Homeland Security: Coast Guard Operations - Background and Issues for Congress

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Summary

The Coast Guard is the lead federal agency for maritime homeland security. For FY2008, the Coast Guard is requesting a total of about $4.5 billion, or a bit more than half its total proposed budget, for the five missions defined in The Homeland Security Act of 2002 (P.L. 107-296) as the Coast Guard's homeland security missions. The Coast Guard's homeland security operations pose several potential issues for Congress. This report will be updated as events warrant.

Contents

Tables

Contacts

Background

The Coast Guard's Role in Homeland Security

The Coast Guard, which is a part of the Department of Homeland Security (DHS), is the lead federal agency for maritime homeland security. Section 888(a)(2) of The Homeland Security Act of 2002 (P.L. 107-296 of November 25, 2002), which established DHS, specifies five homeland security missions for the Coast Guard: (1) ports, waterways, and coastal security, (2) drug interdiction, (3) migrant interdiction, (4) defense readiness, and (5) other law enforcement.[1] The Coast Guard, in its own budget materials, excludes drug interdiction and other law enforcement from its definition of its homeland security missions.[2]

Under the Ports and Waterways Safety Act of 1972 (P.L. 92-340) and the Maritime Transportation Security Act (MTSA) of 2002 (P.L. 107-295 of November 25, 2002), the Coast Guard has responsibility to protect vessels and harbors from subversive acts. With regard to port security, the Coast Guard is responsible for evaluating, boarding, and inspecting commercial ships approaching U.S. waters, countering terrorist threats in U.S. ports, and helping protect U.S. Navy ships in U.S. ports. A Coast Guard officer in each port area is the Captain of the Port (COTP), who is the lead federal official for security and safety of vessels and waterways in that area.[3]

Homeland Security Missions In The Coast Guard Budget

Table 1 below shows FY2005-FY2008 funding for the Coast Guard's five statutorily defined homeland security missions. As shown in the table, the Coast Guard for FY2008 is requesting a total of about $4.5 billion, or a bit more than half its total proposed budget, for these five missions. The Coast Guard states that in FY2006, it met it performance targets for two of its five statutorily defined homeland security missions (ports, waterways, and coastal security, and other law enforcement) and did not meet them for two others (defense readiness and migrant interdiction). Performance regarding the fifth mission (drug interdiction) was to be determined as of February 2007.[4]

Table 1. FY2005-FY2008 Funding For Homeland Security Missions

(homeland security missions as defined in Section 888(a)(2) of Homeland Security Act of 2002 [P.L. 107-296]; totals may not add due to rounding)

PWCS[a]	Drug interdiction[b]	Migrant interdiction	Defense readiness	Other law enforcement[b]	Total
Funding (millions of dollars, rounded to nearest million)					

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[1] Section 888(a)(1) defines the Coast Guard's non-homeland security missions as (1) marine safety, (2) search and rescue, (3) aids to navigation, (4) living marine resources (fisheries law enforcement), (5) marine environmental protection, and (6) ice operations.

[2] See, for example, U.S. Department of Homeland Security, *U.S. Coast Guard [FY]2008 Budget in Brief and Performance Report*. Washington, 2007. (February 2007) Table 5 on p. 19.

[3] For more on port security, see CRS Report RL33383, *Terminal Operators and Their Role in U.S. Port and Maritime Security*, by John Frittelli and Jennifer E. Lake; CRS Report RL33787, *Maritime Security: Potential Terrorist Attacks and Protection Priorities*, by Paul W. Parfomak and John Frittelli, and CRS Report RL31733, *Port and Maritime Security: Background and Issues for Congress*, by John Frittelli.

[4] U.S. Department of Homeland Security, U.S. Coast Guard [FY]2008 Budget in Brief and Performance Report. Washington, 2007. (February 2007) Table 5 on p. 19. Subsequent pages discuss FY2006 performance of each of these missions in greater detail.

	PWCS[a]	Drug interdiction[b]	Migrant interdiction	Defense readiness	Other law enforcement[b]	Total
FY05	1,625	1,017	549	613	95	3,899
FY06	1,718	1,437	574	550	122	4,402
FY07	1,840	1,349	515	664	161	4,529
FY08	1,928	1,293	521	627	131	4,500
% of total Coast Guard budget						
FY05	21.0	13.2	7.1	7.9	1.2	50.4
FY06	19.8	16.6	6.6	6.3	1.4	50.7
FY07	21.3	15.6	6.0	7.7	1.9	52.5
FY08	22.1	14.8	6.0	7.2	1.5	51.6

Source: Prepared by CRS using data from U.S. Department of Homeland Security, *U.S. Coast Guard [FY]2008 Budget in Brief and Performance Report*. Washington, 2007. (February 2007) Table 5 on p. 19, and (for FY2005) the analogous document for the FY2007 budget. Figures may not add due to rounding.

a. Ports, waterways, and coastal security.

b. The Coast Guard excludes drug interdiction and other law enforcement from its definition of its homeland security missions.

