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Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

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Subject: Coast Guard: Service Has Taken Steps to Address Historic Personnel Problems, but It Is too Soon to Assess the Impact of These Efforts

During this decade, the Coast Guard has been challenged with expanded mission responsibilities, and concerns have been raised about whether sufficient personnel exist within the Coast Guard to fulfill these mission responsibilities. The terrorist attacks of September 11th resulted in additional and expanded security-related mission areas, while major natural disasters, such as Hurricane Katrina, provided lessons learned in allocating personnel and other resources across Coast Guard units. However, the impact of expanding Coast Guard missions and the increasing nationwide need for mission-ready Coast Guard units underscored shortcomings in the Coast Guard's ability to effectively allocate resources, such as personnel, ensure readiness levels, and maintain mission competency. GAO, the Offices of Inspector General at first the Department of Transportation and then the Department of Homeland Security, the National Transportation Safety Board, Congress, and the Coast Guard itself have reported on these types of personnel concerns both before and after the 2001 attacks.

Commenting on the Coast Guard's fiscal year 2009 appropriations, congressional appropriators noted in a Senate Appropriations Committee Report that while the Coast Guard workforce is approximately the same size today as it was at the end of fiscal year

1975, its present mission responsibilities are greater.¹ For example, the congressional appropriators reported that the number of foreign vessel arrivals in the United States increased by 61 percent over the last 10 years while the number of marine inspectors responsible for inspecting these vessels decreased by 1 percent. According to the Senate Appropriations Committee Report, however, the Coast Guard has not completed the necessary human resource requirements analysis to address the increases in its personnel needs. Further, a number of our reports and others have noted problems the Coast Guard has had allocating its personnel and other resources to accomplish its missions. For example, in 2008, we commented on the Coast Guard's inability to clearly monitor resource allocations, particularly in mission areas like marine safety where work is heavily personnel-based and not as dependent on physical assets such as ships or airplanes. There are also concerns about the competency levels of some Coast Guard personnel. Specifically, maritime stakeholders have raised issues about the competency of some Coast Guard personnel to fulfill its marine safety mission, which Coast Guard leadership agreed needed to be addressed.

Interested in these issues and others, you requested that we provide information on personnel efforts undertaken by the Coast Guard. This report discusses (1) documented personnel problems experienced by the Coast Guard in the last decade, (2) Coast Guard efforts to address these personnel problems, and the extent to which these efforts conform to congressional direction or identified best practices, as appropriate, and (3) possible challenges to their implementation.

To provide the historical perspective of personnel problems experienced by the Coast Guard, we reviewed our prior work on the Coast Guard's difficulties allocating its personnel and other resources to accomplish all of its diverse missions while ensuring that it addresses personnel readiness, qualifications, and training requirements. We also reviewed the results of relevant Coast Guard personnel qualifications and training investigations conducted by the National Transportation Safety Board and the Coast Guard, as well as reports of the Departments of Transportation and Homeland Security Offices of Inspector General related to the Coast Guard's management and readiness posture.

To assess the Coast Guard's efforts to address personnel problems, we reviewed relevant laws and congressional guidance, instructions, staffing manuals, training guidance, policies, and procedures related to the Coast Guard's workforce planning and personnel development. We analyzed the Coast Guard's *Workforce Action Plan* against guidance provided by congressional appropriators, the Department of Homeland Security's *Workforce Planning Guide*, and key principles for effective strategic workforce planning

¹ The Senate report (S. Rep. No. 110-396 at 80 (2008)) accompanying the Fiscal Year 2009 Department of Homeland Security Appropriations Act (Pub. L. No. 110-329, 122 Stat. 3574, 3652 (2008)) required the Commandant of the United States Coast Guard to develop a workforce action plan. The Explanatory Statement accompanying the Department of Homeland Security Appropriations Act, 2009, directed the Coast Guard to comply with the Senate report direction regarding a workforce action plan. H. Comm. on Appropriations, 110th Cong., Committee Print on H.R. 2638/Public Law 110-329 at 646 (2008).

we identified in previous work.² In addition, we analyzed the *Force Readiness Command Business Plan* as it reflects the Coast Guard's effort to align and standardize training to ensure force interoperability and readiness across all units. We also compared the Business Plan to planning elements set out in the Government Performance and Results Act (GPRA) of 1993.³ We analyzed the *Marine Safety Performance Plan* to assess how the Coast Guard planned to address certain complaints raised by the maritime community regarding a lack of competency in personnel conducting this mission, among other things. We also compared the *Marine Safety Performance Plan* to planning elements set out in the GPRA. Further, we reviewed the Coast Guard's *Acquisition Human Capital Strategic Plan* as well as a body of our work related to Coast Guard acquisitions as the Coast Guard continues implementing the largest acquisition program in the Coast Guard's history.⁴ We also analyzed information that reflects how the Coast Guard assessed personnel resources and allocated personnel to its various missions. In addition, we spoke with relevant Coast Guard officials from various offices, including the Office of the Vice Commandant; Human Resources; Assistant Commandant for Marine Safety, Security, and Stewardship; Assistant Commandant for Capability; Deputy Commandant for Operations; and Force Readiness Command, to discuss new personnel initiatives, including plans and data-driven tools, which are designed to better inform Coast Guard management of the personnel resources available, the status of training and other necessary qualifications, and options to allocate personnel for Coast Guard missions.

To identify and assess the challenges the Coast Guard may experience implementing new personnel initiatives, we discussed with relevant Coast Guard officials the purpose, status, and time frames for these initiatives, as well as the challenges and obstacles to implementing them. We also reviewed the National Academy of Public Administration's (NAPA) 2009 study addressing the Coast Guard's modernization program, and interviewed members of the project team.⁵

We conducted this performance audit from December 2008 through January 2010 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.

² U.S. Department of Homeland Security, *Workforce Planning Guide*, (July 31, 2007); and GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, GAO-04-39 (Washington, D.C.: Dec. 14, 2003).

³ Government Performance and Results Act of 1993 (GPRA), Pub. L. No. 103-62, 107 Stat. 285 (1993).

⁴ We have a robust body of work related to the acquisition challenges of the Coast Guard spanning several years. For example, GAO, *Coast Guard: As Deepwater Systems Integrator, Coast Guard Is Reassessing Costs and Capabilities but Lags in Applying Its Disciplined Acquisition Approach*, GAO-09-682 (Washington, D.C.: July 14, 2009) and *Coast Guard: Change in Course Improves Deepwater Management and Oversight, but Outcome Still Uncertain*, GAO-08-745 (Washington, D.C.: June 24, 2008).

⁵ NAPA, *U.S. Coast Guard Modernization Study* (Washington, D.C.: Apr. 2009). NAPA is an independent, nonprofit organization chartered by Congress to assist federal, state, and local governments in improving their effectiveness, efficiency, and accountability.

Results in Brief

The Coast Guard has made efforts to address its personnel problems, but it is too soon to assess these efforts' impact. The Coast Guard has a well-documented history of personnel problems, identified by Congress, GAO, and marine safety industry stakeholders, among others. For example, the Coast Guard faces continuing problems in balancing homeland security and more traditional missions, such as law enforcement and marine safety. The Coast Guard has made efforts to address these problems, such as the development of servicewide mission-support and mission-specific plans, as well as the creation or expansion of data-driven management tools. However, most of these efforts are in early stages of implementation or expansion, the data are not yet available to assess them, and of the four plans we reviewed, one plan did not fully conform to congressional direction. For example, one servicewide effort provides a description of the processes used by the Coast Guard to manage its personnel resources. Yet this effort did not include a gap analysis of the mission areas that continue to need resources and the type of personnel necessary to address those needs, in response to congressional direction. The remaining three plans generally conformed to best practices. Other efforts involve the development of electronic tools to allow for more data-driven management decisions on personnel requirements and preparedness. For example, the Officer Specialty Management System is designed to help workforce planners monitor the officer corps and identify potential shortfalls in specific knowledge, skills, education, and experience. The tool may help determine the rotation assignments of individual officers and assist program managers with calculating the time and cost of obtaining specific specialties, but officials do not expect the system to be fully online until 2011. Furthermore, as the Coast Guard continues to develop and implement these personnel-related efforts, it faces challenges due to resource constraints, data reliability problems, coordination, and leadership concerns.

Background

The Coast Guard is a multimission military service comprising approximately 49,100 full-time personnel—including about 42,000 military personnel and 7,100 civilians. Active duty military personnel, in turn, are comprised of almost 7,000 officers and 35,000 chief warrant officers and enlisted personnel. The Coast Guard's statutory mission responsibilities include homeland-security-mission programs such as the protection of ports, waterways, and coastal security; defense readiness; undocumented migrant interdiction; and nonhomeland-security-mission programs, such as drug interdiction; aids to navigation and waterways management; search and rescue; living marine resources; marine safety; marine environmental protection; other law enforcement; and ice operations.⁶ For fiscal year 2010, the Coast Guard's budget request totals about \$9.7 billion to meet its personnel and mission responsibilities, which is about \$360 million more than its total enacted appropriation in fiscal year 2009.

⁶ The Coast Guard's homeland security and nonhomeland security-missions are delineated in section 888 of the Homeland Security Act of 2002 (Pub. L. No. 107-296, 116 Stat. 2135, 2249 (2002)). Starting with the fiscal year 2007 budget, however, the Office of Management and Budget designated the Coast Guard's drug interdiction and other law enforcement mission programs—which were originally homeland-security-missions—as nonhomeland-security-missions for budgetary purposes.

As the Coast Guard continues to tackle historical documented problems related to personnel resource allocation, personnel readiness, qualifications, and training, the service is undergoing a significant organizational change, part of which involves modernizing its command structure, support systems, and business processes. The Coast Guard intends for this modernization program to better position the service to fulfill not only traditional missions but also homeland security responsibilities that expanded after September 11th. The modernization program is focused on the Coast Guard's command and control structure and human resources systems, among other mission-support systems.⁷ These new commands are as follows:

- The Deputy Commandant for Operations is responsible for aligning policy and planning across the Coast Guard's 11 statutory mission programs. The Deputy Commandant for Operations coordinates the development of resource proposals, including personnel resources, articulates gaps in workforce planning, and prioritizes the workforce gaps to be filled.
- The Deputy Commandant for Mission Support is responsible for processes and systems related to logistics, mission support, and human resources, including the development of human resource strategies to support mission execution (e.g., the Coast Guard's *Workforce Action Plan*).
- Force Readiness Command (FORCECOM) has the overall role of providing prepared forces throughout the Coast Guard by using enterprisewide analysis and standardized doctrine, training and tactics, and techniques and procedures to best allocate forces for sustainable mission execution.
- Operations Command is comprised of and consolidating the Coast Guard's field command and control structure, with ultimate responsibility for Coast Guard mission execution. Operations Command, as the end-user of operational personnel, is expected to collaborate with other commands to help ensure that its personnel-related needs are met.

The Coast Guard has requested certain additional statutory authorities to fully implement the new command structure and associated senior leadership positions. As of January 8, 2010 there were three pending bills (H.R. 3619, H.R. 2650, and S. 1194) containing the Coast Guard's requested provisions. For example, H.R. 3619, one of the pending Coast Guard authorization bills, would amend federal statutes that govern the operations of the Coast Guard and authorize four instead of the current two vice admiral positions to take leadership positions for each of the commands listed above.

⁷ GAO, *Coast Guard: Observations on the Genesis and Progress of the Service's Modernization Program*, GAO-09-530R (Washington, D.C.: June 24, 2009). This report provides additional information about the status of the Coast Guard's modernization effort.

