

March 2012

BORDER SECURITY

Opportunities Exist to Ensure More Effective Use of DHS's Air and Marine Assets



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Why GAO Did This Study

Within DHS, the U.S. Customs and Border Protection's (CBP) OAM deploys the largest law enforcement air force in the world. In support of homeland security missions, OAM provides aircraft, vessels, and crew at the request of its customers, primarily Border Patrol, which is responsible for enforcing border security, and tracks its ability to meet requests. GAO was asked to determine the extent to which OAM (1) met its customers' requests; (2) has taken steps to ensure its mix and placement of resources effectively met mission needs and addressed threats; and (3) coordinated the use of its assets with the USCG, which is to execute its maritime security mission using its assets. GAO reviewed DHS policies, interviewed OAM, Border Patrol, U.S. Immigration and Customs Enforcement, and USCG officials in headquarters and in 4 field locations selected on factors, such as threats and operating environments. Results from these field visits are not generalizable. GAO analyzed OAM support request data for fiscal year 2010, and surveyed OAM and USCG officials at 86 proximately located units to determine the extent of cooperation between the two agencies. This report is a public version of a law enforcement sensitive report GAO issued in February 2012. Information deemed sensitive has been redacted.

What GAO Recommends

GAO recommends, among other things, that CBP reassess decisions and document its analyses for its asset mix and placement, and that DHS enhance oversight to ensure effective coordination of OAM and USCG resources, and DHS concurred.

View [GAO-12-518](#). For more information, contact Rebecca Gambler at (202) 512-8777 or gambler@gao.gov.

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What GAO Found

GAO's analysis of the Office of Air and Marine (OAM) data found that OAM met 73 percent of the 38,662 air support requests and 88 percent of the 9,913 marine support requests received in fiscal year 2010. The level of support differed by location, customers, and type of mission. For example, in its northern region OAM met air support requests 77 percent of the time and in its southeast region, it met these requests 60 percent of the time. The main reasons for unmet air and marine support requests were maintenance and adverse weather, respectively. OAM has taken actions, such as developing an aircraft modernization plan and purchasing all-weather vessels, to address these issues.

OAM could benefit from taking additional steps to better ensure that its mix and placement of resources meets mission needs and addresses threats. GAO's analysis of OAM's fiscal year 2010 performance results indicate that OAM did not meet its national performance goal to fulfill greater than 95 percent of Border Patrol air support requests and did not provide higher rates of support in locations designated as high priority based on threats. For example, one high-priority Border Patrol sector had the fifth highest support rate across all nine sectors on the southwest border. OAM could benefit from reassessing the mix and placement of its assets and personnel, using performance results to inform these decisions. Such a reassessment could help provide OAM with reasonable assurance that it is most effectively allocating scarce resources and aligning them to fulfill mission needs and related threats. Additionally, OAM has not documented its analyses to support its asset mix and placement across locations. For example, OAM's fiscal year 2010 deployment plan stated that OAM deployed aircraft and maritime vessels to ensure that its forces were positioned to best meet field commanders' needs and respond to emerging threats, but OAM did not have documentation that clearly linked the deployment decisions in the plan to these goals. Such documentation could improve transparency to help demonstrate the effectiveness of its decisions in meeting mission needs and addressing threats.

GAO's analysis of OAM and U.S. Coast Guard (USCG) air and marine survey responses indicated that they coordinated with their proximately located counterparts more frequently for activities directly related to carrying out their respective agencies' missions (mission-related activities) than for mission support activities. For example, within mission-related activities, 54 percent of the 86 respondents reported sharing intelligence on a frequent basis and, within mission-support activities, about 15 percent reported that they frequently coordinated for maintenance requests. Survey respondents, the Department of Homeland Security (DHS) analyses, and GAO site visits confirm that opportunities exist to improve certain types of coordination, such as colocating proximate OAM and USCG units, which currently share some marine and no aviation facilities. In addition, DHS does not have an active program office dedicated to the coordination of aviation or maritime issues. DHS could benefit from assessing actions it could take to improve coordination across a range of air and marine activities, including reconstituting departmental oversight councils, to better leverage existing resources, eliminate unnecessary duplication, and enhance efficiencies.

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Abbreviations

AMOR	Air and Marine Operations Reporting system
Border Patrol	Office of Border Patrol
CBP	U.S. Customs and Border Protection
DHS	Department of Homeland Security
DOD	Department of Defense
GPRA	Government Performance and Results Act
ICE	U.S. Immigration and Customs Enforcement
JIATF-S	Joint Interagency Task Force - South
OAM	Office of Air and Marine
NASOC	National Air Security Operation Center
UAS	unmanned aircraft system
USCG	U.S. Coast Guard

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Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

March 30, 2012

The Honorable Susan M. Collins
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Peter T. King
Chairman
The Honorable Bennie G. Thompson
Ranking Member
Committee on Homeland Security
House of Representatives

The Department of Homeland Security (DHS) has the largest law enforcement air force in the world and uses these resources to prevent, detect, and interdict acts of terrorism and other unlawful activity of persons approaching or crossing the United States borders. In 2004, DHS consolidated most of its air and marine resources in the Office of Air and Marine (OAM), a subcomponent of U.S. Customs and Border Protection (CBP), which has primary responsibility for the management, control, and protection of the nation's borders.¹ As of September 2011, OAM had approximately 267 aircraft, 301 marine vessels, and 1,843 personnel in 70 locations primarily on the southwest, northern, and southeast borders. From fiscal years 2006 through 2011, OAM allocated about \$1.3 billion to modernize its fleet of aged aircraft and marine vessels with a smaller variety of more flexible and sustainable assets equipped to support homeland security missions. For fiscal year 2011, DHS allocated \$814.5 million for OAM's overall operations.

OAM carries out its mission to secure the nation's borders by providing aviation and marine support to various DHS components and other federal, state, and local law enforcement agency customers. Within DHS, OAM focuses its capabilities on border enforcement support to CBP's Office of Border Patrol (Border Patrol), which is primarily responsible for enforcing border security between official ports of entry to the United States; and investigative support to the U.S. Immigration and Customs

¹U.S. Coast Guard (USCG) resources were not combined into OAM.

Enforcement (ICE), which is the largest DHS investigative entity. OAM also provides support to combat drug trafficking in the Caribbean and other foreign areas; provides air and marine security at national events; provides disaster relief support; and supports other federal, state, and local law enforcement missions. To support its various customers, it is critical that CBP has the right mix of air and marine assets located in the right places for maximum effectiveness and use. This effectiveness can be enhanced by coordination of its operations with other agencies that operate air and marine assets in the same geographic area. One such agency is DHS's U.S. Coast Guard (USCG), which, among its statutory missions, is responsible for executing its maritime security mission on or over the major waterways, including the Great Lakes and 95,000 miles of U.S. coastline and territorial seas, using its own air and marine assets. We previously reported on opportunities to increase coordination of OAM and USCG assets and DHS implemented our recommendations by, among other things, providing guidance on relative roles and responsibilities and how asset use should be coordinated to meet border security needs.²

This report responds to your request that we review the extent to which CBP has assessed that it has the right mix of air and marine assets in the right locations to meet customer needs, and has coordinated with the USCG. Specifically, we reviewed the extent that OAM:

- (1) met air and marine support requests across locations, customers, and missions;
- (2) has taken steps to ensure that its mix and placement of resources met its mission needs and addressed threats; and
- (3) coordinated the operational use of its air and marine assets and personnel with the USCG.

This report is a public version of the prior law enforcement sensitive but unclassified report that we provided to you. DHS has deemed some of the information in the prior report as law enforcement sensitive, which must be protected from public disclosure. Therefore, this report omits

²GAO, *Border Security: Opportunities to Increase Coordination of Air and Marine Assets*, [GAO-05-543](#) (Washington D.C.: Aug. 12, 2005).

information describing the numbers of assets and personnel and the types of activities at the OAM branch level and below, and the specific operational locations we visited. Otherwise, this report addresses the same questions and uses the same overall methodology as the sensitive report.

In conducting our work, we interviewed DHS headquarters officials, analyzed DHS data and documentation, conducted site visits to selected air and marine branch locations, and administered a web-based survey to selected OAM and USCG air and marine units. We visited 4 of the 23 OAM branch offices. We chose these locations because they comprise a mix of differences across border locations (northern, southwest, and southeast), threats (terrorism, drug smuggling, and illegal immigration), and operating environments for air (desert, forest, urban, rural) and marine (Great Lakes, coastal, intracoastal waterways). In these locations we interviewed OAM officials and their customers including officials from Border Patrol, ICE, and some local law enforcement officials. We also interviewed USCG officials in all locations except one, because a USCG unit was not located nearby. We also visited OAM's principal radar center, the Air and Marine Operations Center, at Riverside, California. While we cannot generalize our work from these visits to all air and marine branches, the information we obtained provides examples of the benefits and challenges in providing air and marine support to customers for various missions.

To address the first and second objective, we obtained data on the number and type of requests OAM received for air and marine assets from OAM's Air and Marine Operations Reporting (AMOR) system for fiscal year 2010, and analyzed the extent that OAM met requests for air and marine support across locations, customers, and missions. We assessed the reliability of these data by interviewing OAM officials responsible for overseeing applicable quality control procedures and reviewing available system documentation, such as user guides, among other things. We concluded that these data were sufficiently reliable for the purposes of this report, with one exception. We did not use data showing marine support by customer because of missing entries and inconsistent data entry practices, as discussed later in this report.³ We

³The process we used to extract, reconcile, and convert OAM operational data for analysis took over 6 months to complete.

discussed differences in the level of OAM support with OAM, Border Patrol, and ICE officials at headquarters and field locations we visited. We also assessed OAM's internal controls related to data management and compared them against criteria in *Standards for Internal Control in the Federal Government*.⁴

To address the second objective, we interviewed DHS, CBP, Border Patrol, and OAM officials and reviewed documentation available supporting the mix and placement of assets. We reviewed the extent that the documentation considered current and future mission needs and relative threats defined by CBP-designated priority locations. We analyzed AMOR data for fiscal year 2010 to determine the extent OAM had provided air and marine support to CBP-designated priority locations, and was able to meet their performance goal in these locations compared to others. We also compared data from AMOR to information reported in CBP's annual Performance and Accountability Report to determine the extent that OAM's performance in providing air support to Border Patrol was accurately reported.

To address the first and third objective, we developed and administered a web-based survey to each of 86 proximately located OAM air and marine branches and units and USCG air and marine stations asking them about the level of interagency coordination across various mission and mission support areas, and any results in terms of performance effectiveness, reduced duplication, and cost savings. Our survey went to senior officers in 18 OAM air branches or units, 13 USCG air stations, 27 OAM marine branches or units, and 28 USCG marine stations. Our response rate was 100 percent, although not all respondents answered each question. We also reviewed past GAO and DHS analyses to identify opportunities for increased coordination, and interviewed DHS officials and reviewed documentation to determine the extent to which DHS headquarters councils were in place to carry out oversight responsibilities outlined in the council charters to improve the efficiency, effectiveness, and interoperability of air and marine assets.

We conducted this performance audit from June 2010 through February 2012 in accordance with generally accepted government auditing

⁴GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: Nov. 1999).

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. Additional details on our scope and methodology are contained in appendix I. The survey text and results are contained in appendix II.

Background

OAM Organization

OAM resources are divided among 70 air and marine locations across three regions (southeast, southwest, and northern); the National Capital area; and National Air Security Operations Centers (NASOC) throughout the continental United States, Puerto Rico, and the U.S. Virgin Islands as shown in figure 1. OAM also has mission support facilities including those for maintenance, training, and radar-tracking to detect and direct interdiction of illegal aircraft and maritime vessels. OAM strategic assumptions in deploying its resources include the ability to provide a 24-hour, 7-day a week response to border penetrations anywhere along the U.S. border, with a 1-hour response time for areas designated as high priority.⁵ Considerations in OAM allocation decisions include historical location, congressional direction,⁶ and differences in geography and relative need for air and marine support to address threats. As of May 2011, OAM had placed about half of its air assets on the southwest border region and the remainder on the northern and southeast regions, while marine resources were distributed fairly evenly across the northern, southwest, and southeast regions.⁷ OAM has 23 branches and 6 NASOCs across these regions, and within the branches, OAM may have one or more air or marine units.

