil Pollution Act of 1990 (Pub. L. 101-380, 104 Stat. 484 (1990)).

³¹ DHS generally agreed that existing forums provide a good opportunity to conduct outreach to and participation by stakeholders from various federal, state, and local agencies and as appropriate, industry and governmental organizations; however, the department said it did not endorse placing responsibility for disaster contingency planning on existing committees. We found during the course of our field work that some ports were already using existing port communities effectively to plan for all hazards, and we believe DHS could continue to use these forums as a way to engage all relevant parties in discussing natural disaster planning for ports.

plans using an all-hazards approach may require additional Coast Guard resources at the local port level and at the national level.

- **Revising oil spill regulations to protect the Oil Spill Liability Trust Fund:** As the recent accident in San Francisco Bay illustrates, the potential for an oil spill exists daily across coastal and inland waters of the United States. Spills can be expensive with considerable costs to the federal government and the private sector. The Oil Pollution Act of 1990³² (OPA) authorized the Oil Spill Liability Trust Fund, which is administered by the Coast Guard, to pay for costs related to removing oil spilled and damages incurred by the spill when the vessel owner or operator responsible for the spill—that is, the responsible party—is unable to pay.³³ In September 2007, we reported that the fund has been able to cover costs from major spills—i.e., spills for which the total costs and claims paid was at least \$1 million—that responsible parties have not paid, but additional risks to the fund remain, particularly from issues with limits of liability.³⁴ Limits of liability are the amount, under certain circumstances, above which responsible parties are no longer financially liable for spill removal costs and damage claims. The current liability limits for certain vessel types, notably tank barges, may be disproportionately low relative to costs associated with such spills, even though limits of liability were raised for the first time in 2006.³⁵ In addition, although OPA calls for periodic regulatory increases in liability limits to account for significant increases in inflation, such increases have never been made.³⁶ To improve and sustain the balance of the fund, we recommended that the Coast Guard determine what changes in the liability limits were needed. The Coast Guard concurred with our recommendation. Aside from issues related to limits of liability, the fund faces other potential drains on its resources, including ongoing claims from existing spills,

³² Pub. L. 101-380, 104 Stat. 484 (1990).

³³ OPA applies to oil discharged from vessels or facilities into navigable waters of the United States and adjoining shorelines. OPA also covers substantial threats of discharge, even if an actual discharge does not occur.

³⁴ GAO, *Maritime Transportation: Major Oil Spills Occur Infrequently, but Risks to the Federal Oil Spill Fund Remain*, [GAO-07-1085](#) (Washington, D.C.: Sept. 7, 2007).

³⁵ The Coast Guard and Maritime Transportation Act of 2006 (Pub. L. No. 109-241, 120 Stat. 516 (2006)) significantly increased the limits of liability from the limits set by OPA in 1990.

³⁶ If the liability limits had been adjusted for inflation between 1990 and 2006, the Fund could have saved approximately \$39 million.

spills that may occur without an identifiable source, and therefore, no responsible party, and a catastrophic spill that could strain the fund's resources.³⁷

- **Safeguarding the new national marine monument:** In December 2000, Executive Order 13178 authorized the creation of the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, called Papahānaumokuākea. The Reserve is about 140,000 square miles in area—slightly smaller than the state of Montana, our 4th largest state. In 2006 the President declared this region a national monument to be monitored by the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration, with support from the State of Hawaii and the Coast Guard. The Coast Guard's stewardship mission includes preserving the marine environment, which includes monitoring fishing activities and law enforcement, marine species protection, debris recovery and oil spill clean-up and prevention. These activities are supported by collaboration with other organizations, but nevertheless require regular aerial surveillance patrols and monitoring of vessel traffic. To ensure that commercial fishing is limited to selected vessels until 2011, several Coast Guard vessels patrol the region and conduct search and rescue missions, protect threatened species, or respond to potential hazards such as debris or damaged vessels. According to the Coast Guard, monument surveillance has added an additional enforcement responsibility onto an existing mission workload without the benefit of increased funding, personnel, or vessels and aircraft.
- **Increasing polar activity:** The combination of expanding maritime trade, tourism, exploratory activities and the shrinking Arctic ice cap may increase the demand for Coast Guard resources across a variety of non-homeland security missions. Moreover, multiple polar nations have recognized the value of natural resources in the Arctic region and have therefore sought to define and claim their own Arctic seabed and supply-chain access. However, the increase in Arctic activity has not seen a corresponding increase in Coast Guard capabilities. For example, two of the three Coast Guard polar ice-breakers are more