The Coast Guard Has a History of Personnel Resource Allocation and Preparedness Problems

Since the terrorist attacks of September 11, 2001, the Coast Guard has encountered difficulties allocating its personnel and other resources to accomplish all of its diverse missions while ensuring that it addresses personnel readiness, qualifications, and training requirements. More specifically, the Coast Guard's security responsibilities increased following the September 11th attacks, while it maintained responsibility for conducting its nonhomeland security responsibilities, such as law enforcement and marine safety. Moreover, although the Coast Guard received increases in funding following the attacks, resources allocated to some nonhomeland-security activities declined, and remained below historic levels for years.⁸ In 2002 and 2003, we reported that the Coast Guard did not have a long-term strategy that outlined how it sees its resources—including personnel—distributed across its various missions in this new operating environment.⁹ Furthermore, we reported that although the Coast Guard used a variety of mission performance measures, it lacked a useful reporting mechanism to synthesize and convey data to Congress about its nonsecurity-mission resource levels. Thus, we recommended in 2004 that the Coast Guard implement a system to accurately account for resources expended in each of its mission areas.¹⁰ The Coast Guard acted upon this recommendation and has reported improvements in the transparency and accuracy of its financial systems and data. Similarly, in 2008, we noted that a lack of reliable data hindered the Coast Guard's efforts to estimate the number of facility inspectors needed to fulfill statutory responsibilities for conducting regular security inspections of the nation's ports and other maritime facilities to help prevent terrorist attacks.¹¹ Facility inspectors may be assigned other duties apart from inspections, and the Coast Guard did not have data on how inspectors' time was allocated. Further, in 2008, we reported that the Coast Guard's execution of a security-related program was at risk because it lacked a strategic workforce plan that defined appropriate staffing levels, identified the critical skills needed to achieve the mission, and eliminated workforce gaps to prepare for future needs.¹²

Formulating appropriate personnel levels for specific programs or across mission areas also involves a consideration of military-to-civilian staff ratios. A previous Coast Guard report to Congress on workforce issues, submitted to Congress in 1997, noted that civilian employees were better qualified to fill support positions that require technical

⁸ GAO, *Coast Guard: Strategy Needed for Setting and Monitoring Levels of Effort for All Missions*, GAO-03-155 (Washington, D.C.: Nov. 12, 2002) and *Coast Guard: Comprehensive Blueprint Needed to Balance and Monitor Resource Use and Measure Performance for All Missions*, GAO-03-544T (Washington, D.C.: Mar. 12, 2003).

⁹ GAO-03-155 and GAO-03-544T.

¹⁰ GAO, *Coast Guard: Relationship between Resources Used and Results Achieved Needs to be Clearer*, GAO-04-432 (Washington, D.C.: Mar. 22, 2004).

¹¹ 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).

¹² GAO, *Maritime Security: Coast Guard International Port Security Program Has Made Progress, but Additional Workforce Planning Is Needed*, GAO-08-335SU (Washington, D.C.: Apr. 4, 2008).

skills, extensive specialty training, and continuity of service.¹³ In 2000, we reviewed close to 1,000 nonoperational commissioned officer positions and determined that about 800 of the positions did not meet the Coast Guard's criteria for military staffing and could be filled by civilians.¹⁴ Although the Coast Guard identified several disadvantages to filling the military positions with civilians, such as loss of flexibility and impact on promotions and retention in the officer corps, we maintained that the long-term cost savings of the conversion outweighed the Coast Guard's concerns. Specifically, for the jobs examined in the study, the cost of employing an officer was on average 21 percent more than filling the same position with a comparable civilian. Despite the fact that the Coast Guard did not agree with several aspects of the analysis, it concurred that additional civilian conversions were appropriate and acknowledged additional qualitative benefits of a civilian workforce. More recently, the Coast Guard has sought to strengthen continuity of expertise in mission-related areas, such as marine safety, by adding civilian positions. These types of considerations will continue to make the balance of military and civilian personnel an important component of Coast Guard workforce planning, especially given the service's uncertain long-term budget outlook.

The Coast Guard has also faced other personnel problems related to readiness, qualifications, and training in specific mission areas, some of which predate the terrorist attacks. For example, some personnel qualifications and training elements associated with the Coast Guard's search and rescue mission were questioned in a National Transportation Safety Board (NTSB) investigation of the 1997 fatal sinking of a recreational sailing vessel.¹⁵ The NTSB concluded that substandard performance by the Coast Guard in initiating a search and rescue response to the incident contributed to loss of life, and recommended training improvements and changes in the certification process for Coast Guard communications staff that receive and act upon distress calls. In 2001, 2002, and 2003, the Department of Transportation Office of Inspector General also reported personnel concerns with the Coast Guard search and rescue mission along with the network of boat stations typically responsible for carrying out these operations.¹⁶ Among other things, the Inspector General noted boat station staff shortages, a declining trainer-to-trainee ratio that diminished the quality of on-the-job training, and a lack of entry-level training for boatswain's mates, who are key search and rescue mission staff that comprise a large segment of Coast Guard enlisted personnel. We reported in 2005 that stations were still unable to meet Coast Guard standards in the area of staffing.¹⁷ As

¹³ U.S. Coast Guard, *Report to Congress on Civilians in Personnel Management Structure* (Washington, D.C., June 26, 1997).

¹⁴ GAO, *Coast Guard Workforce Mix: Phased-In Conversion of Some Support Officer Positions Would Produce Savings*, GAO/RCED-00-60 (Washington, D.C.: Mar. 1, 2000).

¹⁵ National Transportation Safety Board, *Marine Accident Report: Sinking of the Recreational Sailing Vessel Morning Dew at the Entrance to the Harbor of Charlestown, South Carolina, December 29, 1997* (Washington, D.C.: Oct. 1999).

¹⁶ U.S. Department of Transportation, *Audit of the Small Boat Station Search and Rescue Program, United States Coast Guard* (Washington, D.C.: Sept. 2001); U.S. Department of Transportation, *U.S. Coast Guard Budget and Management Issues: Statement of the Honorable Kenneth M. Mead, Inspector General, U.S. Department of Transportation* (Washington, D.C.: Mar. 2002); and U.S. Department of Transportation, *Audit of the Use of Fiscal Year 2002 Funds to Improve the Operational Readiness of Small Boat Stations and Command Centers, United States Coast Guard* (Washington, D.C.: Apr. 2003).

¹⁷ GAO, *Coast Guard: Station Readiness Improving, but Resource Challenges and Management Concerns Remain*, GAO-05-161 (Washington, D.C.: Jan. 31, 2005).

recently as 2009, the experience levels of Coast Guard personnel were again called into question following a search and rescue response to a fatal fishing vessel sinking. A Coast Guard memorandum about the incident stated that the delayed response “revealed several procedural, training, and judgment shortfalls” and recommended further study.¹⁸

The Coast Guard has also acknowledged significant personnel problems in conducting its marine safety mission. The primary goal of this long-standing core mission is to promote the safe operation and navigation of U.S. and foreign flagged commercial vessels, passenger vessels, and recreational boats. Towards this goal, the marine safety mission encompasses several different activities, including vessel inspections, mariner credentialing, developing and enforcing federal marine safety regulations, industry and public outreach, and maritime casualty investigations. According to Coast Guard documents, the demand for marine safety mission services has increased significantly over the past decade in conjunction with industry growth and increased complexity. For example, citing Department of Transportation figures, a Coast Guard budget publication affirms that from 2002 to 2005, the number of U.S. port calls made by oceangoing vessels increased more than 10 percent to 61,047 calls.¹⁹ At the same time, however, many of the Coast Guard’s industry stakeholders (e.g., ports; shipyards; cargo, tank, and small passenger vessels; cruise ships) perceived a widening performance gap in the marine safety mission as the Coast Guard assumed additional homeland security responsibilities after the September 11th attacks. In August 2007, the Coast Guard Commandant acknowledged industry concerns in his written testimony for a congressional hearing on marine safety challenges. The most prominent concerns included reduced access to senior Coast Guard leadership, delays in mariner license issuance, perceived reduction in marine inspector experience, and confusion over the Coast Guard rulemaking process. A more detailed Coast Guard report documenting maritime stakeholder complaints was released later in 2007.²⁰ It described specific stakeholder concerns related to marine safety personnel issues: the number of personnel/resources, capability, career path/professionalism, training and qualifications, civilian/military mix, and tour length and rotations. In addition to maritime stakeholders, the Department of Homeland Security Office of Inspector General has raised personnel-related concerns about aspects of the Coast Guard’s marine safety mission. For example, a 2008 report found that the marine casualty investigations program had been hindered by less than fully qualified personnel conducting investigations, among other things.²¹ The Office of Inspector General made several recommendations with which the Coast Guard concurred, including developing and implementing a plan to increase the number of marine casualty investigators (including hiring additional civilians), and improving the investigator career path.

¹⁸ U.S. Coast Guard, *Final Action on Administrative Investigation of the Coast Guard Response to the Sinking of the F/V Patriot that Occurred on 3 January 2009* (Washington, D.C.: June 11, 2009).

¹⁹ U.S. Coast Guard, *U.S. Coast Guard Posture Statement with 2009 Budget in Brief* (Washington, D.C.: Feb. 2008).

²⁰ U.S. Coast Guard, *Coast Guard Marine Safety Analysis: An Independent Assessment and Suggestions for Improvement*, (Washington, D.C.: Nov. 16, 2007).

²¹ U.S. Department of Homeland Security, Office of Inspector General, *United States Coast Guard’s Management of the Marine Casualty Investigations Program* (Washington, D.C.: May 9, 2008).