⁵OAM response time for ICE prioritized areas was to be between 1 and 3 hours.

⁶In fiscal years 2006 through 2008, DHS received funding for the establishment of 6 OAM marine units and 5 air branches along the northern border. See H.R. Rep. No. 109-241, at 42, 45, 46 (2005) (Conf. Rep.); H.R. Rep. No. 109-699, at 125, 131 (2006) (Conf. Rep.); H.R. Comm. on Appropriations, 110th Cong., Consolidated Appropriations Act, 2008, at 13, 22-23 (Comm. Print 2008) (Explanatory Statement); S. Rep. No. 110-84, at 38-39 (2007); H.R. Rep. No. 110-181, at 38 (2007).

⁷For more information on the location of OAM air and marine assets, see appendix III.

Figure 1: OAM Branch Offices and NASOCs as of September 2011

INTERACTIVE GRAPHIC

ROLL YOUR MOUSE OVER EACH LOCATION FOR MORE INFORMATION



Source: GAO analysis of OAM data; Map Resources (map).

Note: The 23 OAM branches and 6 NASOCs depicted are roughly equivalent in geographic location to Border Patrol’s 20 sectors. There are 35 USCG sectors in the continental United States, Alaska, Hawaii, Puerto Rico, and Guam. ICE has 26 principal investigative field offices nationwide. “Air and marine” branches operate air assets at the branch location itself while marine assets, and sometimes additional air assets, are operated from subordinate locations called “marine units” or “air units.”

OAM performs various missions in response to requests for air and marine support from other DHS components—primarily Border Patrol and ICE; as well as other federal, state, and local law enforcement agencies. In addition, OAM is a representative on the Joint Interagency Task Force-South, located in Key West, Florida, a unified command sponsored by the White House Office of National Drug Control Policy that facilitates transnational cooperative counter-narcotic and counterterrorism efforts throughout the South America source zone and the Caribbean, eastern Pacific, Central America, and Mexico transit zone.⁸ OAM's NASOCs perform specialized missions nationwide and in the Caribbean, eastern Pacific, and Central America, using unmanned aircraft systems, long-range patrol aircraft, and other aircraft.

Control of OAM resources to respond to these support requests differs by location. For the northern and southwest regions, OAM branches and units are under the tactical control of the local Border Patrol sector chief, who has authority to approve, deny, and prioritize requests for air and marine support. In contrast, OAM branch directors have the authority to control how air and marine resources are used in the southeast region—where there is less Border Patrol presence, as well as in the National Capital area and in NASOCs.

The majority of OAM operations is in support of customer or self-initiated law enforcement missions.⁹ These missions include air and marine patrols to detect illegal activity; search for illegal aliens; surveillance; and transport of Border Patrol, ICE, and other law enforcement officers and their equipment. OAM also performs non-enforcement missions including those to support maintenance, training, public relations, and to provide humanitarian aid. Over the last 3 years, the proportion of air and marine mission hours (flight hours or hours a vessel was on duty) for law enforcement related missions has increased, as shown in table 1.

⁸Other Joint Interagency Task Force-South representatives include USCG, Department of Defense, Department of Justice, and the National Security Agency, as well as liaison officers from 11 different countries.

⁹“Self-initiated” indicates that following the mission, the pilot or boat operator entered “OAM” into the “initiated by” data field in the Air and Marine Reporting system. Self-initiated missions occur most often in the southeast region where OAM has tactical control of the mission.

Table 1: OAM Air and Marine Hours by Mission Type, Fiscal Years 2008 through 2010

	Mission type	Fiscal year			Total
		2008	2009	2010	
Air^a	Enforcement	59,283	73,472	85,579	218,333
	Non-enforcement	31,383	26,782	20,844	78,008
	Total	90,665	100,253	106,423	297,341
Marine^b	Enforcement	18,956	32,880	48,151	99,987
	Non-enforcement	2,232	5,129	5,319	12,680
	Total	21,188	38,009	53,471	112,667

Source: GAO analysis of AMOR data.

Note: Numbers may not add due to rounding.

^aAir hours (flight hours) represent time from point of takeoff to touchdown.

^bMarine hours (service hours) represent time from point of departure to arrival.

DHS has taken actions to consolidate or integrate its air and marine resources across components. In 2004, DHS transferred ICE’s air and marine assets under CBP and in 2005 added Border Patrol air assets to CBP. In 2006, CBP officially integrated its marine and air forces, creating OAM. Further, DHS established departmental councils since 2003 with broad responsibilities to review the missions and requirements of USCG, CBP, and ICE to identify opportunities to increase effectiveness and lower costs, and to propose to DHS’s senior-level management departmental strategies to realize these opportunities. In March 2004, DHS established the DHS Aviation Management Council to review and coordinate joint departmental aviation issues, including oversight of operational policy and generation of resource requirements. The charter also designated the Aviation Management Council as a commodity council for strategic sourcing to enable a DHS-wide approach to acquire aviation goods and services efficiently and effectively. DHS also chartered a Marine Vessel Management Council in 2004 to, among other things, identify and prioritize marine vessel program goals to improve mission effectiveness DHS-wide. At the component level, CBP and USCG co-chair a Boat Commodity Council to, among other things, coordinate acquisition, training, and maintenance issues affecting both OAM and USCG marine-related resources.¹⁰ Further, OAM and USCG have cooperated on specific projects, such as developing requirements for the joint operation

¹⁰The Boat Commodity Council was established in May 2004.

of unmanned aircraft systems (UAS), which are long-duration, remotely piloted aircraft used for maritime border security and disaster assistance.

OAM Air and Marine Support Rates Differed by Location, and Some Field Officials Reported Resource Constraints

The percentage of OAM air and marine support requests met differed by location, customer, and mission type, with unmet air support requests primarily due to aircraft maintenance and unmet marine requests due to adverse weather in fiscal year 2010.¹¹ In addition, OAM, Border Patrol, and ICE officials reported that OAM resources were constrained in some locations. Further, although OAM has taken actions to address challenges in providing air and marine support, its efforts to increase aircraft availability have not been fully realized.

Air Support Differences Were Greater among Locations Than among Customers or Missions

OAM met 73 percent of the 38,662 total air support requests that it received in fiscal year 2010, according to our analysis of AMOR data.¹² OAM tracks its ability to meet air support requests by location, customer, and mission in its AMOR system. Our analysis of these data showed that the percentage of air support requests OAM met differed by region or branch location, and to a lesser extent, by customer and mission type. Specifically, the percentage of air support requests met ranged by 29 percentage points across regions (from 60 to 89 percent) and ranged by over 50 percentage points across branches (from 43 to 96 percent), while the percentage of requests met across customers ranged by about 14 percentage points (from 76 to 90 percent) and the percentage of requests met across mission types ranged by 24 percentage points (from 61 to 85 percent).

¹¹We were unable to analyze marine support request by customer due to data reliability concerns, as discussed later in this report.

¹²In order to provide meaningful support rates, we excluded from our analysis requests for non-enforcement related activities, such as training or maintenance flights, as well as requests for support that were canceled by the requester. We included all other enforcement related support requests, including those that were not met due to adverse weather.

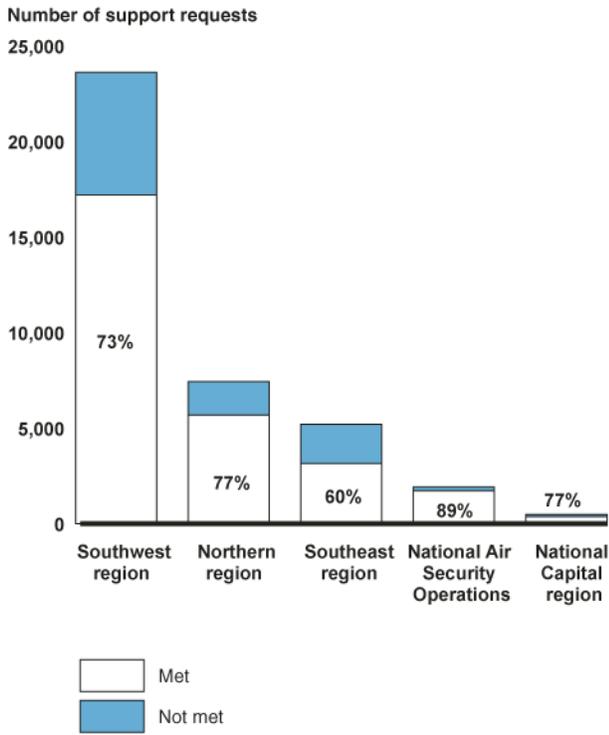
Air Support Differed across Locations

OAM air support requests met differed by up to 29 percentage points across five different OAM regional areas of responsibility (i.e., regions).¹³ The highest percentage of support requests met was provided to OAM's NASOCs and the lowest percentage of support requests met was provided to the U.S. southeast region, as shown in figure 2.¹⁴

¹³For purposes of comparison and analysis, we have classified OAM's NASOCs as a regional area of responsibility (i.e., region). In addition, we classified the National Capital Region Air Branch as a region, even though, according to OAM officials, it is under the immediate direction of OAM headquarters.

¹⁴NASOCs operate national strategic assets that include the P-3 maritime patrol aircraft, unmanned aircraft systems, and other specialized aircraft, according to OAM officials. P-3 aircraft are used primarily in the source zones of South America and the transit zones of the Caribbean, eastern Pacific, Central America, and Mexico. Unmanned aircraft systems are used at the nation's borders.

Figure 2: OAM Air Support Requests by Region, Fiscal Year 2010



Source: GAO analysis of AMOR data.

The percentage of air support requests met across branches and NASOCs showed greater differences than across regions, particularly across branches in the southwest region, as shown in table 2.

Table 2: Distribution of the Percentage of OAM Air Support Requests Met by Air Branches and NASOCs across Regions, Fiscal Year 2010

OAM Region/Center	Percent of air support requests met						Total
	40 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	
Southwest	1	1	2	1	2	3	10
Northern			1	5	2		8
Southeast		2	1	1			4
NASOCs			1		3	2	6
National Capital				1			1
Total	1	3	5	8	7	5	29

Source: GAO analysis of AMOR data.

Notes: Percentages are rounded to the nearest whole number.

Air Support Differences across Customers and Missions

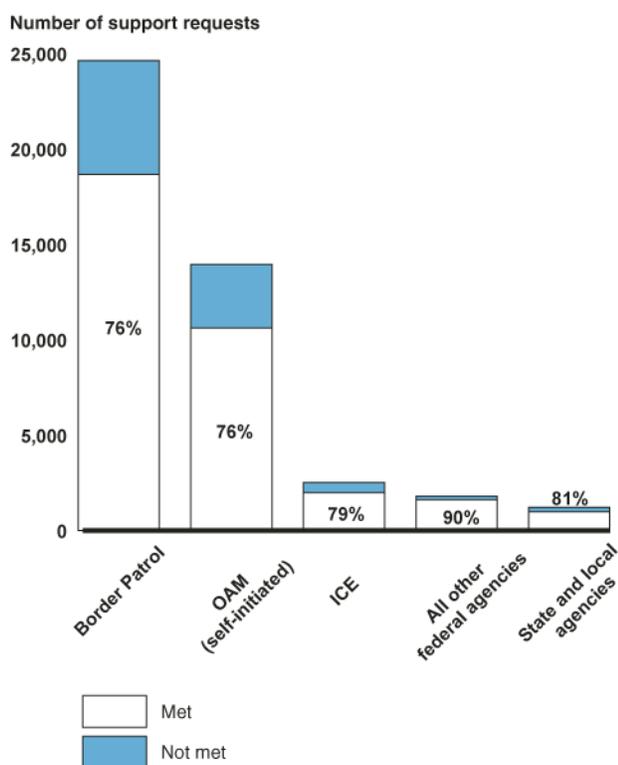
There were smaller differences in OAM's ability to meet requests for air support across customers than across locations. The overall percentage of air support requests met across customers ranged from a low of 76 percent for Border Patrol and OAM to a high of 90 percent for all other federal agencies, as shown in figure 3. Border Patrol has control over OAM mission support priorities in the northern and southwest regions, and OAM has control over its priorities in the southeast region.¹⁵ To increase transparency of ICE support requests, OAM, Border Patrol, and ICE established a process requiring that ICE requests that are denied at the field level be elevated to management.¹⁶ Finally, our analysis of

¹⁵In a 2008 Air Council meeting, Border Patrol and OAM outlined similar prioritization schemes for providing air support: anti-terrorism or other exigent missions are first priority, then DHS missions, and then other law enforcement operations and activities. An Assistant Chief Patrol Agent for one Border Patrol station along the southwest border said he prioritizes pre-scheduled flight block requests based on the level of cross-border activity in the area of responsibility, and Border Patrol officials in another station said they prioritize ad hoc requests according to situational circumstances, such as officer safety or proximity of the aircraft to the support location.