³⁷ During the 1989 Exxon Valdez oil spill, the vessel discharged about 20 percent of the oil it was carrying. Clean up costs for the Exxon Valdez alone totaled about \$2.2 billion, according to the vessel's owner. A catastrophic spill from a vessel could result in costs that exceed those of the *Exxon Valdez*, particularly if the entire contents of a tanker were released in a 'worst-case discharge' scenario.

than 30 years old.³⁸ The continued presence of U.S.-flagged heavy icebreakers capable of keeping supply routes open and safe may be needed to maintain U.S. interests, energy security, and supply chain security. These new demands, combined with the traditional Polar mission to assist partner agencies such as the National Science Foundation in research while protecting the environment and commercial vessels in U.S. waterways, reflect a need for an updated assessment of current and projected capabilities. In the explanatory statement accompanying the DHS fiscal year 2008 appropriations, the Committees on Appropriations of the House of Representatives and Senate directed the Coast Guard to submit a report that assesses the Coast Guard's Arctic mission capability and an analysis of the effect a changing environment may have on the current and projected polar operations, including any additional resources in the form of personnel, equipment, and vessels.

³⁸ For more information on polar icebreakers, see pp. 31-33 of *Coast Guard: Observations on the Fiscal Year 2008 Budget, Performance, Reorganization, and Related Challenges*, [GAO-07-489T](#) (Washington, D.C.: Apr.18, 2007).

Coast Guard Deepwater Program Continues to Experience Challenges and Progress Related to Affordability, Management, and Operations

Over the years, our testimonies on the Coast Guard's budget and performance have included details on the Deepwater program related to affordability, management, and operations.³⁹ Given the size of Deepwater funding requirements, the Coast Guard will have a long term challenge in funding the program within its overall and AC&I budgets. In terms of management, the Coast Guard has taken a number of steps to improve program management and implement our previous recommendations. Finally, problems with selected Deepwater assets—the 110-foot patrol boats that were upgraded and converted to 123-foot boats and subsequently grounded due to structural problems—have forced the Coast Guard to take various measures to mitigate the loss of these boats. These mitigating measures have resulted in increased costs to maintain the older 110-foot patrol boats and reallocation of operations across the various missions. These additional costs and mission shifts are likely to continue until the Coast Guard acquires new patrol boats.

Funding Deepwater Poses a Long Term Affordability Challenge

The Deepwater program represents a significant portion of the Coast Guard's budget, especially for acquisition, construction and improvements (AC&I). The Deepwater program, at \$990 million, accounts for approximately 11 percent of the Coast Guard's overall \$9.3 billion budget request for the entire agency for fiscal year 2009. As noted at the beginning of this statement, the overall federal government faces a long-term fiscal imbalance, which will put increased pressure on discretionary spending at individual agencies. In addition, Deepwater dominates the Coast Guard's capital spending as it represents nearly 82 percent of the agency's total AC&I request of \$1.21 billion. This leaves relatively little funding for non-homeland security assets which—as we reported last year—compete with the Deepwater program for AC&I resources. For example, many inland aids-to-navigation vessels are reaching the end of their designed service lives and, without major rehabilitation or

³⁹ See, for example, *Coast Guard: Challenges Affecting Deepwater Asset Deployment and Management Efforts to Address Them*, [GAO-07-874](#) (Washington, D.C.: June 18, 2007); *Coast Guard, Observations on Agency Performance, Operations, and Future Challenges*, [GAO-06-448T](#) (Washington, D.C.: June 15, 2006); *Coast Guard: Observations on Agency Priorities in Fiscal Year 2006 Budget Request*, [GAO-05-364T](#) (Washington, D.C.: Mar. 17, 2005); *Coast Guard: Key Management and Budget Challenges for Fiscal Year 2005 and Beyond*, [GAO-04-636T](#) (Washington, D.C.: Apr. 7, 2004); *Contract Management: Coast Guard's Deepwater Program Needs Increased Attention to Management and Contractor Oversight*, [GAO-04-380](#) (Washington, D.C.: Mar. 9, 2004); *Coast Guard: Budget and Management Challenges for 2003 and Beyond*, [GAO-02-538T](#) (Washington, D.C.: Mar. 19, 2002); and *Coast Guard: Challenges for Addressing Budget Constraints*, [GAO/RCED-97-110](#) (Washington, D.C.: May 1997).

replacement, their ability to carry out their designated missions will likely decline in the future.⁴⁰ While the Coast Guard has considered options for systematically rehabilitating or replacing these vessels, it has requested relatively little funding in the fiscal year 2009 budget request. Specifically, the Coast Guard has requested \$5 million in AC&I funds for survey and design activities to allow them to begin examining options for a new vessel to replace the aging inland river aids-to-navigation cutters.