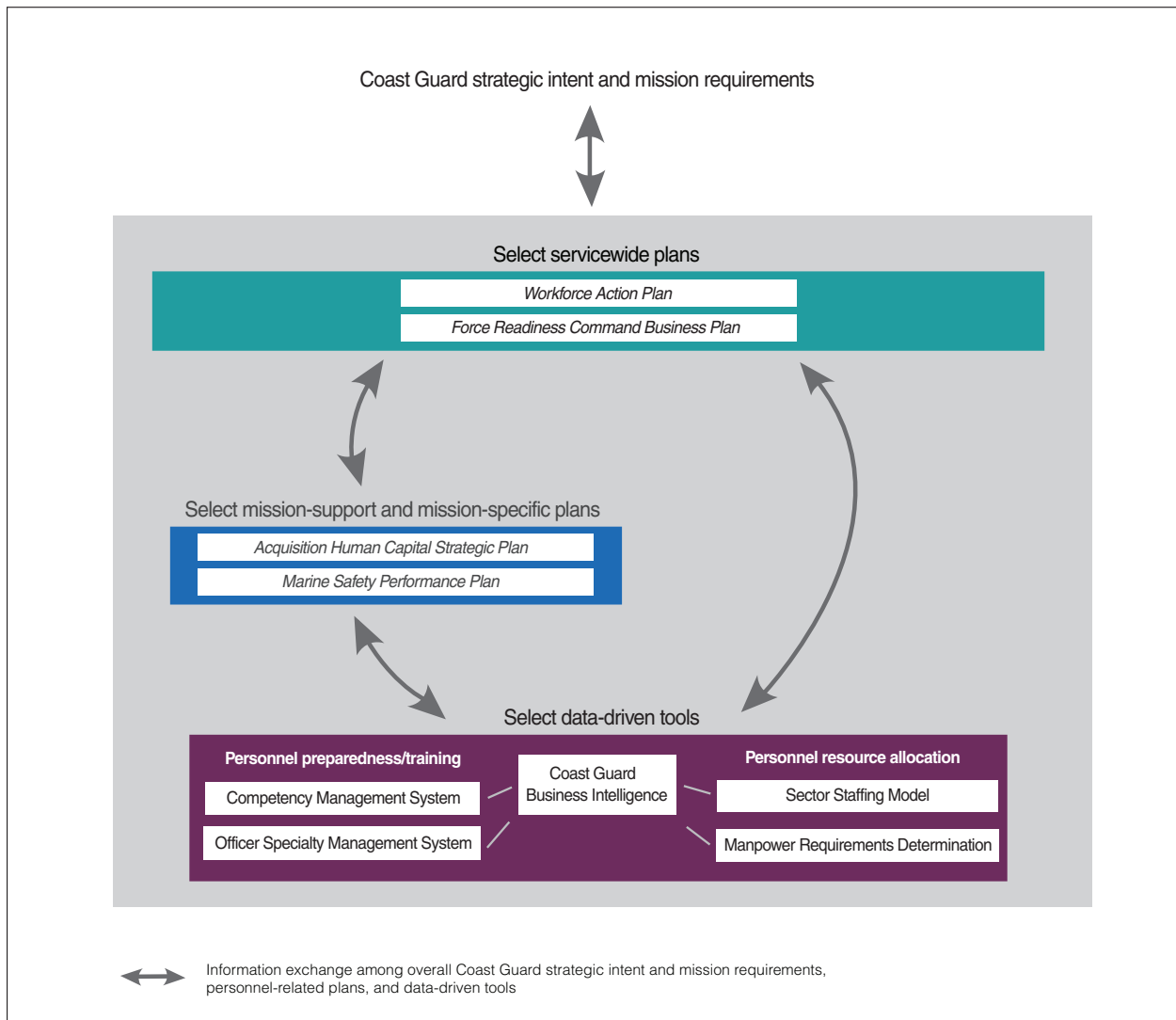
In addition to issues in specific mission areas, such as search and rescue and marine safety, the Coast Guard has faced significant problems developing and managing its acquisition workforce, which we have reported on previously.²² Although we noted in 2009 that the Coast Guard had made progress in identifying and mitigating acquisition workforce challenges, the service had difficulty hiring and retaining qualified acquisitions personnel and key positions remained unfilled as of July 2009. However, the Coast Guard's Office of Acquisition Workforce Management reported that the vacancy rate across the civilian acquisition workforce had declined from 27.2 percent to 12.7 percent during the second half of the 2009 calendar year.

The Coast Guard Has Developed Plans and Tools to Address Personnel Problems, but It Is too Soon to Assess Their Impact

The Coast Guard has responded to its historic problems related to personnel by developing both plans and tools to better allocate personnel resources, and prepare personnel for the positions they have been assigned. Figure 1 provides an overall diagram of how selected plans and data-driven tools collectively work to inform management decisions about personnel, including allocation and training needed. Following the figure is a more detailed description of each plan and tool we reviewed. For additional information on the time frames and status of each of these efforts, see enclosure.

²² GAO has a robust body of work related to the acquisition challenges of the Coast Guard spanning several years. For example, GAO-09-682 and GAO-08-745.

Figure 1: Select Coast Guard Personnel-Related Plans and Tools



Sources: GAO (analysis), Coast Guard (data).

Servicewide, Mission-Support and Mission-Specific Plans

To address problems related to personnel, the Coast Guard has developed plans including, among others, two servicewide plans for implementing broad workforce changes—the *Workforce Action Plan* and the *FORCECOM Business Plan*—plus a mission-support plan focused on increasing the number of acquisition personnel within its Acquisition Directorate, and a mission-specific plan focused more narrowly on its

marine safety mission.²³ According to the Coast Guard, these plans represent its efforts to better identify its personnel resource needs and manage its workforce.

- *Workforce Action Plan*: This plan considers Coast Guard mission areas and was developed in response to appropriations committee report direction, whose members had expressed concern that the size of the Coast Guard’s workforce had not kept pace with its increased mission requirements.²⁴ The creation of a workforce action plan can help to ensure that the Coast Guard better align its human capital program with current and emerging mission requirements, and facilitate the development of long-term strategies for acquiring, training, and retaining needed staff. In this case, the Coast Guard was directed to provide a workforce plan that would include (1) a gap analysis of the mission areas that continue to need resources and the type of personnel necessary to address those needs; (2) a strategy, including funding, milestones, and a timeline for addressing personnel gaps for each category of employee; (3) specific strategies for recruiting individuals for hard-to-fill positions; and (4) any additional authorities and resources necessary to address staffing requirements. The *Workforce Action Plan* did not provide a gap analysis of the mission areas and personnel needed, and thus also did not provide a strategy with proposed funding, milestones, and a timeline for addressing these personnel gaps for each employee category consistent with congressional direction. The *Workforce Action Plan* did provide a general view of recruiting strategies for meeting the service’s three priority workforce needs related to the quantity, quality, and diversity of its applicant pool, and referred generally to two mission areas that the Coast Guard identified as needing personnel adjustments—acquisitions and marine safety. Lastly, while the plan discussed some of the agency’s existing authorities, it did not expound upon any additional authorities needed to address staffing requirements. Instead, the Coast Guard’s *Workforce Action Plan* explained the Coast Guard’s workforce planning process. For example, the *Workforce Action Plan* provided an overview of how the Coast Guard would use the resources requested in the fiscal year 2010 President’s Budget and provided a list of manpower determinations for some units and platforms, an accession plan, civilian hiring targets, and a workforce status report (as of the first quarter of 2009). Although the workforce plan did not comport with the direction provided by the congressional appropriators, it followed the Department of Homeland Security’s workforce planning guidance in that the Coast Guard identified its human resource planning processes, highlighted recent efforts undertaken to improve the Coast Guard’s human resources management program, and discussed areas for improvement in its human resource planning and budgeting processes.²⁵ The *Workforce Action Plan* was completed in August 2009, but elements, such as the accession and recruiting

²³ In this review, we focused on the marine safety mission and the Coast Guard’s November 2008 *Marine Safety Performance Plan* because of the number of complaints lodged by maritime stakeholders nationwide, and the Coast Guard’s recognition of the extent and serious nature of the problems within this mission area. In addition, enhancing aspects of the marine safety mission was identified as a “strategic priority” in both the 2008 and 2009 Coast Guard Posture Statements.

²⁴ In response to the congressional direction provided in Senate Report 110-396, the Coast Guard produced a document, entitled *U.S. Coast Guard Workforce Action Plan: Fiscal Year 2009 Report to Congress*.

²⁵ U.S. Department of Homeland Security, *Workforce Planning Guide* (July 31, 2007).

plans, are to be implemented once final fiscal year funding is identified. The Coast Guard reported that it intends to revise the plan periodically as needed.

- *FORCECOM Business Plan*: The Coast Guard has developed a business plan for improving the readiness of its operational personnel and has tasked one of its new commands, FORCECOM, with carrying out the plan. The plan reflects FORCECOM's goals of ensuring servicewide force interoperability and readiness and supports the command's overall mission to provide ready forces to operational commanders. Standardizing personnel requirements and training may help to ensure that the Coast Guard can surge people and assets across the nation to fulfill mission needs. GPRA provided agencies a framework for effectively implementing and managing programs including setting strategic goals, measuring performance, and reporting on the degree to which goals are met. Although GPRA is generally applied to agencywide strategic plans, its framework is useful to guide any type of planning. The *FORCECOM Business Plan* contains characteristics of GPRA planning including defining a mission and desired outcomes and identifying performance measures to gauge progress.²⁶ For example, the plan defines a clear mission, specifically, to ensure the allocated forces are trained to standards, armed with current tactics and procedures, interoperable, and inspected in order to meet current and future operational requirements. The plan also calls for performance to be measured with specific actions. For example, the *FORCECOM Business Plan* contains a goal to catalogue and review all general mandated training requirements to ensure that each requirement is carefully approved and targeted for efficiency by 2010. To fulfill this plan, FORCECOM is assuming responsibilities in several personnel-related areas, including training and standardization. For example, under FORCECOM, Coast Guard officials we spoke with said they are planning to work with Coast Guard units to develop more standardized on-the-job training requirements across local units. We reported in 2006 that for the Hurricane Katrina response, standardization enabled Coast Guard search and rescue personnel from anywhere in the country to form unified crews to perform operations. For example, a helicopter pilot from Florida, a copilot from Alabama, and a rescue swimmer from Alaska formed a crew to perform numerous search and rescue operations. FORCECOM intends to take the standardization lessons-learned from this historic response and apply them across Coast Guard units and mission areas. FORCECOM officials noted that the Coast Guard's consolidation of force readiness responsibilities under FORCECOM represents an effort to increase this standardization and integration of personnel management. The *FORCECOM Business Plan* was completed in October 2008, and is planned to be implemented through fiscal year 2010. The Coast Guard reported that it intends to update the plan periodically to reflect FORCECOM priorities.

²⁶ GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996). It is important to note that while GPRA focuses on the agency level, performance goals and measures are important management tools for all levels of an agency, such as the bureau, program, project, or activity level, and these criteria are applicable at those levels as well.

- Acquisition Human Capital Strategic Plan*: This document addresses the challenges the Coast Guard is facing in filling the government acquisition positions it has identified both now and in the future. By developing its own acquisition workforce, the Coast Guard may improve accountability for its acquisitions by increasing government control and visibility over its assets and capabilities. The plan sets forth three overall challenges to developing its own acquisition workforce, including (1) recruitment, development, and retention of qualified acquisition personnel; (2) human capital information management; and (3) human capital management policy guidance, procedures, and practices. Further, it outlines 10 strategies for building and maintaining an acquisition workforce. The strategies include creating a “reward environment” that recognizes factors beyond employee compensation and benefits that attract, retain, and motivate employees. They also include establishing and maintaining human capital information systems that support the recruitment, development, and retention of the acquisition workforce, and performance planning, assessment, and measurement. According to the *Acquisition Human Capital Strategic Plan*, it established the strategic foundation for specific actions to be taken to achieve its human capital objectives, and identified performance metrics to track progress towards these goals. In addition, the plan adopted and applied the Office of Personnel Management’s Human Capital Assessment and Accountability Framework, which includes guidance in the areas of Strategic Alignment, Leadership and Knowledge Management, Results-Oriented Performance Culture, Talent Management, and Accountability. The *Acquisition Human Capital Strategic Plan* was first released in 2008, with an updated version published in 2009, and officials indicated that the outcomes and effectiveness of this plan are under constant assessment and review to ensure that the Coast Guard acquisition workforce is continually improving.
- Marine Safety Performance Plan*: This mission-specific plan seeks to address competency concerns by setting goals, objectives, and performance targets for the marine safety mission for fiscal years 2009 through 2014. Having the appropriate numbers and fully trained marine safety personnel may help to ensure that the Coast Guard successfully meets the increasing needs of maritime stakeholders. Similar to the *FORCECOM Business Plan*, the *Marine Safety Performance Plan* also contained characteristics of planning set out by GPRA, including involving stakeholders in defining the mission and desired outcomes of the plan, and identifying specific goals, objectives, and performance measures that link to the stated mission.²⁷ For example, according to the *Marine Safety Performance Plan*, it incorporates input from maritime stakeholders, and defines the mission of the plan as a means to ensure the safety of maritime stakeholders by preventing marine casualties, protecting marine environment, and strengthening maritime commerce. In addition, the *Marine Safety Performance Plan* outlines specific goals and objectives that can be measured. For example, as of December 3, 2009, the Coast Guard had filled 88 of 108 civilian marine safety positions, including more civilian inspectors for continuity, adjusted tour lengths, strengthened career paths, and expanded marine safety training and education. The *Marine Safety*

²⁷ GAO/GGD-96-118.