Issues for Congress

Potential issues for Congress concerning the Coast Guard's homeland security operations include, among others, the following:

- the sufficiency of Coast Guard funding, assets, and personnel levels for performing both homeland and non-homeland security missions;
- the division of the Coast Guard's budget between homeland security and non-homeland security missions;
- whether the Coast Guard is achieving sufficient interoperability and coordination with other DHS, federal, state, and local authorities involved in the maritime aspects of homeland security, including coordination of operations and coordination and sharing of intelligence;
- monitoring compliance with the facility and vessel security plans that the Coast Guard has reviewed and approved;
- how the Coast guard assesses security risks to various ports and prioritizes these risks for allocating port-security funding;
- completing foreign port security assessments;
- implementing a long-range vessel-tracking system required by MTSA;
- implementing Automatic Identification System (AIS);
- inland waterway security; and
- response plans for maritime security incidents.

Performance of Homeland non-Homeland Security Missions

A December 2006 report from the DHS Inspector General on major DHS management challenges stated:

To implement the Maritime Transportation Security Act of 2002 in a timely and effective manner, USCG must balance the resources devoted to the performance of homeland and non-homeland security missions; improve the performance of its homeland security missions; maintain and re-capitalize USCG's Deepwater fleet of aircraft, cutters, and small boats; restore the readiness of small boat stations to perform their search and rescue missions; and increase the number and quality of resource hours devoted to non-homeland security missions. For example, while overall resource hours devoted to USCG's homeland security missions grew steadily from FY 2001 through FY 2005, USCG continues to experience difficulty meeting its performance goals for homeland security missions.[5]

A July 2006 report from the DHS Inspector General on Coast Guard mission performance in FY2005 stated:

Since FY 2001, more [Coast Guard] resource hours have been dedicated to homeland security missions than for non-homeland security missions. However, after an initial drop in FY 2002, non-homeland security resource hours have increased every period, and have now returned to within 3% of baseline levels.... The Coast Guard has been more successful in meeting goals for its traditional non-homeland security missions, meeting 22 of 28 goals (79%) where measurable goals and results existed, but still leaving room for improved performance. Not including the Ports, Waterways, and Coastal Security mission, by far the largest user of resource hours of any Coast Guard mission, the Coast Guard achieved only 26% of its homeland security goals (5 of 19).... Growth in total resource hours has leveled off. Since resource hours are based on the limited and finite number of available assets, the Coast Guard will be unable to increase total resource hours without the acquisition of additional aircraft, cutters, and boats. Consequently, the Coast Guard has a limited ability to respond to an extended crisis, and therefore must divert resources normally dedicated to other missions. To improve performance within their overall constraints, the Coast Guard must ensure that a comprehensive and fully defined performance management system is implemented, and that experienced and trained personnel are available to satisfy increased workload demands.[6]

In March 2005, the Government Accountability Office (GAO) testified that:

The Maritime Transportation Security Act of 2002 charged the Coast Guard with many maritime homeland security responsibilities, such as assessing port vulnerabilities and ensuring that vessels and port facilities have adequate security plans, and the Coast Guard has worked hard to meet these requirements. GAO's reviews of these efforts have disclosed some areas for attention as well, such as developing ways to ensure that security plans are carried out with vigilance. The Coast Guard has taken steps to deal with some of these areas, but opportunities for improvement remain.[7]

Prototype Port Security System and AIS

A December 30, 2007, press article on a prototype port security system in Miami called Project Hawkeye and the AIS states in part:

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[5] U.S. Department of Homeland Security, Office of Inspector General, *Major Management Challenges Facing the Department of Homeland Security (Excerpts from the FY 2006 DHS Performance and Accountability Report)*, December 2006. (OIG-07-12) p. 21.

[6] U.S. Department of Homeland Security, Office of Inspector General, *Annual Review of Mission Performance, Untied States Coast Guard (FY 2005)*, July 2006. (OIG-06-50) p. 1.

[7] Government Accountability Office, *COAST GUARD[:] Observations on Agency Priorities in Fiscal Year 2006 Budget Request*, GAO-05-364T, Mar. 17, 2005.

A Coast Guard plan to combat terrorism by creating the maritime equivalent of an air traffic control system in the coastal waters here, a test for a nationwide effort, has fallen far short of expectations.

The Coast Guard installed long-range surveillance cameras, coastal radar and devices that automatically identify approaching vessels to help search out possible threats.

But the radar, it turns out, confuses waves with boats. The cameras cover just a sliver of the harbor and coasts. And only a small fraction of vessels can be identified automatically.

Officials acknowledge the limited progress that the Department of Homeland Security and the Coast Guard have made toward creating a viable defense here in Miami or at harbors nationwide against a maritime attack, despite the billions of dollars invested since 2001....