As we reported last year, Deepwater continues to represent a significant source of unobligated balances—money appropriated but not yet spent for projects included in previous years’ budgets.⁴¹ The unobligated balances for Deepwater total \$566 million as of the end of fiscal year 2007, which is about 56 percent of the Coast Guard’s fiscal year 2009 request for Deepwater.⁴² These unobligated balances have accumulated for a variety of reasons—such as technical design problems and related delays—where the Coast Guard has found itself unable to spend previous year acquisition appropriations. For two Deepwater assets where the Coast Guard has postponed acquisition—the Offshore Patrol Cutter and the Vertical Unmanned Aerial Vehicle—the Coast Guard did not request funds for fiscal year 2008. In the fiscal year 2008 appropriation, Congress rescinded \$132 million dollars in unobligated balances for these two assets. For fiscal year 2009, the Coast Guard has requested relatively small amounts (approximately \$3 million each) for these two assets.

Given the magnitude of the program within Coast Guard’s overall and AC&I budgets, affordability of the Deepwater program has been an ongoing concern over the years. Our 1998 report on Deepwater indicated that the Coast Guard’s initial planning estimate for Deepwater was \$9.8 billion (in then-year constant dollars) over a 20-year period.⁴³ At that time, we said that the agency could face major financial obstacles in proceeding with a Deepwater program at that funding level because it would consume

⁴⁰ See GAO, *Coast Guard: Condition of Some Aids to Navigation and Domestic Icebreaking Vessels Has Declined: Effect on Mission Performance Appears Mixed*, [GAO-06-979](#) (Washington, D.C.: Sep. 22, 2006).

⁴¹ [GAO-07-489T](#).

⁴² Of this \$566 million, approximately \$105 million was in the Fast Response Cutter B-class account, \$82 million in the National Security Cutter account, and \$47 million in the HC-130H Conversion/Sustainment Projects account, among other items.

⁴³ GAO, *Coast Guard Acquisition Management: Deepwater Project’s Justification and Affordability Need to be Addressed More Thoroughly*, [GAO/RCED-99-6](#) (Washington, D.C.: Oct. 26, 1998).

virtually all of the Coast Guard's projected capital spending. Our 2001 testimony noted that affordability was the biggest risk for the Deepwater program because the Coast Guard's contracting approach depended on a sustained level of funding each fiscal year over the life of the program.⁴⁴ In 2005, the Coast Guard revised the Deepwater implementation plan to consider post-9/11 security requirements.⁴⁵ The revised plan increased overall cost estimates from \$17 billion to \$24 billion, to include annual appropriations ranging from \$650 million to \$1.5 billion per year through fiscal year 2026. Continuing into future budgets, Deepwater affordability will continue to be a major challenge to the Coast Guard given the other demands upon the agency for both capital and operations spending.

Coast Guard Making Changes to Improve Management of Deepwater

In the wake of serious performance and management problems, the Coast Guard is making a number of changes to improve the management of the Deepwater program.⁴⁶ The Coast Guard is moving away from the ICGS contract and the "system-of-systems" model, with the contractor as systems integrator, to a more traditional acquisition strategy, where the Coast Guard will manage the acquisition of each asset separately. It has recognized that it needs to increase government management and oversight and has begun to transfer system integration and program management responsibilities back to the Coast Guard. The Coast Guard began taking formal steps to reclaim authority over decision-making and to more closely monitor program outcomes. It has also begun to competitively purchase selected assets, expand the role of third parties to perform independent analysis, and reorganize and consolidate its acquisition function to strengthen its ability to manage projects.

⁴⁴ GAO, *Coast Guard: Actions Needed to Mitigate Deepwater Project Risks*, [GAO-01-659T](#) (Washington, D.C.: May 3, 2001).

⁴⁵ The new requirements generally related to improved capabilities to operate in conditions of chemical, biological, and radiological contamination; greater anti-terrorist weaponry; development of airborne use of force capabilities; improved communications systems, and enhanced flight decks.