Performance Plan was designed to reduce maritime casualties, facilitate commerce, improve program processes and management, and improve human resource capabilities. The *Marine Safety Performance Plan* was completed in November 2008, and is planned to be implemented through fiscal year 2014.

Tools to Facilitate Data-Driven Management Decisions

Coast Guard officials have expressed a need for reliable, verifiable, and repeatable data to facilitate data-driven management decisions on personnel requirements and preparedness. The five tools identified below are all in development and intended to collectively provide Coast Guard management with access to more reliable and comprehensive data. The last of the five tools is expected to provide the Coast Guard with data access capability to allow it to use the data captured by the first four tools, among other things.

- **Officer Specialty Management System (OSMS):** OSMS is a new framework for Coast Guard officer “specialties,” specific areas of expertise within the service associated with different occupations or positions. In addition to replacing over 70 legacy specialties with 13 new specialties and 38 subspecialties, for the first time the Coast Guard plans to identify specific competency requirements for each specialty. For example, the legacy specialties of Boating Safety, including General, Boating Affairs, Boating Standards, and Boating Investigations, have been consolidated into one subspecialty under OSMS entitled Maritime Law Enforcement/Ports, Waterways & Coastal Security Operations. According to officials and an agency overview document, the overarching goal of these changes to legacy specialties is to gain a clearer picture of (1) what is required by Coast Guard officer positions, and (2) the capabilities of the officer corps.²⁸ OSMS is the product of internal studies initiated in 2001. The Coast Guard expects to assign specialties to officers beginning in summer 2010 with full implementation of the system by spring 2011.
- **Competency Management System (CMS):**²⁹ CMS is the mechanism by which Coast Guard officials establish and modify a standard set of competencies, assign competencies to positions, record competencies earned by members, collect and organize competency data and information, and allow for the use of competency information in personnel management decisions. For example, CMS contains the engineering competency “Engineering Inspections” and describes the individual with this competency as “able to inspect facilities or construction projects from an engineering perspective to identify required repairs, remaining life, and potential problems or improvements.” In another example, CMS lists the marine safety competency “Boarding Officer (Marine Safety)” and describes an individual with this competency as able to “perform detailed examinations of foreign and U.S. vessels of all types to verify compliance with U.S., class society, and

²⁸ Unlike officer specialties, the Coast Guard’s enlisted ratings already provide specific requirements for each rating.

²⁹ “Competency” in the Coast Guard generally refers to attributes such as knowledge, skills, abilities, and personal attributes that a person exercises while performing the business of any given position.

international safety, security, and pollution prevention regulations.” According to the CMS Manual, at a basic level CMS is designed to help decision makers understand the demands of the service and specific positions along with the supply of people available to meet those demands. As of November 2009, CMS covered approximately 80 percent of active duty and reserve positions, and the Coast Guard was in the early stages of developing processes to identify and assign competencies to civilian and auxiliary positions. It is unclear at this time when CMS will fully reflect military, reserve, and auxiliary competencies.

- **Manpower Requirements Determination (MRD):** According to Coast Guard documents and officials, the MRD system is designed to help calculate the human capital needed to perform Coast Guard tasks or missions using verifiable, repeatable, and defensible analyses. According to the MRD Business Model, Coast Guard officials currently measure human capital in ways that can vary based on factors such as programmatic or local needs. The goal of the MRD system is to create a common set of standards and analytical approaches so that officials responsible for personnel allocation decisions can make more standardized human capital comparisons across units or programs. For example, in December 2008 the MRD system was used to conduct a baseline analysis of the optimal mix of manpower required to maintain safety and sustain the mission of the Juniper Class cutter, which resulted in recommended increases of certain enlisted positions, and decreases in other enlisted positions.³⁰ MRD was chartered in 2006, and the Coast Guard expects the guiding doctrine, policy, and procedure documents for the MRD program to be complete by September 2010; the service expects the supporting automated information system that would be accessed through the Coast Guard Business Intelligence system to be completed by September 2012.
- **Sector Staffing Model (SSM):** Using SSM, the Coast Guard expects to be able to create baseline staffing data that are comparable across the Coast Guard’s 35 diverse sectors.³¹ Specifically, according to Coast Guard officials, SSM seeks to quantify staffing shortfalls, which in turn could justify resource proposals for additional staff; provide a transparent basis for mission requirement resource allocation; enable senior leadership and program managers to understand resource implications of proposed policy changes and requirements; and help forecast future staffing needs based on projected activity and mission growth. SSM uses two types of worksheets to analyze baseline staffing at sectors: (1) an activity-based worksheet and (2) a command cadre worksheet. For example, using the activity-based worksheet for “container inspections,” each sector estimates annual mission hours and activity levels needed to complete inspection-related activities. The results of this worksheet are converted into time available for work. The second worksheet—the command cadre tool—accounts for the

³⁰ A Coast Guard cutter is a vessel 65 feet in length or greater, having adequate accommodations for crew to live onboard. The Juniper Class cutter is 225 feet in length and the first vessel of this class was commissioned in 1996 as the lead ship in the Coast Guard’s Buoy Tender Replacement Project.

³¹ Sectors are operational units that carry out the full range of Coast Guard missions. There are currently 35 geographically-based Coast Guard sectors in the continental United States, Alaska, Hawaii, Puerto Rico, and Guam.

number of subordinate officers, and enlisted and civilian personnel, and considers unit-specific data for roughly 12-15 criteria related to each unit's size, assets, and missions. For example, the Prevention Department Head worksheet would include criteria, such as number of vessels inspected in that particular sector and the number of serious marine casualties occurring in that sector. These SSM worksheets are converted into Coast Guard positions, taking into account the mix of civilian and military staff, as well as their rates, ranks, or pay grades, providing Coast Guard management with a baseline of the personnel needed at each sector. SSM was chartered in 2007, and the Coast Guard expects that it will be accessible through the Coast Guard Business Intelligence data system in December 2010.

- Coast Guard Business Intelligence (CGBI): According to Coast Guard documents and officials, the CGBI data system is designed to support decision making across all levels of the Coast Guard by leveraging existing Coast Guard data, measures, and processes. This data system can generate a variety of reports or displays by drawing and combining data from multiple electronic sources. CGBI can access or is expected to be able to access the Officer Specialty Management System, Competency Management System, Manpower Requirements Determination, and Sector Staffing Model and is to provide a foundation for more data-driven decisions. For example, the Coast Guard expects to be able to access Sector Staffing Model results through CGBI in June 2010. In April 2009, the Coast Guard launched an updated version of CGBI, which added features to the initial 2006 version. Although the CGBI system is operational and utilized across the Coast Guard, its development continues. Program staff will continue to focus on measuring data quality in the future, according to one official. The next major system upgrade, which involves increasing the Coast Guard's capability to use existing data for predictive modeling or simulations, is expected to be completed in 2011, according to the Coast Guard.

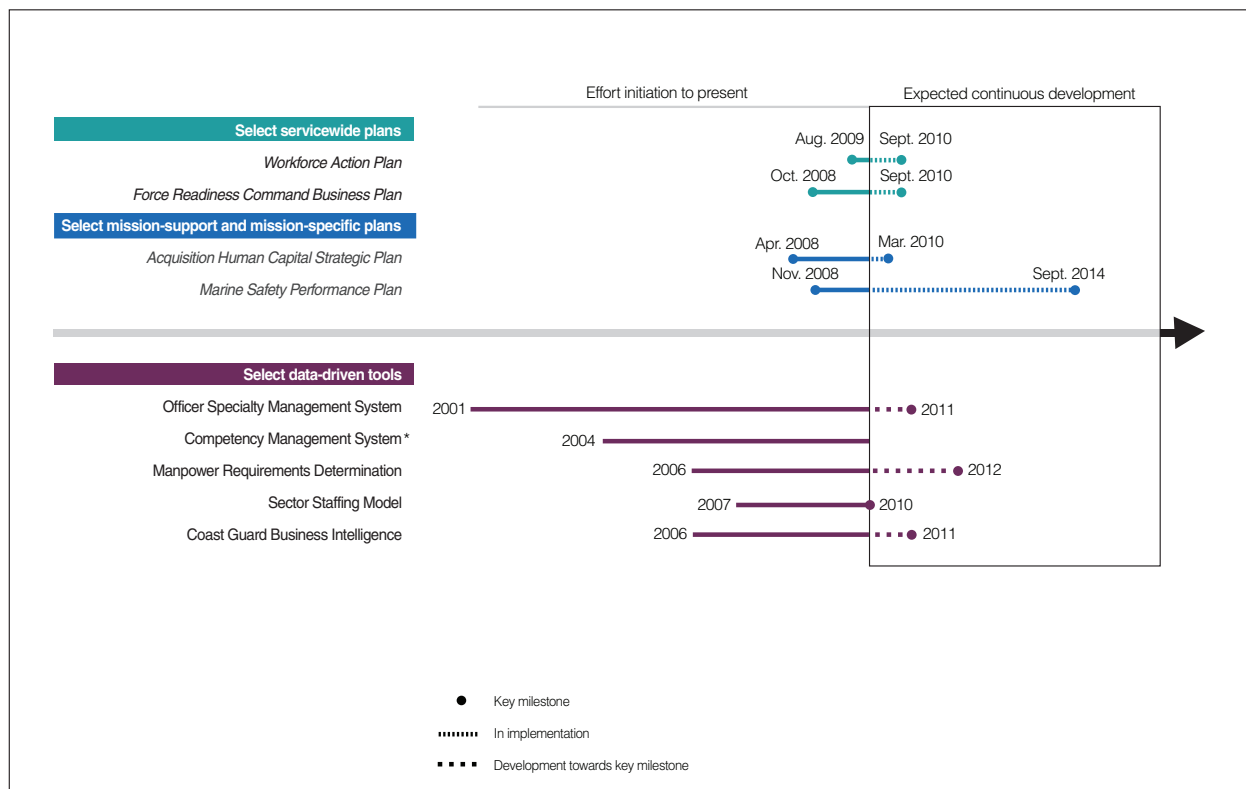
Efforts Still in Development

It is too soon to tell whether the plans and data-driven tools that the Coast Guard has begun to put in place will provide an analytical foundation to support management decisions related to resource allocation and personnel preparedness because the plans and tools are still in development or support ongoing efforts. The *Workforce Action Plan* and *FORCECOM Business Plan* both describe discrete goals related to personnel improvements that extend beyond 2010. The *Acquisition Human Capital Strategic Plan* also contains challenges and outlines strategies for addressing these challenges, which have deadlines provided by the *Blueprint for Acquisition Reform*, a companion document to the human capital strategic plan. As we reported in July 2009, the Coast Guard has completed a number of the initiatives, including the adoption of a model to assess future acquisition workforce needs. The *Marine Safety Performance Plan* contains initiatives that extend through fiscal year 2014. In terms of the tools, OSMS and SSM have undergone beta testing and have been deployed for limited use, but are not expected to be fully implemented until 2011 and 2010, respectively, according to estimates from the responsible program offices. The Coast Guard reported in December 2009 that the Manpower Requirements Determination analysis tool has been utilized in 23 completed or ongoing projects; however, the Coast Guard estimated that the currently

expanding Manpower Requirements Determination system will not be completed until 2012. The Competency Management System tool currently provides information relevant to most military positions, but officials have only recently begun to populate civilian and auxiliary competencies, and it is not clear when this update will be completed. Lastly, although the CGBI system is operational and in use across the Coast Guard, it too undergoes updates and revisions to meet the needs of those who use the system, according to officials who manage the system.