Miami was selected to serve as a laboratory for the Maritime Domain Awareness project....

The surveillance effort in Miami, known as Project Hawkeye, was intended to search out vessels that might present a threat, allowing the Coast Guard to try to foil an impending attack.

Using radar, the Coast Guard would track boats larger than 25 feet within 12 miles of shore. Smaller vessels—as little as a Jet Ski—would be tracked with infrared cameras up to five miles offshore. The surveillance would cover an area from Fort Lauderdale to the Florida Keys.

To identify which vessels among the thousands might pose a danger, the Coast Guard would rely on sophisticated software that would assemble and analyze all this data. Under the plan, Coast Guard officials would be alerted when boats entered restricted waters, loitered in a vulnerable spot or displayed an unusual course or speed.

The cameras have at times proved helpful, allowing the Coast Guard to investigate how a ship went aground or to monitor security contractors at the cruise ship terminal, to make sure they are doing their job, said Capt. Liam Slein, deputy commander of the Miami sector.

But the cameras, it turns out, are not powerful enough or installed widely enough to track small boats approaching the many inlets in the Miami area. The radar system is so unreliable—mistaking waves for boats, splitting large ships in two or becoming confused by rain—Coast Guard staff personnel have been told not to waste much time looking at it.

And technology the Coast Guard has required for large ships and wants installed on commercial fishing vessels, devices that automatically identify an approaching ship's name, location and course, has also provoked concerns.

The Automated Identification System, as it is known, was first developed as a collision avoidance measure, not a security system, and was not made tamperproof. A captain or crew wanting to hide or disguise their location could simply turn the system off, or enter data that transmitted false information about the vessel's whereabouts and identity....

Most critically, the software system intended to make sense of all the collected data has not yet been installed in Miami. That means that very little of what the cameras are filming or the radar is tracking is ever used or even watched. The data is of such limited value that at least for now, the Coast Guard has assigned only volunteers to deal with it....

A surveillance system similar to the one in Miami is supposed to be installed at as many as 35 ports. But given the challenges here, and the unwillingness of Congress to finance the still-unproven effort, the Coast Guard has delayed expanding the effort to other ports until at least 2014.[8]

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[8] Eric Lipton, "Security Effort by Coast Guard Is Falling Short," *New York Times*, Dec. 30, 2006.

Vessel Tracking System

A March 31, 2007, press article about a private-sector vessel tracking system called the Automated Vessel Tracking System states in part:

> The Automated Secure Vessel Tracking System has proven itself to businesses around the world. It gave real-time information to oil companies as Hurricane Katrina raged in 2005, helping them follow oil platforms that had been torn from their moorings. It has tracked ships in distress far out to sea.
>
> But the system is getting more attention these days because of who isn't using it: the Coast Guard. Juneau is one of the few Coast Guard district headquarters that subscribes to the system.
>
> Congress ordered the Coast Guard to begin testing by Sunday a system that would track all ships approaching U.S. ports. The Coast Guard says a system will be in place, but critics are concerned that it will prove to be insufficient.
>
> The Coast Guard and Maritime Transportation Act of 2006 says the Coast Guard, part of the Department of Homeland Security, must begin a three-year pilot program of a system capable of tracking 2,000 ships at once "to aid maritime security and response to maritime emergencies."...
>
> Some lawmakers are trying to convince the Coast Guard that the answer already exists in the maritime industry's vessel tracking system....
>
> The Coast Guard has been relying primarily on a radio-based tracking system. Its new system is expected to use satellite technology, but not immediately and then only on a limited basis, Schumer said.
>
> The system being pushed by [Senator] Schumer, [Representative] Sanchez and other members of Congress, however, has been used to monitor ship movement for the last five years by a coalition of nonprofit maritime organizations.
>
> The system relies on emergency beacons that already are fixtures on most commercial vessels. A software program "pings" the ship via satellite and retrieves data such as the name of the vessel, its owner, its latitude and longitude, its speed and its course. It can also track a ship's route across the ocean, allowing observers to know whether the ship stopped and met another vessel at sea or diverted to a port that wasn't on its usual route....
>
> The tracking system was created in 1999 by a small family-run company called Yukon Fuel Co. in Anchorage to keep tabs on its tugs and barges as they supplied fuel and freight to isolated Alaskan villages, fishing camps and mining sites. The software proved so popular that the family sold Yukon and formed Secure Asset Reporting Services Inc. to market the system, said Clayton Shelver, the company's chief executive....
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> The Coast Guard isn't the only player that still needs convincing. Most major shipping companies haven't signed on either. So far, only Taiwan-based Evergreen Marine Corp. has agreed to test it.[9]

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[9] Ronald D. White, "A System To Keep Tabs On Ships," *Los Angeles Times*, Mar. 31, 2007.

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