⁴⁶ For example, the National Security Cutter (NSC), as designed, was unlikely to meet fatigue life expectations (as confirmed by a U.S. Navy study), leading to the Coast Guard's decision to correct structural deficiencies for the first two NSCs at scheduled drydocks and implement structural enhancements into design and production of future ships. The NSC has also experienced delays in delivery. In addition, the Coast Guard has had to suspend design work on the Fast Response Cutter-A due to high technical risks, after obligating approximately \$35 million.

The Coast Guard also continues to make progress in implementing our earlier recommendations to better manage the Deepwater program. In March 2004, we made 11 recommendations to the Coast Guard to address three broad areas of concern: improving program management, strengthening contractor accountability, and promoting cost control through greater competition among subcontractors.⁴⁷ Of the five recommendations that remained open as of our June 2007 report, we have closed two, pertaining to the Coast Guard's use of models and metrics to measure the contractor's progress toward improving operational effectiveness and establishing criteria for when to adjust the total ownership baseline.⁴⁸ The Coast Guard has taken actions on the three recommendations that remain open, such as designating Coast Guard officials as the lead on integrated product teams, developing a draft maintenance and logistics plan for the Deepwater assets, and decreasing their reliance on ICGS, including potentially eliminating the award term provision from the ICGS contract.

Problems with Assets and Delays Create Operational and Resource Challenges

Deferring acquisitions of new vessels and aircraft can affect the cost of operations, in that the cost-savings and reliability advantages of new or modernized assets may not be realized, and the cost of maintaining older assets can increase. For example, delays in the acquisition of new patrol boats have forced the Coast Guard to incur additional costs to maintain the older patrol boats. As part of its Deepwater program, the Coast Guard planned to have ICGS convert all 49 existing 110-foot patrol boats into 123-foot patrol boats with additional capabilities. This conversion project was halted after the first eight 110-foot patrol boats were converted and began to suffer structural and operational problems. In November 2006, all eight 123-foot patrol boats were removed from service and the Coast Guard had to take steps to better sustain its remaining 110-foot patrol boats. In fiscal year 2005, as the 123-foot patrol boats conversion was experiencing problems, the Coast Guard initiated the Mission Effectiveness Project to replace portions of the hull structure and mechanical equipment on

⁴⁷ GAO, *Contract Management: Coast Guard's Deepwater Program Needs Increased Attention to Management and Contractor Oversight*, [GAO-04-380](#) (Washington, D.C.: Mar. 9, 2004).

⁴⁸ See GAO, *Contract Management: Challenges Affecting Deepwater Asset Deployment and Management Efforts to Address Them*, [GAO-07-874](#) (Washington, D.C.: June 18, 2007). The first of these recommendations, on measuring contractor's progress, has been overcome by events, given the changes in how the Coast Guard currently assesses contractor performance.

selected 110-foot patrol boats to improve their overall mission effectiveness until a new replacement patrol boat is ultimately delivered. The Coast Guard has been appropriated a total of \$109.7 million for this effort through fiscal year 2008, and in its fiscal Year 2009-2013 Five Year Capital Investment Plan indicates it will need an additional \$56.3 million through fiscal year 2012. In addition, the Coast Guard plans on implementing a “high tempo, high maintenance” initiative for eight of its 110-foot patrol boats. This initiative is aimed at increasing the number of annual operational hours for these eight patrol boats, at a cost of \$11.5 million in fiscal year 2008.

The removal of the 123-foot patrol boats from service has also increased operational costs in terms of lost or reallocated missions. The loss of the eight 123-foot patrol boats created a shortage of vessels in District 7, where they were all homeported (i.e., based).⁴⁹ As a result, the Coast Guard developed various strategies to mitigate the loss of these boats in District 7—which impacted the ability of the Coast Guard to interdict illegal migrants. One of the Coast Guard’s strategies was to shift deployments of some vessels to District 7 from other districts within the Coast Guard’s Atlantic Area. In fiscal year 2007 the Coast Guard redeployed several vessels—which contributed approximately 6,600 operational hours in District 7—from Districts 1, 5, 8 and the Atlantic Area Command. As discussed in the previous section, the Coast Guard faced a trade off between homeland security missions and non-homeland security missions. In general, this mitigating strategy has led to increased homeland security operations in District 7 (e.g., for migrant interdiction) at the expense of some non-homeland security missions (e.g., living marine resources and aids to navigation) in the Districts providing the assets. For example, District 5 officials estimated that the loss of one medium-endurance cutter deployment from its district to District 7 reduced its non-homeland security operations by potentially preventing District 5 from performing approximately 24 vessel boardings and issuing 17 violation notices in its living marine resources mission.⁵⁰

These additional costs will likely continue until the Coast Guard can acquire the replacement patrol boat—the Fast Response Cutter (FRC)—

⁴⁹ The Coast Guard’s District 7 Command, based in Miami, FL, generally covers the areas and adjacent waters of coastal South Carolina, Florida, and Puerto Rico.