Figure 2 illustrates the timeline for implementation or development of Coast Guard plans and data-driven tools that may address personnel challenges.

Figure 2: Timeline of Select Coast Guard Personnel-Related Plans and Tools



Sources: GAO (analysis), Coast Guard (data).

*Milestone not identified, but the Coast Guard indicated that system development is ongoing.

The Coast Guard May Face Challenges in Implementing Personnel Efforts

The Coast Guard may encounter four specific challenges as it implements the personnel management actions discussed above. Specifically, there may be challenges related to resources being sufficient to implement personnel efforts, as well as sufficient to support mission requirements, data reliability, coordination among the Coast Guard offices responsible for developing and implementing each of these actions, and leadership. It is too soon to tell how successful the Coast Guard will be in overcoming these challenges.

Resource Challenges Are Twofold: Are Resources Sufficient to Implement Personnel Efforts and Fill Mission Requirements

The Coast Guard acknowledged that it faces two types of resource challenges—first, dedicating the necessary resources to implement and monitor its planning and data-tool personnel initiatives, and second, having the resources to meet its personnel and mission requirements once they are established.

First, it remains unclear whether the Coast Guard’s existing resources are sufficient or appropriately utilized to put these new plans and tools into operation. For example, the Manpower Requirements Determination office consists of five staff and one supervisor and has three unfilled positions (two officers and one civilian)³² and they plan to review human resource requirements for over 100 unit types (including small-boat stations, sectors, National Security Cutter, and headquarters), provide an analysis for each new unit, or mission requirements, which is estimated to take about 6-12 months (e.g., the new enlisted maritime enforcement specialist rating), and provide support for all resource proposals that are considered for funding by the Coast Guard.³³ As a result of the size of the workload relative to the size of the staff, the program office that manages MRD is conducting an MRD analysis on its own manpower requirements, which it expects to complete by July 2010. The results will inform the MRD office’s staffing decisions and may result in a request for additional personnel. Further, the Coast Guard’s reliance upon congressional authorization for the new overall Coast Guard command structure may also complicate steps to standardize training and personnel requirements across all Coast Guard units. Under the Coast Guard’s current approach, until the Coast Guard’s new command structure, which includes FORCECOM, is fully authorized and funded under the new structure, personnel assigned to FORCECOM are to continue to conduct their legacy responsibilities under the old command structure. Although senior Coast Guard officials from FORCECOM responsible for training and other personnel-related initiatives reported that they have continued to fulfill their legacy responsibilities and complete their new responsibilities under FORCECOM, it is unclear what impact these dual responsibilities will have on the timely implementation of the goals set out in the *FORCECOM Business Plan* that are focused on standardizing personnel training and preparedness requirements.

Second, given the current resource-constrained federal budget environment faced by all agencies, the use of more standardized and analytical tools like the Manpower Requirements Determination or Sector Staffing Model will not guarantee that identified personnel needs are met in units and platforms across the Coast Guard. Admiral Thad Allen, the Commandant of the United States Coast Guard, recognized the economic challenges the nation faces when he testified in May 2009 on the Coast Guard’s fiscal

³² The MRD office anticipates filling these three positions by the summer of 2010. There are an additional three analysts that conduct manpower requirement determinations for acquisition-related reviews.

³³ In January of 2010, the new maritime enforcement specialist rating will take effect; in the future the personnel in this position will execute the duties of port security specialists. The maritime enforcement “A” school will be located in the Coast Guard Maritime Law Enforcement Academy at the Federal Law Enforcement Training Center in Charleston, South Carolina, and the first class will graduate in spring 2010.

year 2010 budget request. He acknowledged that the Coast Guard could no longer do more with less, and would need to prioritize resource allocations, while accepting risk in areas where resources would be lacking. In July 2009, we noted that while the Coast Guard's budget has increased significantly since 2003, the long-term budget outlook for the service is uncertain.³⁴ Specifically, administration budget projections indicate that the Department of Homeland Security's annual budget is expected to remain constant or decrease over the next 10 years. As a result of this uncertainty, if the results of personnel analyses show a need to increase resources, it will still be a challenge for the Coast Guard to obtain them.

Data Reliability Challenges Are Ongoing Concern

Coast Guard officials we spoke with acknowledge challenges with obtaining reliable, verifiable, and repeatable data that may affect the data-driven tools created by the Coast Guard. For example, CGBI combines data from multiple databases to create its various informational reports. Coast Guard officials acknowledge that some of these databases, including Direct Access and Marine Information for Safety and Law Enforcement (MISLE), have data quality problems.³⁵ Although Coast Guard officials said that the more widespread use and greater transparency of CGBI has promoted more accurate data entry, these officials added that the increased use of the system has also exposed unreliable data. As a result, the Coast Guard has begun taking steps to proactively validate data, for example, within the Direct Access system, which is the service's authoritative human resources database. Specifically, all active duty personnel were required to update or validate certain information, such as marital status, birth date, and number of dependents. According to Coast Guard officials, they intend to continue this validation process for other data fields. In another effort to improve data accuracy, after discovering that one data element—military service entry date—had a relatively high error rate, the Coast Guard reported addressing this issue by providing a clearer definition of this data field to personnel. According to an official with direct responsibility for CGBI, these types of incremental improvements at the transactional database level will improve the overall efficacy of CGBI products. However, in 2008 we reported our concerns about the reliability of some MISLE data, and the Coast Guard concurred with our recommendation to assess the data, including their completeness, along with data entry, consistency, and data field problems.³⁶ As the Coast Guard plans to rely on MISLE data to help inform personnel decisions, ensuring its reliability is important to strengthening the reliability of the CGBI system and its subordinate tools,

³⁴ GAO, *Coast Guard: Observations on the Fiscal Year 2010 Budget and Related Performance and Management Challenges*, GAO-09-810T (Washington, D.C.: July 7, 2009).

³⁵ Direct Access is a computer-based human resource system. It provides Coast Guard assignment processing; posts official positions; schedules training; and processes retirements, promotions, and disciplinary actions. Direct Access also maintains all personnel attributes and military payroll. MISLE began operating in December 2001 as the Coast Guard's primary data system for documenting marine safety and environmental protection activities. Storage of data on facility oversight and other Coast Guard activities, such as vessel boardings and incident response, have since been added. The purpose of MISLE is to provide the capability to collect, maintain, and retrieve information necessary for the administration, management, and documentation of Coast Guard activities.

³⁶ GAO-08-12.

but achieving this data reliability will likely be a challenge for the Coast Guard given its past problems with ensuring data reliability.³⁷

Challenges Coordinating Various Personnel-Related Plans and Tools

Along with resource and data reliability challenges, the Coast Guard faces potential challenges in coordinating its various personnel-related plans and tools. Specifically, in the midst of the large organizational transformation that is under way involving numerous changes to the Coast Guard's command structure, enterprisewide support systems, and business practices, it may prove difficult for the Coast Guard to coordinate more narrowly defined personnel-related efforts, such as the nine plans and tools highlighted in this report. These plans and tools, although interrelated, span a range of specific functions and encompass a variety of Coast Guard activities. Efforts such as the Manpower Requirements Determination system and Sector Staffing Model, for example, are designed to help the Coast Guard better allocate overall personnel resources across the service, while efforts such as the Officer Specialty Management System and Competency Management System are more focused on the knowledge, skills, and abilities of individuals. In addition to varying in purpose and scope, the efforts are subject to different time frames and are overseen by several different entities. Specifically, the nine plans and tools have been managed by at least eight different program or mission support offices and three separate commands, and some initiatives, such as the Officer Specialty Management System and Sector Staffing Model, have shifted or may shift to different program offices as they move from development to implementation.

Although the Coast Guard has established an office to coordinate the modernization effort and other broad organizational change initiatives, it is not clear whether its span of control or influence will extend to the specific personnel-related plans and tools described above. In May 2009, the Coast Guard established the Office of Enterprise Strategy, Management, and Doctrine Oversight Directorate within the Office of the Vice Commandant, to enhance servicewide change management and strategic analysis, among other things. According to a draft charter document provided to us in September 2009, this newly established office will lead a team of senior officials from across the Coast Guard charged with the overarching design, planning, implementation, and sustainment of organizational change initiatives such as modernization. However, as of December 2009, the draft charter had not been finalized and senior officials from the Office of Enterprise Strategy had previously stated that their office was not tasked with direct coordination of specific personnel efforts. Furthermore, these officials emphasized that the more narrowly defined personnel plans and tools are owned and managed by their respective program offices. For instance, at the programmatic level, the Office of Future Force provided examples of outreach and coordination with offices responsible for implementing aspects of the plans and tools we have discussed above. The Office of Future Force coordinates with FORCECOM's Office of Assessment, Integration and Risk Management on building competency-based curriculum, works with the Acquisition Workforce Planning, Development & Certification office to identify acquisition

³⁷ GAO, *Coast Guard: Update on Marine Safety Information for Safety and Law Enforcement System*, GAO-02-11 (Washington, D.C.: Oct. 17, 2001) and GAO-08-12.

competencies, and with the Assistant Commandant for Marine Safety and Stewardship has developed two new competencies.

However, management by different program offices may complicate coordination. For example, in August 2009, the Personnel Service Center assumed responsibility for the Officer Specialty Management System; the Office of Future Forces maintains the Competency Management System. The expertise of staff in the Office of Enterprise Strategy, one official continued, does not typically extend to program subject matter itself and the program offices are ultimately accountable for developing and monitoring their own initiatives. Officials did note, however, that the Office of Enterprise Strategy's role in managing the Coast Guard Business Intelligence system involves checking the performance metrics of the various initiatives for duplication. In addition, they concurred that the visibility of the Coast Guard Business Intelligence system data throughout the Coast Guard would facilitate coordination among the relevant program offices themselves. Still, because of the numerous Coast Guard entities involved with the development of the various personnel-related plans and tools, the Coast Guard faces the potential for duplication of efforts and challenges in establishing accountability for its overall workforce goals.

Upcoming Change in Leadership May Make Sustaining Personnel Efforts Challenging

A change in the Coast Guard's leadership in May 2010 may make it challenging to sustain various personnel efforts associated with the Coast's Guard's ongoing modernization. In our view, fostering continued progress in addressing workforce issues is important to achieving the agency's workforce goals embedded within the agency's overall modernization plan. As we have previously reported, at the center of any serious change management initiative—such as the modernization plan—are the people.³⁸ Thus, the key to a successful merger and transformation is to recognize the “people” element and implement strategies to help individuals maximize their full potential in the new organization, while simultaneously managing the risk of reduced productivity and effectiveness that often occurs as a result of the changes. One key practice in this effort is ensuring that the organization's top leadership drives the change initiative and defines and articulates a succinct and compelling reason for the change. For example, in 2003 we reported that because a merger or transformation entails fundamental and often radical change, strong and inspirational leadership is indispensable, and that top leadership that is clearly and personally involved in the merger or transformation represents stability and provides an identifiable source for employees to rally around during tumultuous times. The agency's leadership must set the direction, pace, and tone for the transformation. According to a 2009 National Academy of Public Administration (NAPA) study, the current Coast Guard Commandant has taken several positive steps in this regard by reaching out to an unprecedented number of agency staff through a variety of innovative mechanisms and by involving his senior leadership in the design, communication, and implementation of the modernization vision since announcing his

³⁸ GAO, *Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations*, GAO-03-669 (Washington, D.C.: July 2, 2003).

intention to transform the organization.³⁹ However, with the transition to a new Commandant's leadership in the summer of 2010, there is no guarantee that the events put into motion to achieve this transformation will be supported by the new Commandant's agenda. As NAPA reported, it is possible that the current leadership's vision will not be sustained past the summer of 2010. Moreover, our previous work also reported that experience shows that successful major change management initiatives in large private and public sector organizations can often take at least 5 to 7 years. Thus, the combined factors of the Coast Guard's dependence on receiving congressional authorization to fully implement the modernization plan, and the current Commandant's limited time remaining as the leader of this effort, may make it challenging to retain the sustained and inspired attention needed to accomplish these changes, unless the incoming Commandant shares a similar vision for the organization. Certainly the progress made to date in implementing the modernization plan helps to mitigate this challenge, but the final results remain to be seen.