¹⁶This process was established following a 2008 CBP Commissioner's Air Council meeting, and makes it clear that ICE requests that are denied at the field level for any reason other than adverse weather, crew, or maintenance issues may be elevated up the ICE and CBP chains of command, until they are resolved; if they are not resolved before they reach the CBP Commissioner's Office, he or she has final say. In its 2010 annual report for support provided to ICE, OAM reported that only one ICE request was elevated to the CBP Commissioner for resolution.

AMOR data showed that there were few concurrent support requests that resulted in denial of one agency's request to support another agency. For example, of the 38,662 requests for air support in fiscal year 2010, 2 percent (915) could not be met due to a competing mission request from the same or another agency.

Figure 3: OAM Air Support Requests by Customer, Fiscal Year 2010



Source: GAO analysis of AMOR data.

Note: About 14 percent of unmet air support requests in fiscal year 2010 had more than one agency as a requestor and we attributed these requests to each of the requesting agencies, thus in some cases one request was attributed to more than one agency. In addition, about 17 percent of unmet requests, excluding those canceled by the requestor, could not be attributed to any agency. As a result, the percentage of support requests not met may be understated. For a detailed discussion on our methodology, see appendix I.

OAM headquarters officials gave the following possible explanations as to why state and local, and all other federal agencies had higher support rates than Border Patrol or OAM.

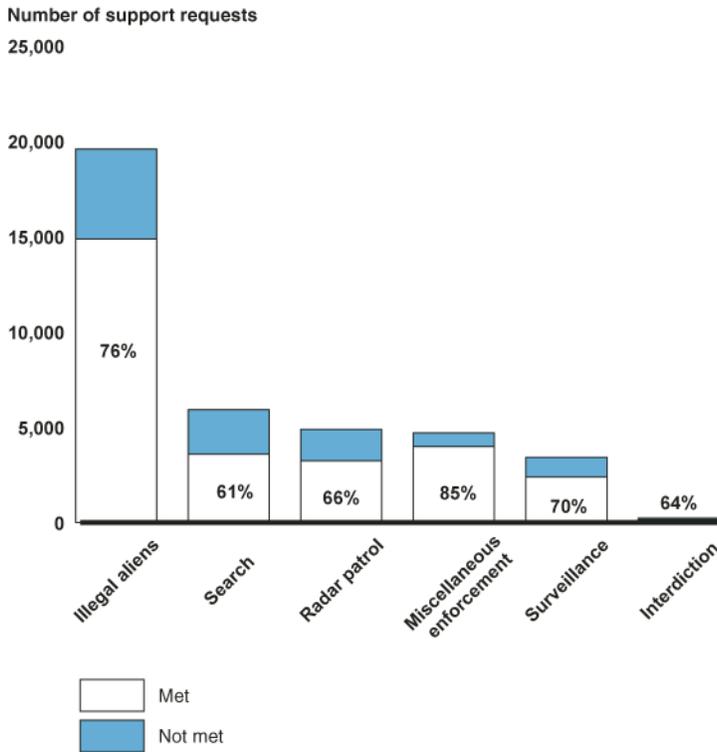
- State and local support frequently involved OAM diverting a flight already in progress; in such cases, aircraft availability challenges

were not an issue. As a result, OAM was able to provide the support to the state and local agency resulting in higher support rates.

- Federal agencies (as in the “all other federal agencies” category in figure 3) and state agencies (as in the “state and local agencies” category in figure 3) often require types of aircraft that have greater availability in general.
- Standing, daily requests—which were most common to Border Patrol—were more likely than ad hoc requests to be canceled as a result of adverse weather, maintenance, or aircraft and personnel restrictions. As a result, Border Patrol may have more unmet requests than other agencies.

The difference in percentage of support requests met across mission categories ranged from 61 to 85 percent, with higher levels of support for miscellaneous enforcement activities such as reconnaissance, photography, or information. The percentage of air support was lower for mission activities classified as search, interdiction, or radar patrol, as shown in figure 4. OAM officials told us that there were too many variables, such as budget and resource constraints, weather, and conflicting mission priorities, to explain why there were differences in percentages of support requests met for different mission types.

Figure 4: OAM Air Support Requests by Mission Type, Fiscal Year 2010



Source: GAO analysis of AMOR data.

Note: According to the AMOR user guide and OAM headquarters officials, mission types include:

Illegal aliens: Support flights that resulted in the search for, or arrest of, illegal aliens.

Search: Flights by any aircraft, radar equipped or not; and performed with or without intelligence of a target in a specific location.

Radar patrol: Support flights by aircraft equipped with radar, with the purpose of detecting suspect private aircraft.

Miscellaneous enforcement: Represents several enforcement activities, including beeper/transponder install/remove, controlled delivery, enforcement relocation, eradication support, information gathering, logistic/transportation, reconnaissance/photography, security support, undercover, and warrants .

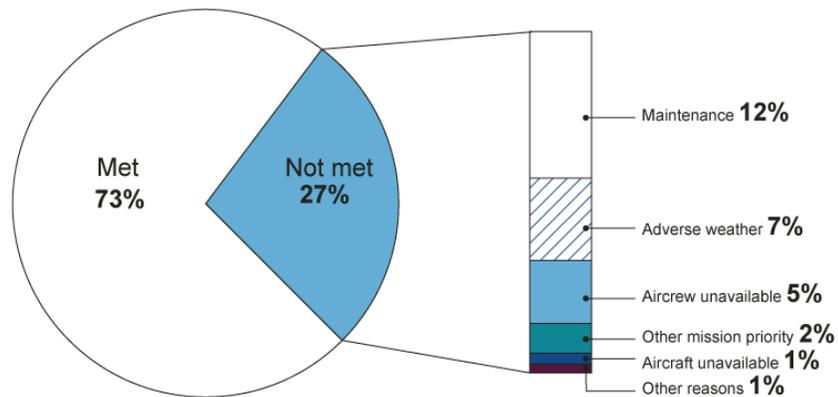
Surveillance: Flights required by specific intelligence of the target being observed—such as what the target is and where it is located.

Interdiction: The interception, tracking, or apprehension of suspected violators.

Reasons for Unmet Air Requests

OAM was unable to meet 27 percent, or 10,530 of the 38,662 air support requests it received from customers in fiscal year 2010. The primary reason for unmet requests was the unavailability of aircraft in maintenance, but adverse weather and unavailable aircrew were also factors, as shown in figure 5.¹⁷

Figure 5: OAM Air Support Requests and Reasons for Unmet Requests, Fiscal Year 2010



Source: GAO analysis of AMOR data.

Note: N = 38,662. Percentages may not add to 100 percent due to rounding. "Other reasons" include when OAM received information that was incomplete or not timely, among other things.

Some Field Officials Reported That OAM Has Air Support Resource Constraints

OAM survey respondents were generally satisfied with the type and number of air assets they had to perform various missions; however, some survey respondents and field officials we interviewed identified capability gaps, such as the lack of maritime patrol aircraft. In addition, survey respondents and field officials reported general dissatisfaction with the number of personnel to perform air operations. Finally, OAM has taken actions to increase aircraft availability—including creating an aircraft modernization plan and conducting an aged-aircraft investigation—but these efforts have not been fully realized.

¹⁷OAM awarded a new aircraft maintenance contract in 2009 and officials told us the new contractor performed poorly in the beginning of the contract period which increased the number of unmet support requests due to maintenance in fiscal year 2010.

Survey Respondents and Field Officials Cited Mixed Views on OAM Air Assets and Support

The majority of officials that responded to our survey questions from 18 OAM air locations across the southwest, northern, southeast, and National Capital regions, and NASOCs generally reported that they were either satisfied with, or neutral—neither satisfied nor dissatisfied—toward the type and number of OAM aircraft they had at their locations to perform various mission activities.¹⁸ For example, 16 of 18 respondents reported satisfaction with the type of aircraft available for surveillance; and 12 of 18 respondents reported satisfaction with the number of aircraft they have to perform information gathering. A majority of respondents also expressed satisfaction or neutrality toward the type and number of aircraft they have to perform 12 other mission activities. Some respondents, however, identified capability gaps and resource limitations for certain mission activities. For example, officials from 7 of the 14 air locations that perform air-to-water radar patrols reported that they were very dissatisfied with the type of aircraft available to conduct these missions.¹⁹ Similarly, respondents from 7 of the 17 air locations that perform interdictions expressed dissatisfaction with the number of aircraft available to conduct these missions. One respondent reported that his/her location had no maritime or air radar interdiction capabilities, despite having a border that was entirely water. See appendix IV for a summary of survey results by location for respondents' satisfaction with the type and number of assets for various mission activities.

OAM Regional Directors expressed differing levels of satisfaction with the type and number of air assets in their regions to perform operations. The Northern Regional Director said the type and number of air assets generally met mission needs.²⁰ The Southeast Regional Director said the southeast region did not have sufficient air assets to meet mission needs; specifically, they were not consistently meeting requests for air patrol of

¹⁸We surveyed 18 of the 40 operating OAM air locations, including branches, units, and NASOCs that were proximate to USCG air locations. We surveyed respondents about their satisfaction with the type and number of OAM aircraft they have to perform 15 different mission activities at their locations. See appendix IV for additional data from this survey question. See appendix I for our survey scope and methodology.

¹⁹Air-to-water radar patrols are missions in which aircraft patrol maritime environments.

²⁰ The Northern Border Regional Director said, among other things, he would like to see an additional interceptor aircraft placed in one branch location, but that the runway is too short—the current runway is 4,000 feet and a Citation needs at least 7,000 feet. OAM headquarters officials said that the branch is routinely required to get additional support from neighboring branches.

the maritime environment and that two branches needed more maritime patrol aircraft.²¹ The Southwest Regional Director said he did not have information regarding what the southwest region's needs were in terms of air assets because the southwest region had not performed an assessment in 2 years.

OAM, Border Patrol and ICE officials at field locations we visited in the northern, southeast, and southwest regions expressed various levels of satisfaction with OAM's air support and capabilities. For example, Border Patrol and ICE officials in one northern border location said they were generally satisfied with OAM's air support. Similarly, the Acting Special Agent in Charge for the ICE office in the southeast region said he was generally satisfied with OAM's air support; however, a Border Patrol Assistant Chief for a southeast region sector said OAM had not been responsive to their air support requests.²² In one southwest location, OAM branch officials said the air assets at their location were barely sufficient to meet support requests for its various missions, and ICE officials said they would like to see OAM procure better aircraft for their surveillance needs. In addition, Border Patrol officials in the same southwest location said that while the sector receives substantial OAM air support, OAM as an agency is not adequately resourced in budget, facilities, air frames, or technology to meet operational requirements.²³ Similarly, Border Patrol, OAM, and ICE field officials in another southwest region location said OAM lacked the capability to perform effective maritime (air to water) patrols, and ICE officials in that southwest region location said that helicopters were often not available on short notice.²⁴

²¹Data from the AMOR system for fiscal year 2010 confirm that the southeast region had a low percentage of support requests met (60 percent) relative to other regions.