⁵⁰ We are currently reviewing the Coast Guard’s strategies for mitigating the loss of the eight 123-foot patrol boats in District 7 and will be reporting our results later in the Spring.

the FRC was conceived as a patrol boat with high readiness, speed, adaptability and endurance. ICGS proposed a fleet of 58 FRCs constructed of composite materials (later termed FRC-As). Although estimates of the initial acquisition cost for these composite materials were high, they were chosen for their perceived advantages over other materials (e.g., steel), such as lower maintenance and life-cycle costs, longer service life, and lower weight. However, in February 2006 the Coast Guard suspended FRC-A design work in order to assess and mitigate technical risks.⁵¹ As an alternative to the FRC-A, the Coast Guard planned to purchase 12 modified commercially available patrol boats (termed FRC-Bs). In June 2007, the Coast Guard issued a request for proposals for the design, construction and delivery of a modified commercially available patrol boat for the FRC-B. In late 2006, the Coast Guard estimated that the total acquisition cost for 12 FRC-Bs would be \$593 million. The Coast Guard expects to award the FRC-B contract in the third quarter of fiscal year 2008, with the lead patrol boat to be delivered in 2010. Coast Guard officials stated that their goal is still to acquire 12 FRC-Bs by 2012. The Coast Guard intends to award a fixed price contract for design and construction of the FRC-B, with the potential to acquire a total of 34 cutters.

Madam Chair and Members of the Subcommittee, this completes my prepared statement. I will be happy to respond to any questions that you or other Members of the Subcommittee may have.

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⁵¹ For more information on the FRC-A, see GAO, *Coast Guard: Status of Deepwater Fast Response Cutter Design Efforts*, [GAO-06-764](#) (Washington, D.C.: June 23, 2006).

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Appendix I: Status of Selected Deepwater Assets

Appendix I provides information on key vessels and aircraft that are part of the Deepwater program. In 2005, the Coast Guard revised its Deepwater acquisition program baseline to reflect updated cost, schedule, and performance measures. The revised baseline accounted for, among other things, new requirements imposed by the events of September 11. The initially-envisioned designs for some assets, such as the Offshore Patrol Cutter and Vertical Unmanned Aerial Vehicle, are being rethought. Other assets, such as the National Security Cutter and Maritime Patrol Aircraft, are in production. Table 2 shows the 2005 baseline and current status of selected Deepwater assets.

Appendix I: Status of Selected Deepwater Assets

Table 2: Progress of Selected Deepwater Assets

Deepwater asset	2005 baseline	Current status
<p>Fast Response Cutter</p> 	<ul style="list-style-type: none"> • 58 ships • new design with composite hull • cost \$3.2 billion or \$55.6 million per ship • first asset delivers in 2007 	<ul style="list-style-type: none"> • original procurement halted because of design concerns • new competition for up to 34 ships based on a commercially available design • Coast Guard intends to acquire 12 ships by 2012 for a cost of \$593.0 million, or \$49.4 million per ship • first asset delivers in 2010
<p>National Security Cutter</p> 	<ul style="list-style-type: none"> • 8 ships • cost of \$2.9 billion or \$359.4 million per ship • first asset delivers in 2007 	<ul style="list-style-type: none"> • 8 ships • problems in design and construction will delay first asset delivery to 2008 • cost has increased to \$3.5 billion or \$431.3 million per ship
<p>Offshore Patrol Cutter</p> 	<ul style="list-style-type: none"> • 25 ships • cost of \$7.1 billion or \$282.2 million per ship • first asset delivers in 2010 	<ul style="list-style-type: none"> • re-competing asset with new design will delay first asset delivery until fiscal year 2015 • 25 ships • cost is uncertain because of new design; however, 2007 expenditure plan shows cost increase to \$8.1 billion or \$323.9 million per ship
<p>HH-65 Multi-Mission Cutter Helicopter</p> 	<ul style="list-style-type: none"> • upgrade of 95 helicopters • cost of \$575.0 million or \$6.1 million per helicopter • first asset delivers in 2012 	<ul style="list-style-type: none"> • upgrade of 102 helicopters in three phases • total cost of \$741.0 million or \$7.3 million per helicopter • first asset of third and final phase delivers in 2008
<p>Maritime Patrol Aircraft</p> 	<ul style="list-style-type: none"> • 36 aircraft • cost of \$1.6 billion or \$44.2 million per aircraft • first asset delivers in 2008 	<ul style="list-style-type: none"> • 36 aircraft • cost of \$1.7 billion or \$47.4 million per aircraft • first asset delivers in 2008
<p>Vertical Unmanned Aerial Vehicle</p> 	<ul style="list-style-type: none"> • 45 aircraft • cost of \$503.3 million or \$11.2 million per aircraft • first asset delivers in 2007 	<ul style="list-style-type: none"> • Coast Guard has deferred acquisition of this asset because of challenges in technology maturation • the fiscal year 2009 budget requests funding for continued analysis but the acquisition plan has not yet been determined
<p>C4ISR</p> 	<ul style="list-style-type: none"> • cost \$1.9 billion • includes upgrades to cutters and shore installations, as well as development of a common operating picture 	<ul style="list-style-type: none"> • cost \$1.4 billion • capability will be introduced in four increments beginning in 2007 and completing in fiscal year 2014