Agency Comments and Our Evaluation

On December 21, 2009, we provided a draft of this report for review and comment to the Department of Homeland Security (DHS) and the Coast Guard. On January 5, 2010, the department's audit liaison office responded by e-mail that DHS concurred with the report. The department and the Coast Guard provided no formal comments but offered one technical clarification. We incorporated the technical clarification into this report where appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of Homeland Security and interested congressional committees and subcommittees. In addition, this report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff has any questions about this report or wish to discuss the matter further, please contact me at (202) 512-9610 or caldwells@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Other key contributors to this report are listed in enclosure II.

³⁹ NAPA, *U.S. Coast Guard Modernization Study* (Washington, D.C.: Apr. 2009). NAPA is an independent, nonprofit organization chartered by Congress to assist federal, state, and local governments in improving their effectiveness, efficiency, and accountability.

A handwritten signature in black ink, appearing to read "Stephen Caldwell", with a checkmark at the end.

Stephen L. Caldwell
Director, Homeland Security and Justice Issues

Enclosure - 2

Enclosure I

Key Personnel Plans and Data-Driven Tools

This enclosure provides more detailed information about how the Coast Guard seeks to address its personnel problems. The Coast Guard has developed plans and tools including, among others, two servicewide plans for implementing broad workforce changes—the *Workforce Action Plan* and the *FORCECOM Business Plan*—plus a mission-support plan focused on improving the number of acquisition personnel within its Acquisition Directorate, and a mission-specific plan focused more narrowly on its marine safety mission. Table 1 provides a detailed description of the purpose of each personnel plan or tool, the specific Coast Guard office responsible for its implementation, the time frames for implementation, and the status of each initiative.

Table 1: Summary of Key Personnel Plans and Data-Driven Tools

Servicewide Plans

Workforce Action Plan

Issue

This plan considers Coast Guard mission areas and was developed at the direction of the Senate Appropriations Committee, whose members had expressed concern that the size of the service's workforce had not kept pace with its increased mission requirements. The plan was to include (1) a gap analysis of the mission areas that continue to need resources and the type of personnel necessary to address those needs; (2) a strategy, including funding, milestones, and a timeline, for addressing personnel gaps for each category of employee; (3) specific strategies for recruiting individuals for hard-to-fill positions; and (4) any additional authorities and resources necessary to address staffing requirements. The creation of a workforce action plan may help the Coast Guard better align its human capital program with current and emerging mission requirements, and also facilitate the development of long-term strategies for acquiring, training, and retaining needed staff.

Purpose

The Coast Guard's *Workforce Action Plan*, which emphasizes the Coast Guard's mission staffing for fiscal years 2009-2010, was created in response to congressional direction and examines current human resource planning processes, highlights recent improvements to these processes, and discusses areas for improvement.

Responsible Command

The Assistant Commandant for Human Resources under the future Deputy Commandant for Mission Support is responsible for development of the *Workforce Action Plan*.

Time frames

Start

- September 2008—Department of Homeland Security Appropriations Act, 2009 (Pub. L. No. 110-329, 122 Stat. 3574 (2008)) enacted. Senate appropriations committee report 110-396 accompanying this appropriations act directed the Coast Guard to create a workforce action plan. The Explanatory Statement accompanying the Department of Homeland Security Appropriations Act, 2009 directed the Coast Guard to comply with the Senate report direction regarding a workforce action plan. H. Comm. on Appropriations, 110th Cong., Committee Print on H.R. 2638/Public Law 110-329 at 646 (2008).

End

- August 24, 2009—Plan signed by Commandant.
- Fiscal year 2010—Plan listed selected requests for personnel increases contained in the fiscal year 2010 President’s Budget; the Coast Guard reported that it intends to revise the plan periodically as needed.

Status

The *Workforce Action Plan* did not provide a gap analysis of the mission areas and personnel needed, and thus also did not provide a strategy with proposed funding, milestones, and a timeline for addressing these personnel gaps for each employee category consistent with congressional direction. The *Workforce Action Plan* did provide a general view of recruiting strategies for meeting the service’s three priority workforce needs related to the quantity, quality, and diversity of its applicant pool, and referred generally to two mission areas that the Coast Guard identified as needing personnel adjustments—acquisitions and marine safety. Lastly, while the plan discussed some of the agency’s existing authorities, it did not expound upon any additional authorities needed to address staffing requirements. Instead, the Coast Guard’s *Workforce Action Plan* set out an explanation of the Coast Guard’s workforce planning process. For example, the *Workforce Action Plan* provided an overview of how the Coast Guard would use the resources requested in the fiscal year 2010 President’s Budget and provided a list of manpower determinations for some units and platforms, an accession plan and civilian hiring targets, as well as a workforce status report (as of the first quarter of 2009). Although the submitted workforce plan did not comport with direction provided by the Senate appropriators, it did follow the Department of Homeland Security’s (DHS) workforce planning guidance in that the Coast Guard identified its human resource planning processes, highlighted recent efforts undertaken to improve the Coast Guard’s human resources management program, and discussed areas for improvement in its human resource planning and budgeting processes. Following the DHS Workforce Planning Model, the Coast Guard plan frames its human resource planning and budget processes across five stages:

- *Strategic Planning:* As described in the *Workforce Action Plan*, Coast Guard strategic planning takes place under the “Evergreen process,” a 4-year planning cycle aligned with the appointment of a new Commandant. The incoming Commandant’s Intent is developed into the Coast Guard Strategy and communicated to the organization. The central linkage between overall strategy and human capital allocations is the budget process. Program managers submit

Resource Proposals (RP) to request staffing for current shortfalls or anticipated needs using guidance from the Commandant, which is reflected in the Coast Guard Strategy. The RPs are reviewed and prioritized by different groups of senior resource managers before inclusion in the DHS budget.

- *Supply, Demand, Discrepancies:* In its *Workforce Action Plan*, the Coast Guard describes how program managers determine the nature of their human resource needs by identifying the job tasks to be performed, the skills needed to do them, and an assessment of the training needed to deliver the job skills to an individual. The Coast Guard has developed the Manpower Requirements Determination tool, which according to Coast Guard documents and officials is designed to use a scientific approach to measure workload, in order to help determine the appropriate number and mix of personnel needed to conduct Coast Guard work. The Manpower Requirements Determination system, is under development and is planned to be linked to RP requests—with the goal of providing senior Coast Guard managers the information they need to make better informed resource management decisions.
- *Develop Action Plan:* According to the *Workforce Action Plan*, the Coast Guard develops an annual Integrated Accession Plan (IAP) to provide guidance on personnel requirements and goals for the following fiscal year. The IAPs provide target numbers of needed military and civilian personnel, and are based on expected on-budget personnel increases or decreases and forecasted losses. In addition, the Coast Guard Recruiting Command annually develops a recruiting plan that focuses on hiring individuals in sufficient quantity to meet mission requirements.
- *Implement Action Plan:* To help attain hiring goals contained in annual IAPs, the *Workforce Action Plan* describes various Coast Guard recruiting strategies for its military and civilian workforce, including incentive programs for difficult to fill positions. Strategies used include bonuses and guaranteed skills training; direct-hire authority for limited occupations such as contracting specialist; a pilot referral bonus program; recruitment, relocation, and retention incentives; rehire of annuitants without a salary offset; moving/relocation assistance; student loan repayments; enhanced annual leave accrual; and student internship/developmental programs. Also, the Acquisition Directorate's *Human Capital Strategic Plan* outlines the tools used to meet the human capital goals of the acquisition workforce.
- *Monitor, Evaluate, Revise:* According to the *Workforce Action Plan*, the Coast Guard creates and distributes to senior leadership a monthly workforce status report to help monitor several aspects of the Coast Guard's human capital. The status reports track indicators such as the number of personnel in Coast Guard positions (by officer, chief warrant officer, and enlisted), rates of attrition, and position vacancy rates. The *Workforce Action Plan* states that anomalies revealed through these reports and through other means are investigated further, and can result in corrective actions, such as offering incentives to attract personnel to a

specific job. In addition, mission performance data are used by program managers to help identify potential links between declining performance and workforce gaps.

In the section Coast Guard Staffing Level Requirements, the *Workforce Action Plan* contains fiscal year 2010 requested personnel increases and fiscal year 2009 enacted increases.

The concluding comments of the *Workforce Action Plan* indicate that the Coast Guard will continue its development of tools, such as the Manpower Requirements Determination system, and the Competency Management System, in order to provide a clearer picture of the service's general human resource requirements, and will also continue to implement programs in specific mission areas where resource needs have already been identified, such as marine safety, acquisitions, and financial management.

Force Readiness Command (FORCECOM) Business Plan

Issue

Prior to FORCECOM, which was established on June 1, 2009, many personnel readiness roles were independently managed by the Atlantic Area and Pacific Area commands.⁴⁰ This bifurcation resulted in geographic variation in how Coast Guard personnel were trained; how their operational readiness was inspected, assessed, and reported; and which doctrine or Tactics, Techniques, and Procedures (TTP)⁴¹ they followed when performing their missions. For example, at the unit level, on-the-job training requirements for the same positions could vary by location at the discretion of the commanding officers. Standardizing personnel requirements and training will help to ensure that the Coast Guard can surge people and assets across the nation to fulfill mission needs.

Purpose

FORCECOM's overarching mission is to provide ready forces to meet the supported commander's current and future operational requirements. FORCECOM is leading efforts to make aspects of personnel readiness more standardized across the Coast Guard. As described in the Business Plan and *FORCECOM Commander's Intent* for fiscal years 2009 through 2010, the intended roles of the new command are to

- allocate mobile and deployable specialized forces,
- formulate operational doctrine that will align training and standardization to ensure force interoperability and readiness,
- provide timely and high-quality operational training,
- consolidate and standardize operational inspections and establish a standard measurement system to evaluate force readiness, and
- validate field innovation best practices and incorporate them into TTP.

While recognizing that Coast Guard personnel serve in diverse operating environments that require a degree of local control and flexibility, the consolidation of force readiness responsibilities under a single service-wide command represents an effort to increase standardization and integration of personnel management, according to the Coast Guard.

Responsible Command

FORCECOM, along with the Deputy Commandant for Mission Support, the Deputy Commandant for Operations, and the Operations Command, is one of the four new commands created under the Coast Guard's modernization effort.

⁴⁰ The Coast Guard is in the process of transitioning from a bicoastal operational command structure, consisting of the Atlantic Area Command and Pacific Area Command, to one where all operations are centralized under one command (Operations Command). According to the Coast Guard, when modernization is complete, both Atlantic and Pacific Commands will cease to exist.

⁴¹ Tactics, Techniques, and Procedures are codified, specific, and measurable actions and methods that implement doctrine or policy. TTP captures the content of the information, including the "what," "when," "how," "where," "who," and "why."

Time frames

Start

- October 2008—*FORCECOM Fiscal Year 2009-2010 Business Plan* issued.
- June 1, 2009—FORCECOM stood-up at initial operating capability, but awaiting full congressional approval.