²²A Border Patrol Assistant Chief for one southeast sector said that in some instances, Border Patrol agents may not have asked for air support in fiscal year 2010 because they thought they might not receive it. He said that agents are currently encouraged to ask for support whether or not they believe they will receive it.

²³Specifically, Border Patrol officials in a southwest border sector told us that there were gaps in OAM's ability to provide air mission support for intelligence, reconnaissance, and surveillance.

²⁴In a draft *Fiscal Year 2012-2013 Aircraft Deployment Plan*, OAM proposed that two multi-role enforcement aircraft be allocated to a southwest branch. According to OAM officials, these aircraft are intended to perform marine interdiction, among other activities.

Survey Respondents and Field
Officials Cited Air Personnel
Shortages

Lastly, officials from the Joint Interagency Task Force-South (JIATF-S) said they were pleased with the support they received from OAM, but they would like higher levels of support. According to OAM officials, OAM provided aircraft support to JIATF-S primarily for long-range patrols in the source zones of South America and the transit zones of the Caribbean, eastern Pacific, Central America, and Mexico. JIATF-S officials said that OAM had specialized aircraft that were instrumental to their operations. While OAM provided more than its committed 7,200 flight hours in fiscal year 2010 to support the anti-drug mission in this area, JIATF-S officials said they would like to receive higher levels of OAM support, particularly as support from Department of Defense and other partners had been decreasing.

Our survey of 18 OAM air locations found that the majority of respondents (11 of 18) were either somewhat or very dissatisfied with the extent to which they had adequate air personnel to effectively meet mission needs. In addition, field officials we interviewed in the southwest and southeast regions reported shortages in air personnel.

Although the Northern Border Regional Director told us most air branches along the northern border were staffed sufficiently to meet mission needs, the Southeast and Southwest Regional Directors cited shortfalls in the level of air personnel. The Southeast Regional Director said air staff were frequently assigned to temporary duty in support of UAS and surge operations in the higher priority southwest region; and the Southwest Regional Director said they did not have adequate personnel to be able to respond 24-hours a day at each of its locations.²⁵

OAM officials at the field locations we visited reported shortages in air personnel. For example, the Director of Air Operations at a northern border branch said that the branch was originally slated to have 60 pilots, but instead had 20 pilots. In addition, officials from two branches in the southwest region told us they lacked personnel due to staff being away for such reasons as temporary duty assignments, military leave, sick leave, and training, among other reasons; they said these shortages were

²⁵In March 2011, the Director of Air Operations from one southwest branch told us they were constantly providing personnel for unmanned aircraft systems, and it was getting to the point where they could not perform some manned missions due to shortages of personnel.

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negatively affecting their ability to meet air support requests.²⁶ Further, the Deputy Director of Air Operations for one southeast region branch told us that when they received the new DASH-8 maritime patrol aircraft, they did not receive the necessary increases in personnel to operate them, and as a result, the branch could not fully utilize the capabilities of these technologically advanced aircraft.²⁷ According to the branch officials, personnel problems were further exacerbated by budget constraints.

OAM reported that it had taken actions to increase aircraft availability, but the results of these efforts have not yet been fully realized. OAM created an aircraft modernization plan in 2006 to replace aging aircraft, and updated this plan in 2007 with a model of projected investments over the next 10 years. OAM officials told us that due to changes in mission needs and changes in the aviation market, as well as limited funding, they have had to modify the plan and continue to maintain older and less supportable aircraft, which require more maintenance. OAM officials reported that because they have not been able to replace aircraft as postulated, they have not been able to standardize their fleet by reducing aircraft types—which would reduce costs associated with training materials and equipment, parts and spares inventories, and personnel qualifications.²⁸ Due to the slow pace of aged aircraft replacement and the prospect of a constrained resource environment, OAM conducted an aged aircraft investigation in fiscal year 2010 to determine the operating life limitations of aircraft most at risk. Based on the results of this investigation, OAM plans to either retire aircraft or create sustainment regimens for certain aircraft to lengthen their service lives. Finally, OAM headquarters officials said they still plan to acquire new aircraft and reduce the number of older aircraft to eventually achieve the needed type reductions, consistent with available funding.

²⁶In March 2011, southwest region branch officials told us they really had about half of their pilots available on any given day.

²⁷The DASH-8 requires two pilots and two sensor operators to operate, while the Citation—which the DASH-8 replaced—requires two pilots and one sensor operator, according to OAM officials.

²⁸In its 2006 aircraft modernization plan, OAM planned to reduce the number of aircraft types from 18 to 8, but as of September 2011, OAM had 20 aircraft types (including unmanned aircraft systems).

OAM headquarters officials said they have deployed all-weather aircraft to locations where their capabilities will yield the highest operational dividends.²⁹ They also said they would like to acquire additional all-weather aircraft, but current funding structures preclude the acquisition of more all-weather assets beyond what is currently approved. OAM officials said they are exploring additional technology and instrumentation solutions to increase their ability to conduct missions in adverse weather conditions, and that this is an ongoing process.

OAM headquarters officials stated that they were also limited in their ability to increase the availability of aircrew due to staff reductions and budgetary constraints. OAM conducted a re-evaluation of its staffing in 2009, but it was never approved, as OAM had significant reductions to its work force in fiscal year 2010. Headquarters officials said the effort to redefine their work force is on hold since future funding projections prohibit program growth. OAM officials told us they have not increased staff over the past 2 fiscal years.

Marine Support Differed across Locations and Missions, and Data Were Unreliable to Assess Differences across Customers

OAM met 88 percent of the 9,913 total marine support requests that it received in fiscal year 2010, according to our analysis of AMOR data.³⁰ Similar to our analysis of air support data, our analysis of marine data showed that the percentage of requests OAM supported differed by location; specifically, the percentage of marine support requests met ranged by 9 percentage points across regions (from 84 to 93 percent), and by as much as 28 percentage points across branches (from 71 to 99 percent). AMOR tracks OAM's ability to meet marine support requests by location, customer, and mission; but data by customer were not reliable for our reporting purposes due to inconsistencies in OAM data entry practices.

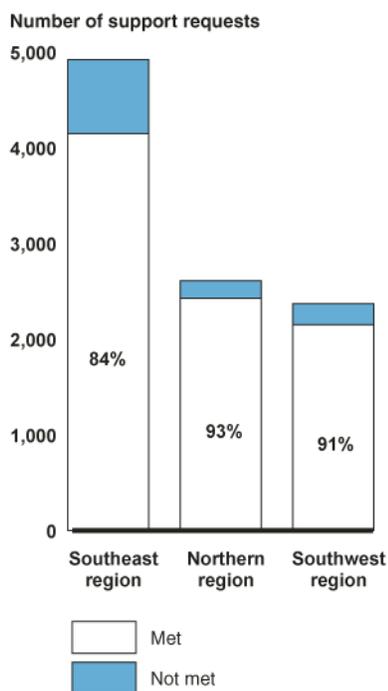
²⁹OAM headquarters officials told us that "all-weather" is a term of art used by the air community, and it refers to aircraft that have instrumentation that allow them to be flown in adverse weather conditions.

³⁰Our analysis of marine requests excluded non-enforcement related activities, such as training or maintenance missions; it also excluded requests that were canceled by the requester.

Marine Support across Regions

The percentage of marine support requests met ranged from 84 to 93 percent across three OAM regional areas of responsibility. The percentage of support requests met was fairly similar for the northern and southwest regions, exceeding 90 percent; however, support was lower (84 percent) for the southeast region, as shown in figure 6. OAM officials said possible reasons for the differences in support rates could include the fact that OAM has placed higher priority on the northern and southwest regions, and that since 2008 OAM has added assets to these regions in response to congressional direction.

Figure 6: OAM Marine Support Requests by Region, Fiscal Year 2010



Source: GAO analysis of AMOR data.

Within each region, the percentage of marine support requests met across branches showed disparities, particularly across branches in the southwest region. Marine support requests met ranged by 15 percentage points across branches in the southeast region (from 80 to 95 percent), by about 10 percentage points across branches in the northern region (from 89 to 99 percent), and by about 28 percentage points across branches in the southwest region (from 71 to 99 percent).

Marine Support across Missions and Customers

Our analysis of AMOR data indicated that 94 percent of all support requests in fiscal year 2010 were for radar patrol missions, while the remaining 6 percent of requests involved interdiction, surveillance, and other miscellaneous enforcement missions. The percentage of support requests met for the remaining 6 percent of requests varied but was 86 percent overall, while the support rate for radar patrol missions was 88 percent.

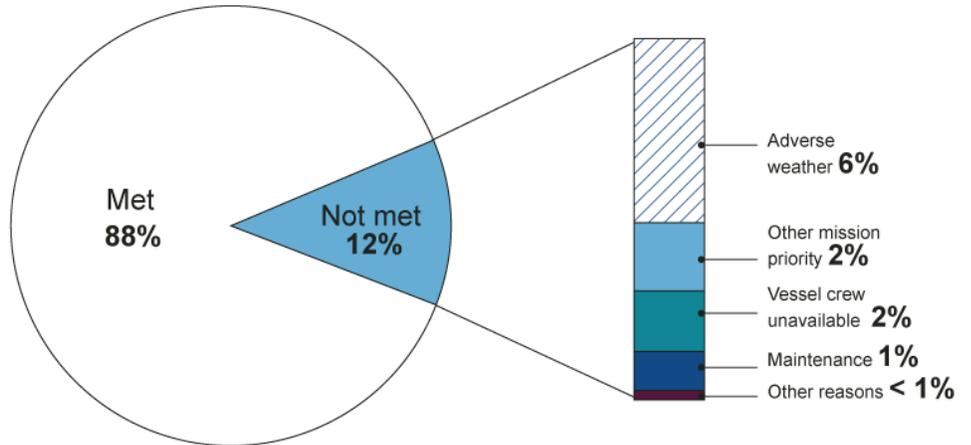
We were unable to report on the percentage of marine support by customer due to reliability concerns associated with data in AMOR. Specifically, when inputting data into the AMOR system for unmet marine requests, OAM staff left the data field blank that identified the customer making the request in over 90 percent of the cases in fiscal year 2010.³¹ OAM reported that they are replacing the AMOR system with a web-based system, which officials said will not allow users to leave important fields blank. Officials also said they are strengthening other internal controls—such as training and supervisory review of data entry—to ensure complete and accurate reporting. Such actions, if implemented effectively, should help improve the reliability of marine customer data—as well as other air and marine operations data—maintained in OAM's system.

Reasons for Unmet Marine Requests

OAM was unable to meet 12 percent, or 1,176 of the 9,913 marine support requests they received in fiscal year 2010. OAM officials said one reason that the percentage of support requests met was higher for marine support than for air support is because the requirements for launching aircraft are more stringent than for launching marine vessels, due to the relative risk of failure. The primary reason for unmet marine requests was adverse weather (6 percent of total requests), with an additional 4 percent due to other mission priorities and crew unavailability, as shown in figure 7.

³¹OAM headquarters and field officials said OAM staff often left the customer support field blank when the mission was self-initiated.

Figure 7: Percent of Total Marine Requests Met, and Reasons for Unmet Requests, Fiscal Year 2010



Source: GAO analysis of AMOR data.

Note: N = 9,913. Percentages may not add to 100 percent due to rounding. "Other reasons" include when OAM received information that was insufficient or a suspect failed to show, among other things.