Source: GAO analysis of Coast Guard documents.

Appendix II: Performance Results by Mission-Program from Fiscal Year 2003 through Fiscal Year 2007

Appendix II provides a detailed list of Coast Guard performance results for the Coast Guard's 11 programs from fiscal years 2003 through 2007.

Table 3: Performance Results by Mission-Program from Fiscal Year 2003 Through Fiscal Year 2007

Mission-program	Mission-program performance measure	Performance Results 2003	2004	2005	2006	2007	Performance target for 2007
Mission-programs meeting 2007 targets:							
Ports, Waterways, and Coastal Security	Percent reduction in maritime terrorism risk over which the Coast Guard has influence	n/a	n/a	14%	17%	15%	≥15%
Undocumented Migrant Interdiction	Percentage of interdicted or deterred illegal migrants entering the United States through illegal means	85.3%	87.1%	85.5%	89.1%	93.7%	≥91%
Marine Environmental Protection	Average of oil and chemical spills greater than 100 gallons per 100 million tons shipped	29.4	22.1	18.5	16.3	15	≤19
U.S. Exclusive Economic Zone Enforcement	Number of detected Exclusive Economic Zone (EEZ) incursions by foreign fishing vessels	152	247	174	164	119	≤199
Ice Operations (domestic icebreaking)	Number of waterway closure days	7	4	0	0	0	≤2 ^a
Mission-program expected to meet 2007 target:							
Illegal Drug Interdiction	Percentage of cocaine removed out of total estimated cocaine entering through the United States through maritime means ^b	Not reported	30.7%	27.3%	25.3%	31.4% ^c	≥26%
Mission-programs that did not meet their 2007 targets:							
Marine Safety	5-year average annual mariner, passenger, and boating deaths and injuries	5,561	5,387	5,169	5,036	4,770	4,539
Search and Rescue	Percentage of distressed mariners' lives saved	87.7%	86.8%	86.1%	85.3%	85.4%	≥86%
Defense Readiness	Percentage of time that units meet combat readiness level	78%	76%	67%	62%	51%	100%
Living Marine Resources	Percentage of fishermen found in compliance with federal regulations	97.1%	96.3%	96.4%	96.6%	96.2%	≥97%
Aids to Navigation	5-year average number of collisions, allisions, and groundings	2,000	1,876	1,825	1,765	1,823	≤1,664

Source: GAO analysis of Coast Guard data.

Note: n/a, not available. Bold numbers indicate that performance targets were met previously. Performance targets for previous fiscal years may have been different than fiscal year 2007 targets.

^aThe target for ice operations noted here is for domestic icebreaking only, and the target level varies according to the index for an entire winter. Thus, for those winters designated as severe, the target is 8 or fewer closure days. For winters designated as average, the target is 2 or fewer closure days.

**Appendix II: Performance Results by Mission-
Program from Fiscal Year 2003 through Fiscal
Year 2007**

^bThe performance measure for the illegal drug interdiction program, the percentage of cocaine removed, was revised in fiscal year 2004 from the percentage of cocaine seized in order to more accurately report the impact Coast Guard counterdrug activities have on the illicit drug trade. As a result, the cocaine removal rates for fiscal year 2002-2003 are not available.

^cComplete data are not yet available for the illegal drug interdiction program. However, the Coast Guard estimates it will surpass the FY 2007 performance target of 26 percent with an estimated 31.4 percent Cocaine Removal Rate.

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