End

- Fiscal year 2010—*FORCECOM Business Plan* end date; the Coast Guard reported that it intends to update the plan periodically to reflect FORCECOM priorities.
- 2012—FORCECOM expected to reach final operating capability.

Status

Between its 2009 commission date and 2012, FORCECOM will incrementally expand its operations to final operating capability. Although not fully implemented, FORCECOM documents and officials provided examples of specific initiatives under way that intend to further the overall goal of more centralized and standardized force readiness management:

- *Assume management of all major training commands*—For the first time in the Coast Guard’s history, according to FORCECOM documents, all training for individuals, boat, cutter, shore, and aviation units will be managed under a single command.
- *Review and revise operational policy, doctrine, and Tactics, Techniques, and Procedures*—One FORCECOM division is currently leading an effort to identify, catalog, and prioritize legacy operational doctrine.
- *Standardize unit inspection requirements and coordinate inspections*—According to the *FORCECOM Commander’s Intent*, an average Coast Guard unit spends 60 days completing inspection visits each year. In addition, we spoke with the senior officer from the FORCECOM offices responsible for standardizing unit inspection requirements and coordinating inspections and he explained that in many cases they request the same information. In 2009, FORCECOM began beta testing new processes to consolidate and standardize assessment visits at three types of field units: cutter, air station, and sector. The command is also seeking ways to more efficiently integrate best practices from the field into standard Coast Guard operating doctrine.
- *Develop a Coast Guard-wide system of readiness measures*—This “FORCECOM Readiness Dashboard” is expected to measure individual, unit, and mission readiness across six broad indicators: People, Equipment, Supply, Training, Infrastructure, and Information, and will be accessed through the Coast Guard Business Intelligence system.
- *Collaborate with operational command and program offices to build a catalog of Coast Guard Mission Essential Tasks*—Mission Essential Task Lists for specific unit types or assets are intended to help the Coast Guard better assess readiness

gaps and will be used as part of a system that reports readiness to the Department of Defense and others.

We used the Government Performance and Results Act of 1993 (GPRA), which provides agencies a framework for effectively implementing and managing programs including setting strategic goals, measuring performance, and reporting on the degree to which goals were met, in our analysis of the *FORCECOM Business Plan*. Although GPRA is generally applied to agencywide strategic plans, its framework is useful to guide any type of planning. The *FORCECOM Business Plan* contains characteristics of GPRA planning including defining a mission and desired outcomes and identifying performance measures to gauge progress.⁴² For example, the plan defines a clear mission, specifically to ensure the forces allocated are trained to standards, armed with current tactics and procedures, interoperable, and inspected, in order to meet current and future operational requirements. The plan also calls for performance to be measured with specific actions needed to create this new command. For example, the *FORCECOM Business Plan* sets a goal to catalogue and review all general mandated training requirements to ensure that each requirement is carefully approved and targeted for efficiency by 2010. Some personnel-related milestones contained in the *FORCECOM Business Plan*, such as establishing processes for developing new operational doctrine and assuming management of certain training teams, for example, are not expected to be reached until 2010.

⁴² GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996). It is important to note that while GPRA focuses on the agency level, performance goals and measures are important management tools for all levels of an agency, such as the bureau, program, project, or activity levels, and these criteria are applicable at those levels as well.

Mission-Support Plan

Acquisition Human Capital Strategic Plan

Issue

In the late 1990s the Coast Guard began the largest acquisition program in its history to build or modernize ships and aircraft and to procure other capabilities, and in 2007, after a series of programmatic failures, the Coast Guard sought to change how its acquisitions were managed. Recognizing that it did not have in place a workforce with the experience and depth to manage all Coast Guard acquisitions, and that it was relying too heavily on contractors, the Coast Guard took steps to build its own acquisition workforce to manage its multibillion dollar acquisition program. By developing its own acquisition workforce, the Coast Guard may improve accountability for its acquisitions by increasing government control and visibility over its assets and capabilities.

Purpose

The *Acquisition Human Capital Strategic Plan* is the second human capital plan used by the Coast Guard since the Acquisition Directorate was created in 2007. The first human capital plan described the challenges related to building a new acquisition directorate, and the updated *Acquisition Human Capital Strategic Plan* set out longer-term planning and management of the acquisition workforce.

Responsible Command

The Office of Acquisition Workforce Management within the future Deputy Commandant for Mission Support authored the plan.

Time frames

Start

- *Acquisition Human Capital Strategic Plan* first released in April 2008, with a recently updated version published in 2009 and a third iteration expected in the second quarter of fiscal year 2010, according to the Coast Guard.

End

- According to the July 2009 *Blueprint for Continuous Improvement*—a companion document to the *Acquisition Human Capital Strategic Plan*—the plan will be updated.

Status

The 2009 version of the *Acquisition Human Capital Strategic Plan* identifies three overarching human capital challenges facing the Coast Guard's Acquisition Directorate along with 10 specific strategic objectives to address these challenges. In addition, the plan adopted and applied the Office of Personnel Management's Human Capital Assessment and Accountability Framework, which includes guidance in the areas of: Strategic Alignment, Leadership and Knowledge Management, Results-Oriented

Performance Culture, Talent Management, and Accountability. While the *Acquisition Human Capital Strategic Plan* itself does not identify time frames for completion, the *Blueprint for Acquisition Reform*, renamed the *Blueprint for Continuous Improvement*, supports many of the initiatives and provides deadlines for their completion.

Mission-Specific Plan

Marine Safety Performance Plan

Issue

Some Coast Guard officials, congressional members, and industry stakeholders perceived a widening performance gap in the service's marine safety mission as the Coast Guard took on increased homeland security mission responsibilities. Specific concerns were summarized in a November 2007 report by retired Vice Admiral James C. Card, *Coast Guard Marine Safety Analysis: An Independent Assessment and Suggestions for Improvement*. Personnel-related issues described in the report were: the number of marine safety personnel/resources; capability; professionalism; training and qualifications; civilian/military mix; and tour length and rotations. Having the appropriate numbers and fully trained marine safety personnel will help to ensure that the Coast Guard successfully meets the increasing needs of maritime stakeholders.

Purpose

The *Marine Safety Performance Plan* was developed in part as a response to concerns expressed by stakeholders and others noted above. The plan sets goals, objectives, and performance targets for the marine safety mission for fiscal year 2009 through fiscal year 2014.

Responsible Command

Assistant Commandant for Marine Safety, Security and Stewardship under the Deputy Commandant for Operations authored the *Marine Safety Performance Plan* and is responsible for managing its implementation.

Time frames

Start

- November 2008—Performance Plan issued.

End

- Fiscal year 2014—Performance Plan end date.

Status

The Coast Guard set out a course of action to meet its human resource capability goals and objectives identified in the *Marine Safety Performance Plan*.

- *Additional positions for fiscal year 2009*—The Coast Guard's fiscal year 2009 appropriation included 310 marine safety positions. About two-thirds (202) of these positions are for military personnel and about one-third (108) are for civilian personnel. The military positions include 47 officers, 42 warrant officers, and 113 enlisted personnel, and as of December 16, 2009, the Coast Guard reported that it had placed a total of 178 military personnel in marine safety positions, including

39 officers, 26 warrant officers, and 113 enlisted personnel. The Coast Guard also reported that it expects to assign the remaining marine safety military positions during the regular assignment cycle (which will conclude in June 2010). With regard to the civilian positions, as of December 3, 2009, 88 of the 108 positions were filled, 17 positions were advertised, and three position descriptions were under development, according to the Coast Guard. Civilian positions have been funded within the National Centers of Expertise for Marine Safety, and among apprentice marine inspectors, and additional civilian training, planning, oversight, policy, and investigating officer positions have also been funded.

- *Additional positions for fiscal year 2010*—The Coast Guard has requested funding for an additional 74 positions for marine inspectors and investigating officers at field units; marine inspector training officers at feeder ports; staffing for the Steam and Vintage Vessels Center of Expertise; engineers for standards development and review; and expanded training curricula at the Marine Safety School in Yorktown, Virginia.
- *Strengthen marine safety career paths*—The Coast Guard is developing an apprentice, journeyman, and senior marine inspector career progression as well additional career paths for junior civilian marine safety positions.
- *Feeder Ports and National Centers of Expertise*—Feeder ports are ports that have sufficient volume and workload to train apprentice-level personnel on marine safety competencies during a 2-year rotation. Eighteen feeder ports have been established to enhance training consistency and opportunities for new marine safety personnel. In addition to the feeder ports, the Coast Guard has created various National Centers of Expertise (NCOE) designed to enhance professional development and interaction with industry. Seven centers were developed in fiscal years 2008 and 2009, including the Vintage Vessels National Center of Expertise, Duluth, Minnesota; Towing Vessel NCOE, Paducah, Kentucky; Liquefied Gas Vessel NCOE, Port Arthur, Texas; Outer Continental Shelf NCOE, Morgan City, Louisiana; and Investigating Officer NCOE, New Orleans, Louisiana.
- *Industry training/ Merchant Marine Industry Training Program*—The Coast Guard is developing Mutual Training Memorandums of Understanding for industry and the Coast Guard, and has a goal of doubling annual industry training billets to 24. In fiscal year 2009, six commissioned Coast Guard Academy graduates were assigned to a newly developed merchant marine ship-rider program. The purpose of the program is to provide staff with exposure to the U.S. merchant marine and maritime industry prior to beginning marine inspector assignments. The Coast Guard and industry are developing long-term (12 months), mid-term (3-6 months), and short-term (less than 1 month) professional development opportunities.

We found that that this performance plan also contained characteristics of planning set out in the Government Performance and Results Act, including involving stakeholders in defining the mission and desired outcomes of the plan, and identifying specific goals,

objectives, and performance measures that link to the stated mission.⁴³ For example, this 5-year plan was the result of actively solicited input from maritime stakeholders, and defines the mission of the plan as a means to ensure the safety of maritime stakeholders by preventing marine casualties, protecting the marine environment, and strengthening maritime commerce. In addition, the *Marine Safety Performance Plan* outlines specific goals and objectives that can be measured. For example, the plan envisions adding over 300 inspector and investigator positions in fiscal year 2009, including more civilian inspectors for continuity, adjusting tour lengths, strengthening career paths, and expanding marine safety training and education. The *Marine Safety Performance Plan* describes various initiatives and set targets for marine safety outcomes through fiscal year 2014. In addition, a senior marine safety official said and the *Marine Safety Performance Plan* states that the plan is a living document and will undergo continual review.

⁴³ GAO/GGD-96-118.

Data-Driven Tools

Officer Specialty Management System (OSMS)

Issue

The legacy Officer Corps Management System and Officer Billet Code framework, according to agency documents and officials, was too complex and no longer accurately reflected Coast Guard mission requirements. The OSMS, by providing a framework with more clearly defined specialties and position requirements, may help officers manage their careers and development, and assist Coast Guard management to better understand the skills set within the officer corps and those skills that need to be enhanced or expanded.

Purpose

The OSMS consists of a new framework of officer specialties and subspecialties—the set of over 70 legacy specialties under the Officer Billet Code framework was reorganized into 13 specialties and 38 subspecialties. Also, unlike the previous system, the OSMS is to detail specific competencies and qualifications required for the specialties and subspecialties.