Some Field Officials Reported That OAM Has Marine Support Resource Constraints

According to our survey of 27 OAM marine units, respondents reported they were generally satisfied with the type and number of vessels at their location. However, OAM Regional Directors and field location officials cited limitations, such as the lack of platform class vessels to perform undercover operations and funding for fuel. In addition, survey respondents and field officials cited shortages in personnel. Lastly, OAM has taken actions to increase its ability to meet marine requests, including purchasing "all-weather" vessels and cold-weather marine gear.³²

³²OAM headquarters officials told us that "all-weather" is a term of art used in the marine community to designate that a vessel has an enclosed cabin.

Survey Respondents and Field Officials Cited Mixed Views on OAM Marine Assets and Support

Our survey of 27 OAM marine locations across the northern, southwest, and southeast regions found that respondents were generally satisfied with the type and number of OAM marine vessels they had at their locations to perform various mission activities.³³ For example, greater than 21 of 27 respondents reported that they were satisfied with both the type and number of vessels they had to perform radar patrol and interdiction missions. Of the remaining 10 activities we asked about, the majority of respondents expressed satisfaction toward the type and number of vessels they had to perform in 7 activities.³⁴ The activity where respondents expressed the greatest dissatisfaction with the type and number of vessels they had was undercover support—with 12 of the 24 marine units that perform undercover support expressing dissatisfaction with the type of vessels, and 10 of the 24 units expressing dissatisfaction with the number of vessels.³⁵ See appendix IV for a summary of survey results by location for satisfaction with the type and number of assets provided by mission activity.

OAM Regional Directors expressed differing levels of satisfaction with the type and number of marine vessels in their regions. The OAM Northern Regional Director said the northern region had the appropriate number and type of vessels to meet mission needs. Although the Southeast Regional Director said the southeast region had the appropriate number of interceptor vessels to meet mission needs, he also said the southeast region needed two other types of vessels to increase mission capability.³⁶

³³Of OAM's 30 marine units, we surveyed 27 that were proximate to USCG marine locations. We surveyed respondents about their satisfaction with the type and number of OAM vessels they have to perform 12 mission activities at their locations. See appendix IV for additional data from this survey question. See appendix I for our survey scope and methodology.

³⁴At least half of respondents indicated they were not satisfied or were neutral toward the type and/or number of vessels they had at their locations to perform three activities, including reconnaissance/photography, undercover support, and controlled delivery.

³⁵OAM headquarters officials said they would like to partner with ICE to ensure OAM has sufficient undercover vessels to meet ICE's requirements. OAM officials said that in the past they contacted ICE headquarters and requested funding to maintain two undercover vessels in the southeast region, but ICE declined. Further, OAM officials said that if undercover support is a requirement for ICE, then the local ICE office would need to submit a request through ICE headquarters.

³⁶The two types of vessels are (1) platform vessels to support undercover operations, and (2) large, aluminum hull vessels to support offshore rig and commercial fishing environments, as well as Mississippi River marine traffic.

The Southwest Regional Director said that given the region's distribution of personnel, it had the appropriate number of assets; however, he said the region did not have the appropriate number of qualified marine personnel to meet mission needs.

Field officials at locations we visited in the northern, southeast, and southwest regions expressed varied levels of satisfaction with OAM's marine support and capabilities. For example, while Border Patrol and ICE officials in a northern border location said they were satisfied with the marine support they received from OAM, the Director of Marine Operations for an OAM branch in the northern region said that it was not feasible to provide a sufficient number of vessels and crew to ensure full coverage of the maritime border, and that the greatest need was for marine radar to queue marine assets to perform interdictions. An OAM branch official from the southeast region said that while the number and type of vessels met their needs, for a period of time, they could use their vessels only about half of each month due to budget constraints limiting fuel. Finally, officials at an OAM branch in the southwest region told us one of their chief resource needs was platform vessels to perform undercover operations.

Survey Respondents and Field Officials Cited Marine Personnel Shortages

Our survey of 27 OAM marine units found that the majority of respondents (18 of 27) reported they were either somewhat or very dissatisfied with the extent to which they had adequate personnel to effectively meet mission needs.

The OAM Regional Director for the Northern Region said that marine personnel levels across his region were adequate; however, Regional Directors for the Southeast and Southwest Regions cited shortages in marine personnel. Specifically, the Southeast Regional Director said that one southeast branch did not have an adequate number of marine personnel to address increasing threat, and the Southwest Regional Director said one location in the southwest region did not have an appropriate number of personnel to meet mission needs.

OAM officials at field locations reported shortages of personnel. For example, an official at one OAM marine unit in the northern region said that sometimes the lack of marine personnel affects operational readiness and that allowing for training and leave are consistently concerns. Similarly, OAM officials from a southwest branch said that sufficient numbers of personnel were not always available due to training, sick days, annual leave, and reservists being called to active duty; and an ICE official in a southwest border location agreed that OAM needed additional

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marine interdiction agents. Lastly, an OAM survey respondent from a marine unit in the southeast region said that although marine staffing was increased in the past few years for new locations, the pre-existing locations were short on manpower and a realignment of personnel was needed.³⁷

OAM headquarters officials reported that they have taken actions to address capability gaps due to adverse weather. For example, OAM officials told us that they purchased “all-weather” vessels with enclosed cabins, and that along with additional vessels acquired from USCG, they will have sufficient assets to meet mission needs. Officials said that while enclosed cabins do not enable OAM to launch in rough sea states, they do enable marine agents to operate in cold weather. They said that while larger vessels could reduce the impact of adverse weather on marine operations, these vessels would not be capable of achieving sufficient speeds to conduct interdictions or, if they were capable of maintaining sufficient speeds, would be cost prohibitive.³⁸ In addition, OAM officials said they purchased marine dry suits and cold weather gear to further address their ability to operate in adverse weather.

In regards to personnel, OAM officials told us that with the rapid growth in the marine program during fiscal years 2008 and 2009, OAM will be able to meet its immediate needs for marine agents, but some of those hired were still in the process of being trained and certified.

OAM headquarters officials said unmet requests due to other mission priorities are often the result of exigent and unanticipated requests for marine support that are outside of the normal mission-tasking process, and that they continually evaluate the need to re-assign marine assets to meet evolving mission needs.

³⁷OAM headquarters officials said the location and initial strength of the new marine units was based on the latest understanding of the threat and/or tactical needs of the CBP Field Commanders, and that OAM has made refinements to its personnel deployment in recognition of the changing environment.

³⁸For example, OAM officials said the U.S. Navy’s Mark V vessel can operate in rough seas and conduct high-speed interdictions, however it has an estimated unit cost of \$3.7 million, while current OAM interceptor vessels have a unit cost of approximately \$500,000.

OAM Could Benefit from Reassessing Its Mix and Placement of Resources to Better Address Mission Needs and Threats

OAM has not documented its analyses to support its resource mix and placement decisions across locations, and challenges in providing higher rates of support to high priority sectors indicate that a reassessment of its asset mix and placement may provide benefits. OAM action to document analyses behind its deployment decisions and reassess where its assets are deployed using performance results could better ensure transparency and help provide reasonable assurance that OAM is most effectively allocating its scarce resources to respond to mission needs and threats. OAM could also improve public accountability by disclosing data limitations that hinder the accuracy of OAM's reported performance results for fiscal year 2011.

OAM Documentation of Analyses to Support Asset Mix and Placement Decisions Could Improve Accountability

OAM has not documented significant events, such as its analyses to support its asset mix and placement across locations, and as a result, lacks a record to help demonstrate that its decisions to allocate resources are the most effective ones in fulfilling customer needs and addressing threats. To help ensure accountability over an agency's resource decisions, Standards for Internal Control in the Federal Government call for agencies to ensure that all significant events be clearly documented and readily available for examination.³⁹ OAM issued a National Strategic Plan in 2007 that included a 10-year plan for national asset acquisitions, and a strategic plan briefing the same year that outlined strategic end-states for air assets and personnel across OAM branches.⁴⁰ While these documents included strategic goals, mission responsibilities, and threat information, we could not identify the underlying analyses used to link these factors to the mix and placement of resources across locations. The 2010 update to the strategic plan stated that OAM utilized its forces in areas where they would pay the "highest operational dividends," but OAM did not have documentation of how operational dividends were determined or analyzed to support deployment decisions. Furthermore, while OAM's Fiscal Year 2010 Aircraft Deployment Plan stated that OAM deployed aircraft and maritime vessels to ensure its forces were

³⁹GAO/AIMD-00-21.3.1.

⁴⁰OAM headquarters officials stated that OAM has essentially adhered to the plan, with changes driven by such factors as emerging threats, technological opportunities, budgetary constraints, and production constraints. The 2007 OAM Strategic Plan briefing is the only plan that contains comprehensive air asset and personnel end-states by branch. The Fiscal Year OAM 2010 Strategic Implementation Plan did not contain updated end-states by branch.

positioned to best meet the needs of CBP field commanders and respond to the latest intelligence on emerging threats, OAM did not have documentation that clearly linked the deployment decisions in the plan to mission needs or threats.⁴¹ Similarly, OAM did not document analyses supporting the current mix and placement of marine assets across locations.⁴² In addition, DHS's 2005 aviation management directive requires operating entities to use their aircraft in the most cost-effective way to meet requirements. Although OAM officials stated that it factored cost-effectiveness considerations, such as efforts to move similar types of aircraft to the same locations to help reduce maintenance and training costs into its deployment decisions, OAM does not have documentation of analyses it performed to make these decisions.⁴³

OAM headquarters officials stated that they made deployment decisions during formal discussions and ongoing meetings in close collaboration with Border Patrol, and considered a range of factors such as operational capability, mission priorities, and threats. OAM officials said that while they generally documented final decisions affecting the mix and placement of resources, they did not have the resources to document assessments and analyses to support these decisions. However, such documentation of significant events could help OAM improve the transparency of its resource allocation decisions to help demonstrate the effectiveness of these resource decisions in fulfilling its mission needs and addressing threats.⁴⁴

⁴¹OAM did not develop an overall fiscal year 2010 deployment plan for its marine vessels, similar to the air deployment plan that was issued that year, due to the minimal movement of assets, according to OAM officials.

⁴²For example, while OAM developed a marine vessel expenditure plan for fiscal year 2010, which included threat information, requirements for vessel acquisitions, and planned end-states for its coastal interceptor vessels, it did not have documentation that clearly linked deployment decisions to mission needs or threats.

⁴³OAM officials stated that having similar types of aircraft in the same locations reduces the personnel needed for maintenance and the need for pilots to be trained on multiple aircraft. They stated that when moving aircraft for this purpose, the effectiveness of the aircraft in meeting mission needs is taken into consideration.

⁴⁴In December 2011, OAM provided documents related to the development of its Fiscal Year 2012-2013 Aircraft Deployment Plan, which included analyses that linked customer needs and threat to some deployment decisions on the northern border. While this is an improvement from the lack of documentation to support the fiscal year 2010 plan, the documents provided do not clearly show how the distribution of OAM's assets across all locations best meets deployment goals and addresses competing needs.

OAM Reassessment of Resource Mix and Placement Could Better Ensure Customer Support in High Priority Locations

OAM did not meet its national air support goal and did not provide higher rates of support to locations Border Patrol identified as high priority, which indicates that a reassessment of OAM's resource mix and placement could help ensure that it meets mission needs, addresses threats, and mitigates risk. According to DHS's Annual Performance Report for fiscal years 2008 through 2010, the primary and most important measure for OAM is its capability to launch an aircraft when a request is made for aerial support. In addition, DHS's May 2010 policy for integrated risk management stated that components should use risk information and analysis to inform decision making, and a key component of risk management is measuring and reassessing effectiveness.⁴⁵ OAM assessed its effectiveness through a performance goal to meet greater than 95 percent of Border Patrol requests for air support in fiscal year 2010, excluding unmet requests due to adverse weather or other factors OAM considered outside of its control.⁴⁶ Our analysis showed that OAM met 82 percent of the 22,877 Border Patrol air support requests in fiscal year 2010.