The OSMS is an evolving system for managing Coast Guard officer “specialties”—specific areas of expertise within the service associated with different occupations or positions. As described both by officials who designed the new system and by key end-users responsible for assigning officers to new positions, OSMS is intended to more clearly articulate information than the legacy system it is to replace, providing the technological link between competencies, individual officers, and specialties. As a result, the system should facilitate the Coast Guard’s efforts to specifically identify, for the first time, the specific competency requirements for each officer specialty. As such, according to officials and an agency overview document, the new streamlined system of specialties will provide a clearer picture of what is required by Coast Guard officer positions and the capabilities of the officer corps. In addition, the OSMS allows for the addition or deletion of specialties and subspecialties as service needs dictate. Officials responsible for OSMS development outlined different ways that stakeholders may capitalize on these clarifications and use the OSMS as a type of management tool:

- Individual officers may be able to better manage their professional development and career choices given more clearly articulated specialty requirements and standards.
- Supervisors and workforce planners may be able to better monitor the competency profile of the officer corps, including potential shortfalls of specific knowledge, skills, education, and experience. In addition, standard specialty requirements may assist managers with calculating the time and cost of obtaining specific specialties.

- Assignment Officers who determine the rotation assignments of individual officers can use the tool to inform their placement decisions, although officials involved with the assignment process emphasized that the system data by itself would not determine placements.

Responsible Command

OSMS was developed by the Future Force Office within the Office of the Assistant Commandant for Human Resources and the future Deputy Commandant for Mission Support. In August 2009 the management of the system was transferred to the Personnel Service Center, the Coast Guard entity responsible for officer assignments.

Time frames

Start

- 2001—the Coast Guard sponsored studies focused on officer specialties that led to a 2-year Future Force Office evaluation of the legacy system.
- May 2004—Coast Guard Commandant approved new officer specialty framework.
- Summer 2010—the Coast Guard expects to start assigning specialties to all officers.

End

- Summer 2010—the Coast Guard expects System to be mapped to CMS.
- Spring 2011—Expected full implementation, followed by continued development.

Status

The Future Force Office assigned the new specialties and subspecialties to officer billets in 2008 and conducted beta testing from December 2008 through June 2009. The Personnel Service Center, having assumed management of OSMS in August 2009, planned to carry out additional beta testing in four specific specialty areas (aviation, medical, legal, and C4IT) from September 2009 through May 2010.⁴⁴

As of summer 2009, program offices were still in the process of identifying requirements for the new specialties, and full system implementation is not expected until 2011.

⁴⁴ C4IT refers to Command, Control, Communications, Computers, and Information Technology.

Competency Management System (CMS)

Issue

There are ongoing general concerns in the Coast Guard about personnel being subjected to different sets of human resource requirements. For example, a 2006 Commandant Intent Action Order stated that the Coast Guard's "staffing standards are obsolete and no process exists to remedy this state. Leaders and resource managers do not have confidence that any particular set of human capital requirements are based on industrial engineering principles, or any objective science, and cannot compare sets of requirements to optimize human resource allocation."⁴⁵ Having clearly defined, standardized human resource requirements should help the Coast Guard ensure that the appropriate personnel with appropriate skill sets are assigned to the appropriate positions.

Purpose

Through a standard set of defined competencies, according to Coast Guard documents, CMS is designed to help decision makers understand the demands of the service and specific positions along with the supply of people available to meet those demands. Specifically, for all Coast Guard personnel, including officers, enlisted, and civilian, the system allows the Coast Guard to

- establish and modify competencies,
- assign competencies to positions,
- record competencies earned by members,
- collect and organize competency data and information, and
- allow for the use of competency information in personnel management decisions.

Responsible Command

The Future Force Office, which falls under the Assistant Commandant for Human Resources and the future Deputy Commandant for Mission Support, maintains CMS.

Time frames

Start

- 2004—CMS initial implementation.

End

- Ongoing. Competencies are routinely reviewed and modified if needed based on changing Coast Guard mission requirements, according to officials.

Status

As of November 2009, CMS covered approximately 80 percent of active duty and reserve positions, and the Coast Guard was in the early stages of developing processes to identify and assign competencies to civilian and auxiliary positions. The system's Competency Dictionary currently contains close to 900 competencies. It is unclear at this time when CMS will fully reflect all military, reserve, and auxiliary competencies.

⁴⁵ Commandant Intent Action Order #8, *Human Resource Strategies to Support Coast Guard Maritime Strategy*.

Manpower Requirements Determination (MRD)

Issue

In general, the MRD system was developed to help make the Coast Guard staffing processes more objective. More specifically, according to the MRD business model, Coast Guard officials currently measure human capital in ways that can vary based on factors such as programmatic or local needs. Having a common set of standards and analytical approaches may enable officials responsible for personnel allocation decisions to make more standardized human capital comparisons across units or programs.

Purpose

According to the MRD business model, the MRD system is designed to help calculate the human capital needed to perform Coast Guard tasks or missions using verifiable, repeatable, and defensible analyses.

The MRD analyses consider a range of variables including Coast Guard strategy, mission requirements, standards shaped by program managers, and inputs from operational commanders. Analyses can be conducted on current, new, or changing mission requirements, such as the recent addition of the new Maritime Enforcement Specialist rating, or on more specific unit- or asset-based activities, such as operating a particular class of cutter.

In addition to the number of personnel needed, analysis outputs can include data on personnel competencies, experience, training, and rank required to conduct the mission, as well as broader Coast Guard considerations like the appropriate mix of ranks needed for continuous growth. When summed across all units, the MRD business model notes, the total human capital requirements associated with a particular mission can be advocated by the program manager or unit in the Coast Guard's resource prioritization and allocation process.

The MRD system is highlighted in the Coast Guard's fiscal year 2009 *Workforce Action Plan* as an example of a tool being developed by the service to help identify workforce supply and demand gaps.

Responsible Command

The Future Force Office within the Office of the Assistant Commandant for Human Resources and future Deputy Commandant for Mission Support is developing the MRD system.

Time frames

Start

- August 2006—Commandant Intent Action Order #8 (Human Resource Strategies to Support Coast Guard Maritime Strategy) noted the need for a more standardized, objective set of human capital requirements.
- October 2006—MRD Enterprise Project Chartered.

End

- September 2010—Expected completion of policy and program development.

- September 2012—Expected completion of automated information system to support the MRD (including access through CGBI), followed by continued development.

Status

According to an agency document, 16 MRD analyses were completed throughout the Coast Guard as of December 2009, an additional 7 were ongoing, and 2 were planned. These types of analyses can be conducted at the request of a sponsoring program, operational commander, or Coast Guard planning element to support specific resource requests in the Coast Guard's annual budget process. The analyses are currently not required and represent almost none of the total number of human capital resource proposals evaluated, according to one official involved with the development of the MRD system. This official stated, however, the Future Force Office hopes to eventually conduct an MRD analysis of every unit type, every 5 years.

Sector Staffing Model (SSM)

Issue

As noted in the 2007 charter that established SSM's guidance team and working group, when sectors were created between 2004 and 2006, there was no standard model to help determine staffing levels—personnel allocations were developed using methodologies that differed by program or unit. Having a transparent and repeatable methodology to determine the minimum number of personnel needed to staff a sector should assist Coast Guard management in allocating personnel resources across all sectors and help project future personnel needs.

Purpose

According to Coast Guard documents, SSM is designed to assist officials with resource allocation decisions by creating baseline staffing data that are comparable across the Coast Guard's 35 diverse sectors.

Officials hope that SSM will address these inconsistencies by applying a transparent, repeatable, and scalable methodology to the staffing process. Specifically, officials intend to use the model to

- quantify staffing shortfalls to justify human capital requests in the Coast Guard's regular resource prioritization and allocation process,
- provide a transparent basis to reallocate resources,
- enable senior leadership and program managers to understand resource implications of proposed policy changes and requirements, and
- help forecast future staffing needs based on projected activity and mission growth.

SSM, according to an official involved with its development, will quantify staffing needs for specific sector activities, such as "container inspections," based upon a number of variables, including

- Coast Guard mission requirements,
- individual sector activity levels,
- "average" time to complete activities, and
- other sector-specific data (e.g., local travel factors).

In addition to defining the quantity of human capital needed to complete an activity in a particular location, the model is planned to break out a recommended mix of officer, enlisted, and civilian personnel along with their rates, ranks, and grades. Another component of the model, a "command cadre tool," is expected to recommend appropriate ranks for sector leadership based on responsibility and span of control measures.

A key official noted that base-level staffing data generated by the model assume positions will be staffed with fully qualified personnel and that data on the length of time

needed to complete training requirements have not been collected; specific training factors were, however, under development as of spring 2009.

Responsible Command

The Office of Shore Forces within the Assistant Commandant for Capabilities and the Deputy Commandant for Operations is leading the development of SSM. According to one official, Shore Forces intends to maintain the model until at least 3-years of activity data are incorporated and other refinements to the model are complete. The same official further commented that the Manpower Requirements Determination workgroup in the Future Force Office will recommend which Coast Guard directorate should take ownership of all service staffing issues, including SSM. Currently, the official said, the Office of Budgets & Programs is responsible for the Coast Guard staffing requirements and the official service staffing manual.

Time frames

Start

- 2007—Sector Staffing Senior Guidance Team and Working Group chartered.

End

- December 2010—Expected SSM access through CGBI.

Status

SSM was accredited by senior Coast Guard leadership in July 2009 and is now available for use by select units to support resource requests and unit-level reprogramming.

According to one Shore Forces official, further refinement is required before the SSM is implemented on a large scale in 2010. This refinement includes additional testing to reduce data anomalies and faulty assumptions, as well as the development and integration of a Sector competency framework. A charter to begin development of the refined model, Phase III, was issued July 2009.

Coast Guard Business Intelligence (CGBI)

Issue

The Coast Guard employs numerous data systems that exhibit varying degrees of data quality, reliability, and integration. The Coast Guard recognizes the need for accurate data from a variety of sources to use in its analysis of personnel management decisions.

Purpose

According to Coast Guard documents and officials, the CGBI system is designed to support decision making across all levels of the Coast Guard by leveraging existing Coast Guard data, measures, and processes. Specifically, the tool accesses raw data from the Coast Guard's numerous "transactional" systems, (i.e., individual databases like Direct Access or Marine Information for Safety and Law Enforcement that serve a range of functions). The general premise of the tool, according to one official, is to collect data once through the appropriate transactional systems in order to have the ability to use the information multiple times in a variety of configurations. Along with providing decision makers a means to view Coast Guard data, officials told us that CGBI also promotes information transparency, which has resulted in more self-correcting of inaccurate data, and greater information sharing, which among other things, helps prevent duplication of efforts.

Responsible Command

The Office of Performance Management and Decision Support under the Office of the Vice Commandant, maintains CGBI. This office is currently transitioning to the new Office of Performance Management within the Coast Guard Enterprise Strategy, Management and Doctrine Oversight Directorate, also under the Office of the Vice Commandant.

Time frames

Start

- 2006—CGBI Phase I launched.

End

- Officials indicated that the system will continue to evolve to meet organizational needs. The next major system upgrade, which involves predictive analytics capabilities, is expected to be implemented by 2011.

Status

CGBI Phase II was launched in April 2009. This version, according to agency documentation, is capable of more powerful searches and has more features than the initial system launched in 2006.

Several other tools related to personnel issues, including the Competency Management System, the Manpower Requirements Determination system, the Officer Specialty Management System, and the Sector Staffing Model, are currently or are planned to be accessed through CGBI.

The CGBI system has been implemented, but its refinement continues. For example, an

official noted that the next major system enhancement is focused on capabilities that will help the Coast Guard use existing data in models or simulations to help predict future outcomes. In addition, the Office of Performance Management staff that support the CGBI system will continue to focus on measuring data quality for the foreseeable future, according to one official.

Enclosure II

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