While OAM officials stated that this goal does not apply to specific locations, we used their stated performance measure methodology to determine support rates across Border Patrol sectors and found that they ranged from 54 to 100 percent in fiscal year 2010, and that OAM did not provide higher rates of support to locations Border Patrol identified as high priority (see table 3). This occurred at both the regional and sector levels. For example, while the southwest border was Border Patrol's highest priority for resources in fiscal year 2010, it did not receive a higher rate of OAM air support (80 percent) than the northern border (85 percent). At the sector level, while Border Patrol officials stated that one sector was a high priority based on the relative threat of cross-border smuggling, our analysis showed that the sector had the fifth highest support rate across all nine sectors on the southwest border. Findings were similar on the northern border, where the Border Patrol's and OAM's

⁴⁵GAO, *Risk Management: Further Refinements Needed to Assess Risks and Prioritize Protective Measures at Ports and Other Critical Infrastructure*, [GAO-06-91](#) (Washington D.C.: December 2005) and 2009 DHS National Infrastructure Protection Plan.

⁴⁶The Government Performance Results Act of 1993 (GPRA), as amended, requires DHS and other agencies to establish performance goals to define the level of performance to be achieved by a program activity. See 31 U.S.C. § 1115(b)(1). One of the goals established to assess OAM operations in fiscal year 2010 was to meet greater than 95 percent of Border Patrol requests for air support.

2007 Northern Border Resource Deployment Implementation Plan prioritized four sectors based on potential terrorist threats.⁴⁷ Our analysis found that two high-priority northern border sectors had lower support rates than three other sectors in the region that were not designated as high-priority.

Table 3: OAM Air Support Rates to Border Patrol across Border Regions, Fiscal Year 2010

Border regions	Border Patrol sector	Number of Border Patrol requests for air support	Percent met^a
Southwest	Sector 1	1,484	98
	Sector 2	954	95
	Sector 3	1,036	95
	Sector 4	1,098	95
	Sector 5	4,623	87
	Sector 6	2,506	83
	Sector 7	1,322	70
	Sector 8	3,344	58
	Sector 9	785	54
Total Southwest		17,152	80
Northern	Sector 1	601	96
	Sector 2	528	92
	Sector 3	235	88
	Sector 4	1,042	86
	Sector 5	528	
	Sector 6	717	81
	Sector 7	1,123	80
	Sector 8	491	79
Total Northern		5,265	85
Southeast	Sector 1	18	100
	Sector 2	80	79
	Sector 3	18	72
Total Southeast		116	81

Source: GAO analysis of AMOR data.

⁴⁷ Border Patrol's Director of Planning and a Northern-Coastal Border Associate Chief stated that the high-priority sectors on the northern border have not changed since 2007.

Note: High-priority Border Patrol sectors are highlighted. NASOCs support in response to Border Patrol requests was not included in the table because they could not be reported by sector. OAM met 95 percent of the 344 Border Patrol requests for NASOCs air support in fiscal year 2010.

^aSupport rates were calculated using OAM's stated methodology for computing its fiscal year 2010 performance measure. Support rates for each Border Patrol sector reflect support provided by the OAM branch or branches within the sector. The geographical boundaries for OAM's southwest, northern, and southeast regions were roughly comparable to the Border Patrol's southwest, northern, and southeast border regions, respectively.

OAM headquarters officials said that they did not use support rate performance results to assess whether the mix and placement of resources is appropriate. OAM officials stated that they managed operations by allocating assets, personnel, and flight hours across locations, but these factors do not assess the outcomes of their operations, specifically the extent to which OAM provided air and marine support when requested to meet mission needs and address threats.⁴⁸

Best practices for performance measurement calls for agencies to use performance information to assess efficiency, identify performance gaps, and ensure intended goals are met, and *Standards for Internal Control in the Federal Government* states that agencies should assess performance over time and establish activities, including data analysis, to monitor performance measures and indicators.⁴⁹ In addition, according to DHS's Annual Performance Report for fiscal years 2008 through 2010, support rates generated from AMOR system data are intended to be used by management to immediately identify problems that need corrective action. OAM officials said that there are significant limitations with the AMOR reporting functions which preclude them from accurately capturing and comparing performance results and using them for this purpose, and said

⁴⁸OAM officials stated the number of assets and flight hours, among other things, allocated to locations should be used to assess operations. However, these factors would not capture, for example, whether OAM has the right aircraft available to launch at the time when air support is needed. In addition, while Border Patrol sectors develop annual flight hour requirements as part of their operational plans, OAM officials stated that OAM did not use them to deploy resources in fiscal year 2010. We found that the requirements were reported inconsistently or not at all in that year. Border Patrol and OAM plan to develop a methodology to more accurately capture flight hour support requirements in Border Patrol's northern border operational plans.

⁴⁹GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, [GAO/GGD-96-118](#) (Washington, D.C.: June 1996), and [GAO/AIMD-00-21.3.1](#).

they will begin to replace the AMOR system in March 2012.⁵⁰ OAM headquarters officials expect that the new information system will be more reliable, user-friendly, and have more robust reporting capabilities; however, officials stated that they did not have plans to change how they will use these capabilities to inform resource mix and placement decisions.

OAM officials stated that while they deployed a majority of resources to high-priority sectors, budgetary constraints, other national priorities, and the need to maintain presence across border locations limited overall increases in resources or the amount of resources they could redeploy from lower-priority sectors. For example, in fiscal year 2010, 50 percent of OAM's assets and 59 percent of OAM's flight hours were in the southwest border, Border Patrol's highest-priority region. While we recognize OAM's resource constraints, the agency does not have documentation of analyses assessing the impact of these constraints and whether actions could be taken to improve the mix and placement of resources within them. Thus, it is unclear the extent to which the current deployment of OAM assets and personnel, including those assigned to the Southwest border as cited above, most effectively utilizes its constrained resources to meet mission needs and address threats.

Looking toward the future, Border Patrol, CBP, and DHS have strategic and technological initiatives under way that will likely affect customer requirements for air and marine support and the mix and placement of resources across locations. Border Patrol officials stated that they are transitioning to a new risk-based approach and Border Patrol National Strategy in fiscal year 2012 that would likely affect the type and level of OAM support across locations. Border Patrol officials said that the new strategy would likely rely more heavily on intelligence, surveillance, and reconnaissance capabilities to detect illegal activity and increased rapid mobility capabilities to respond to changing threats along the border. OAM headquarters officials said that they have received a high-level briefing of the anticipated changes in June 2011, but have not yet received information necessary to incorporate these changes into its current mix and placement of air and marine resources. CBP and DHS

⁵⁰OAM officials told us that phase 1 of the new web-based system was to be implemented in October 2011, but due to technical problems, it has been delayed to March 2012. Projections for the implementation of phases 2 and 3 are on hold pending successful implementation of phase 1.

also have ongoing interagency efforts under way to increase air and marine domain awareness across U.S. borders through deployment of technology that may decrease Border Patrol's use of OAM assets for air and marine domain awareness. Border Patrol officials in one sector, for example, stated that they prefer deployment of technology to detect illegal air and marine activity; OAM officials there said that air patrols are used due to the lack of ground-based radar technology. OAM officials stated that they will consider how technology capabilities affect the mix and placement of air and marine resources once such technology has been deployed.

OAM's fiscal year 2010 aircraft deployment plan stated that OAM deployed aircraft and maritime vessels to ensure its forces were positioned to best meet the needs of CBP Field Commanders and respond to emerging threats; however, our analysis indicates that OAM did not provide higher rates of air support in response to customer need in locations designated as high priority based on threats. In addition, as discussed, OAM did not use performance results to assess the mix and placement of resources. *Standards for Internal Control in the Federal Government* stresses the need for agencies to provide reasonable assurance of the effectiveness and efficiency of operations, including the use of the entity's resources.⁵¹ As such, to the extent that the benefits outweigh the costs, reassessing the mix and placement of its assets and personnel, and using performance results to inform these decisions could help provide OAM with reasonable assurance that it is most effectively allocating its scarce resources and aligning them to fulfill its mission needs and related threats.

OAM Did Not Disclose Data Limitations Related to the Accuracy of Reported Performance Results

OAM officials continue to use performance data from its AMOR system to meet requirements of the Government Performance and Results Act (GPRA), but have not disclosed limitations affecting the accuracy of these data reported to Congress and the public in CBP's Performance and Accountability Report.⁵² OAM inaccurately reported its performance

⁵¹[GAO/AIMD-00-21.3.1](#).

⁵²GPRA, as amended, requires federal agencies to establish annual performance plans covering each program activity set forth in their budget and to report annually on actual performance achieved relative to the performance goals established under the plan. See 31 U.S.C. §§ 1115(b), 1116.

results from fiscal years 2007 to 2010. OAM headquarters officials stated that they were not aware that they had calculated their performance results inaccurately—due to limitations with AMOR reporting functions—before we brought it to their attention in July 2010. In fiscal year 2010, for example, OAM reported that it exceeded its performance goal and met Border Patrol support requests greater than 98 percent of the time, but the actual rate of support based on our subsequent analysis was 82 percent.⁵³ After we informed them of the error, OAM officials stated they plan to use the same methodology for calculating GPRA performance results in fiscal year 2011 because they plan to continue to generate the results from the AMOR system. Thus, OAM's performance results will continue to be calculated and reported inaccurately. The GPRA Modernization Act of 2010 requires that agencies identify (1) the level of accuracy required for the intended use of the data that measures progress toward performance goals and (2) any limitations to the data at the required level of accuracy.⁵⁴ Disclosure of the data limitations relating to the accuracy of OAM's reported performance results for fiscal year 2011 could help improve transparency for achieving program results and provide more objective information on the relative effectiveness of the program, as intended by GPRA.⁵⁵ This is also important because, if a performance goal is not met, GPRA, as amended, requires agencies to explain why the goal was not met and present plans and schedules for achieving the goal.⁵⁶ OAM headquarters officials initially stated that its new information system will allow OAM to calculate and analyze performance results starting in fiscal year 2012; however, this may not be

⁵³OAM calculated the percent of Border Patrol support requests met using two different AMOR reports, one of which substantially understated the number of unmet requests. As a result, OAM reported that it did not meet 369 Border Patrol support requests in fiscal year 2010; however, our analysis of the underlying data in AMOR found that OAM did not meet 3,379 of requests. OAM officials acknowledged this error after we brought it to their attention, and stated that the pre-programmed reports in AMOR do not allow them to accurately calculate GPRA performance results.

⁵⁴Pub. L. No. 111-352, §§ 3, 4, 124 Stat. 3866, 3869, 3872 (codified at 31 U.S.C. §§ 1115(b)(8)(C)-(D), 1116(c)(6)(C)-(D)).

⁵⁵See Pub. L. No. 103-62, § 2(b)(3), (5), 107 Stat. 285, 285 (1993).

⁵⁶31 U.S.C. § 1116(c)(3)(A)-(B).

possible due to the technical problems that have delayed its implementation to March 2012.⁵⁷

Further Action to Coordinate Air and Marine Operations Could Provide Benefit

OAM and USCG officials we surveyed across proximately located air and marine units reported varying levels of coordination across missions, activities, or resources and that to different extents, the coordination that occurred between the agencies was effective and resulted in reduced duplication and cost savings. However, OAM and USCG officials identified one or more areas where improved coordination was needed, and several officials identified opportunities to colocate facilities that, if implemented, could achieve cost savings. DHS oversight to maximize interagency coordination across locations could better ensure the most efficient use of resources for mission accomplishment.

OAM and USCG Field Units Reported Differences in the Extent of Coordination across Mission-related Activities

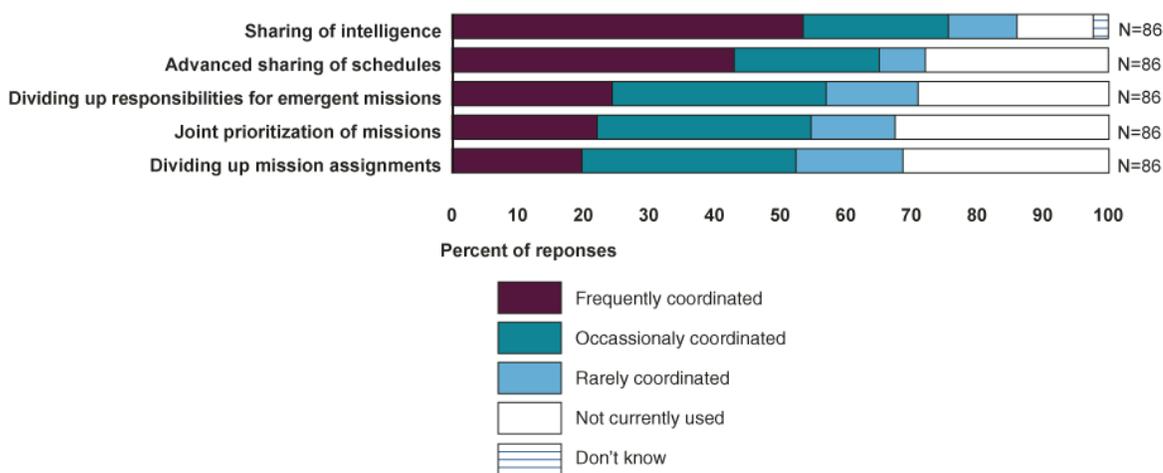
Our survey showed that the extent of coordination between OAM and USCG air and marine units varied by mission activity. We surveyed officials from 86 OAM and USCG air and marine units that were proximately located about the frequency of interagency coordination across five mission-related and four mission support activities.⁵⁸ CBP has cited a multilayered approach to border security which relies on close coordination with partner agencies to reduce reliance on any single point or program that could be compromised and extends the zone of security. Across mission-related activities, 54 percent of responding units reported sharing intelligence on a frequent basis and 43 percent reported sharing schedules, on a frequent basis. For example, personnel from USCG, Department of Defense, and Federal Aviation Administration are assigned to OAM's Air and Marine Operations Center to facilitate interagency

⁵⁷OAM officials stated that OAM expanded its performance measure for fiscal year 2011 to include support to all DHS homeland security missions, including those requested by ICE, instead of only Border Patrol's.

⁵⁸The survey included one response each from a total of 86 OAM and USCG locations, including 31 air locations (18 OAM branches or units and 13 USCG stations) and 55 marine locations (27 OAM branches or units and 28 USCG stations). For purposes of this section, we refer to these OAM and USCG entities as air and marine units. See appendix II for detailed survey responses.

coordination.⁵⁹ Fewer officials reported frequent coordination for other mission activities, such as prioritizing missions (22 percent) and dividing up mission assignments (20 percent), as shown in figure 8. OAM and USCG headquarters officials told us that a number of factors may affect the opportunities and frequency of interagency coordination including the extent that there is overlap between agency missions and geographic areas of responsibility. For detailed survey results, see appendix II.

Figure 8: Percentage of OAM and USCG Survey Respondents on Coordinating across Mission-related Activities



Source: GAO survey of OAM and USCG units.

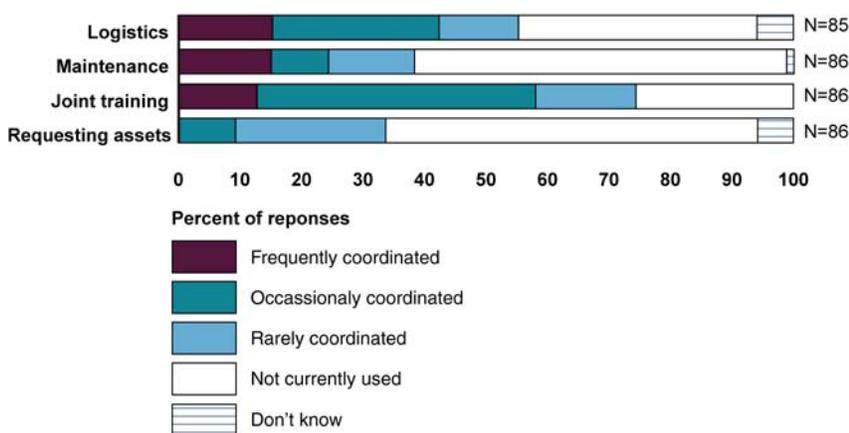
Note: Percentages may not add to 100 percent due to rounding. See question 3 in app. II for detailed survey responses.

The level of OAM and USCG coordination across mission support activities was less than for mission-related activities, according to surveyed officials. DHS has cited that improved efficiency, effectiveness, and interoperability in mission support activities could be achieved by decreasing mission overlap, consolidating CBP and USCG ground

⁵⁹OAM cited over 60 examples of a variety of coordination efforts in which OAM field units participate, including participation on an executive committee to address policy and procedure matters related to unmanned aircraft system access to the National Airspace System, supporting local High Intensity Drug Trafficking Area narcotics, money laundering, and gang investigation groups, meeting weekly with Border Patrol officials to discuss riverine matters, training USCG personnel at the National Marine Training Center in St. Augustine, Florida, and coordinating local officials to develop emergency management plans.

facilities which are in close proximity, and reducing fleet diversity. Within mission support activities, about 15 percent of the officials responding to the survey reported that they frequently coordinated for logistics and maintenance, as compared to 13 percent and 0 percent for joint training and requesting assets, respectively, as shown in figure 9. OAM and USCG headquarters officials said that the levels of coordination in these areas may reflect differences between OAM and USCG, such as less coordination of aircraft maintenance because the two agencies do not have any aircraft models in common and little coordination in requesting assets because field officials are not primarily responsible for these duties.

Figure 9: Percentage of OAM and USCG Survey Respondents on Coordinating across Mission Support Activities



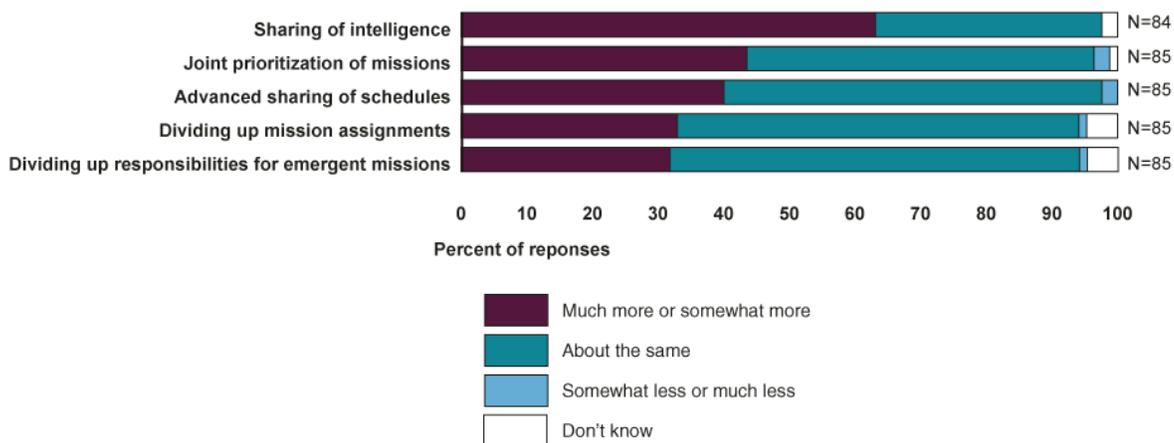
Source: GAO survey of OAM and USCG units.
 Note: Percentages may not add to 100 percent due to rounding. See question 3 in app. II for detailed survey responses.

OAM and USCG Field Units Reported a Need for More Coordination to Share Intelligence and Conduct Joint Training

OAM and USCG officials responding to our survey said that they needed more coordination across one or more mission-related areas as shown in figure 10. DHS stressed the importance of coordinating across components to optimize mission performance in its strategic plans, establishing various departmental level councils, interagency operations centers, and integrating guidance teams across components to identify areas for increased coordination and provide operational oversight. Specifically, DHS planning guidance for fiscal years 2011 to 2015 states that conducting intelligence activities in an integrated and collaborative manner helps to ensure the provision of timely, accurate, and actionable

intelligence and information to all DHS components and appropriate external mission partners. However, 63 percent of survey respondents reported a need for more intelligence sharing. In addition, between 33 and 44 percent of respondents reported they would like to see more coordination in other mission areas, such as advanced sharing of schedules, prioritizing, and dividing mission responsibilities.

Figure 10: Percentage of OAM and USCG Survey Respondents on Additional Coordination Needed across Mission-related Activities

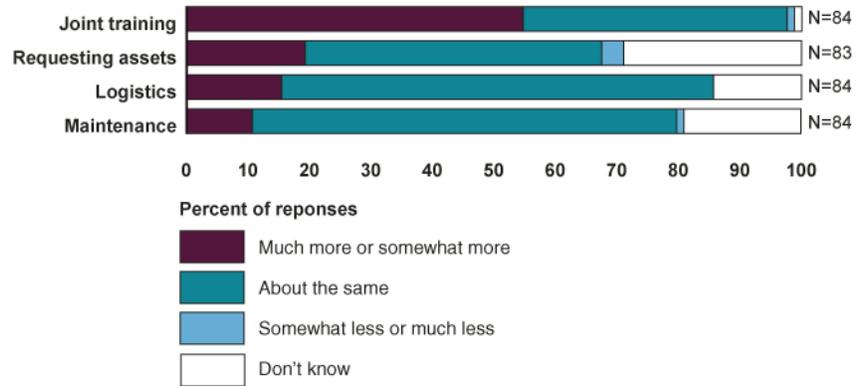


Source: GAO survey of OAM and USCG units.

Note: Percentages may not add to 100 percent due to rounding. See question 13 in app. II for detailed survey responses.

Similarly, over half of survey respondents reported a need for more coordination of joint training, as shown in figure 11. Joint training was cited to strengthen partnerships and facilitate efficiencies in conducting joint operations and patrols. Fewer than 20 percent reported a need to further coordinate maintenance, logistics and asset requests.

Figure 11: Percentage of Additional OAM and USCG Survey Respondents on Additional Coordination Needed across Mission Support Activities



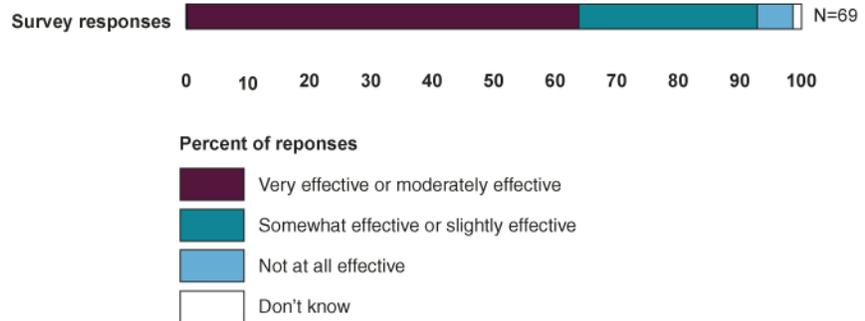
Source: GAO survey of OAM and USCG units.

Note: Percentages may not add to 100 percent due to rounding. See question 13 in app. II for detailed survey responses.

DHS Oversight to Increase Intra-agency Coordination of Mission and Support Activities Could Increase Operational Effectiveness, Reduce Duplication, and Achieve Cost Savings

DHS oversight to increase coordination between OAM and USCG could provide benefits as OAM and USCG field units reported that the coordination that occurred increased effectiveness and sometimes reduced duplication of effort and achieved cost savings. In terms of increasing effectiveness, about 64 percent of the respondents said the current level of coordination was very or moderately effective, as shown in figure 12. Officials provided examples of how coordination was effective in leveraging operations during our site visits. For example, OAM and USCG marine officials in one southwest border location stated that sharing mission schedules provides greater patrol coverage of the vast area of responsibility, and in one northern border location, OAM and USCG marine officials stated that they fill in for each other on an ad hoc basis, such as bridge inspections and other infrastructure.

Figure 12: Percentage of OAM and USCG Survey Respondents on Overall Coordination Effectiveness

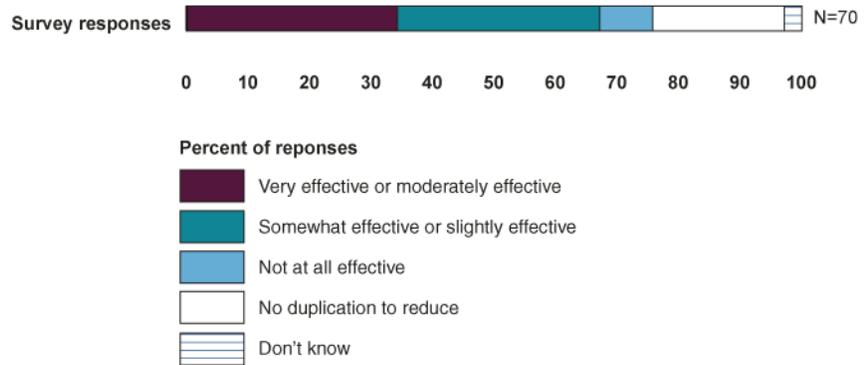


Source: GAO survey of OAM and USCG units.

Note: Percentages may not add to 100 percent due to rounding. See question 9 in app. II for detailed survey responses.

Reduced duplication of air and maritime missions, activities, and resources was another cited benefit of coordination. About 34 percent of the 70 officials responding to this question reported that coordination was very or moderately effective at reducing duplication between OAM and USCG air and marine units, as shown in figure 13. For example, in one southwest border location, USCG and OAM marine patrols divide up times and geographic areas to patrol in order to avoid duplication of effort and to reduce unnecessary consumption of resources, including fuel and personnel. However, about 21 percent of these respondents said that there was no duplication to reduce. For example, in one southwest border location OAM conducts air missions over land in support of ICE and other law enforcement entities that are not within USCG geographic area of coverage.

Figure 13: Percentage of OAM and USCG Survey Respondents on Coordination Effectiveness in Reducing Duplication of Missions, Activities, and Resources



Source: GAO survey of OAM and USCG units.

Note: Percentages may not add to 100 percent due to rounding. See question 11 in app. II for detailed survey responses.

Of the 37 OAM officials we surveyed about cost savings resulting from coordination, about one-third reported that some cost savings resulted from coordination in three mission-related activities—intelligence sharing, dividing up responsibilities for missions, and advance sharing of mission schedules. In regard to mission support activities, about one-fourth of the approximately 37 OAM officials reported cost savings from two activities—joint training and logistics. USCG and OAM officials at headquarters and some field locations stated that because the two agencies use different aircraft, opportunities for cost savings due to coordination of mission support activities were reduced.

DHS conducted analyses in 2009 that identified options to strengthen oversight of OAM and USCG coordination to improve operational effectiveness, identify duplication, and achieve cost savings by establishing DHS headquarters-level councils and program offices, among other things. However, DHS does not have program offices dedicated to coordinating aviation or maritime issues. At the departmental level, the DHS Aviation Management Council, chartered in 2004 to provide oversight over air asset coordination, last met in 2008, when a decision was made not to focus department-level managerial resources on aviation. The Marine Vessel Management Council, which was chartered in 2004 to provide marine vessel coordination, has never met, according to officials from DHS Office of Program Analysis and Evaluation. Both the air and marine management councils were to provide oversight over joint management issues, such as identifying and

resolving overlaps in operational and tactical capabilities of assets, developing common acquisition platforms for fleet and communication equipment, and identifying and prioritizing integrated program goals and objectives to improve mission effectiveness. Other councils, operating at the component level without departmental representation, have faced challenges in providing necessary oversight. For example, a DHS program review conducted in 2009 considered alternatives, including use of an Aviation Commodity Council as a mechanism to improve standardization and interoperability for air-related training and use of the Boat Commodity Council to identify areas where marine training could be centralized or consolidated.⁶⁰ The USCG, CBP, and ICE also established a Senior Guidance Team to provide coordination across components.⁶¹ In June 2011, the DHS Under Secretary for Management recommended that the Aviation Management Council be revived to improve efficiency and effectiveness of aviation resource management across all DHS components. A DHS Program Analysis and Evaluation official stated in December 2011 that the DHS Deputy Secretary and Under Secretary for Management were meeting with USCG and CBP aviation officials to address opportunities to improve operational collaboration, asset utilization and distribution, and propose options for joint investment, savings, and cost reduction. In addition, an official from the DHS Office of the Chief Administrative Officer told us that he expected that the Aviation Management Council governance structure would be designed by March 2012. DHS action to enhance overall coordination oversight by the reconstitution of department-level councils, by strengthening component-level councils, or by other means, could better ensure that the agency is maximizing opportunities identified by its field units to improve operational effectiveness, reduce duplication, and achieve cost savings.

⁶⁰A 2009 analysis by DHS Program Analysis and Evaluation also identified benefits to departmental oversight of air and marine assets, such as reducing fleet diversity through unified aviation acquisitions and decreasing overhead costs when CBP and USCG operating areas and missions overlap.

⁶¹Among other things, the Senior Guidance Team was to provide oversight for the July 2011 Maritime Operations Coordination Plan, a concept of operations plan for maritime operational coordination, planning, information sharing, intelligence integration, and response activities.

DHS Action to Pursue Opportunities to Colocate OAM and USCG Facilities Could Achieve Cost Savings

DHS could better position itself to achieve operational efficiencies and cost savings by identifying and pursuing additional opportunities to colocate OAM and USCG air and marine units. OAM and USCG officials told us that as of December 2011, none of their aviation facilities were colocated, that is, they do not share the same or adjacent facilities, and that some marine facilities were shared.⁶² We previously reported that spending constraints outlined in the Budget Control Act of 2011⁶³ and focus on performance envisioned by the GPRA Modernization Act of 2010 point to the need for agencies to find ways to eliminate ineffective and wasteful practices and become more efficient with fewer resources.⁶⁴ With regard to colocating air units, CBP and USCG provided a study to the DHS Deputy Secretary in October 2009 that recommended 2 of 6 previously identified sites—Borinquen, Puerto Rico and Sacramento, California—as potentially viable for colocating aviation assets through fiscal year 2015.⁶⁵ Subsequently, a March 2010 cost-benefit analysis estimated that in Borinquen, Puerto Rico alone, the department could save over \$23 million by colocating such assets.⁶⁶ A DHS Office of Program Analysis and Evaluation official stated that action was not taken in time to take advantage of an opportunity to lease a hangar facility adjacent to the USCG facility, which would have allowed the shared use of facilities, such as repair shops and fuel storage, as well as shared services and assets, such as security, janitorial, and ground support equipment.

With regard to Sacramento, California and the remaining four air sites that previous DHS studies identified for potential colocation, cost-benefit

⁶²OAM and USCG share some joint maintenance facilities for marine vessels.

⁶³On August 2, 2011, the President signed the Budget Control Act of 2011, Pub. L. No. 112-25, 125 Stat. 240, which raised the federal government's debt limit and established discretionary spending caps for the next 10 years, among other things.

⁶⁴GAO, *Streamlining Government: Key Practices from Select Efficiency Initiatives Should Be Shared Governmentwide*, [GAO-11-908](#), (Washington, D.C.: Sept. 30, 2011).

⁶⁵The other four locations were San Diego, California; Detroit, Michigan; and Jacksonville and Miami, Florida.

⁶⁶Estimate is net present value. Present value is the worth of the future stream of costs in terms of money paid immediately. This estimate illustrates the potential for cost savings from colocation of facilities. These cost savings would occur because colocation would avoid the need for extensive modifications and improvements over a span of 20 years at the current OAM facility.

analyses have not been completed due to various challenges, such as agency resistance to colocation and lack of resources to conduct necessary analyses, according to an Assistant Director from the DHS Office of Program Analysis and Evaluation.⁶⁷

Regarding the colocation of marine units, OAM and USCG field officials responding to our survey pointed out three additional locations where an assessment for colocating marine facilities in Texas and Florida may identify potential cost savings.⁶⁸ In Texas, one respondent said that USCG has 18 land acres in one Texas location and is in the process of demolishing and rebuilding the marine station. This respondent stated that colocating the OAM marine unit with the USCG at the Texas location would save money that is used to lease commercial space and boat moorage at the present OAM location. There were similar opportunities suggested for cost savings at two locations in Florida. One respondent stated that colocating OAM marine units with USCG in one Florida location would reduce OAM costs for leased space at local marinas, and colocating OAM and USCG marine units at another Florida location would also provide OAM the use of secured docks and ramps. None of these opportunities to colocate marine units had yet been pursued by CBP or USCG as of December 2011. USCG headquarters officials said that they did not closely track initiatives at the local level and had no further information on these colocation suggestions by their field units. Similarly, OAM headquarters officials in the Facilities Management Division said they had been provided no information and therefore had no plans to pursue the colocation opportunities suggested by field units. Further, OAM officials stated that as part of its standard practice, OAM's Facilities Management Division coordinates with USCG when searching for potential unit location sites. DHS action to identify and pursue opportunities for colocating its marine units could result in operational efficiencies and cost savings, as envisioned by the DHS strategic plan and the GPRA Modernization Act of 2010.

⁶⁷USCG officials stated in October 2011 that they were considering moving the Sacramento, CA facility to a military base in southern California to increase security and move closer to the coastline.

⁶⁸We did not assess the cost effectiveness of these proposed changes because it was beyond the scope of our work and we report them to note that some potential opportunities for savings were identified by survey respondents.

Conclusions

The limited resources that OAM has to provide support to OBP, ICE, and other customers highlights the importance of effectively assessing the extent to which the mix and placement of OAM resources best meets competing needs and addresses threats across locations and documenting analyses to support those decisions. While OAM has developed strategic and deployment plans, it did not document analyses that clearly linked such factors as threats and mission needs to its resources deployment decisions. Further, while OAM has taken actions that could increase its ability to meet support requests, our analysis indicates potential issues with the mix and placement of resources, such as challenges in meeting its support goal and lower support rates in locations identified as high priority based on threats. As such, documenting analyses to support decisions regarding the mix and placement of OAM assets and personnel could help improve transparency of OAM's resource decisions. Moreover, to the extent that the benefits outweigh the costs, taking action to ensure reassessment of the mix and placement of its assets could help provide OAM with reasonable assurance that it is most effectively allocating its scarce resources and aligning them to fulfill its mission needs and related threats. Furthermore, while OAM has established a performance measure to assess support provided to its customers, OAM did not disclose data limitations relating to the accuracy of its reported performance results for support provided. Such disclosure could help improve transparency for achieving program results and provide more objective information on the relative effectiveness of the program.

With regard to coordination, survey respondents reported that coordination that occurred between OAM and USCG, such as intelligence sharing, was effective and resulted in reduced duplication and cost savings. However, our survey and interviews also highlighted activities where additional coordination could help leverage existing resources, eliminate unnecessary duplication and enhance operational efficiencies, including an assessment of whether proximate OAM and USCG units should be colocated. Thus, DHS could benefit from assessing actions it could take to improve coordination across a range of air and marine activities, including reconstituting the DHS Aviation Management Council and Marine Vessel Management Council.

Recommendations for Executive Action

To help ensure that OAM assets and personnel are best positioned to effectively meet mission needs and address threats, and improve transparency in allocating scarce resources, we recommend that the Commissioner of U.S. Customs and Border Protection take the following three actions:

- document analyses, including mission requirements and threats, that support decisions on the mix and placement of OAM's air and marine resources;
- to the extent that benefits outweigh the costs, reassess the mix and placement of OAM's air and marine resources to include mission requirements, performance results, and anticipated CBP strategic and technological changes; and
- disclose data limitations relating to the accuracy of OAM's reported performance results for support provided.

To help DHS to better leverage existing resources, eliminate unnecessary duplication and enhance efficiencies, we further recommend that the DHS Deputy Secretary assess the feasibility of actions that could be taken to improve coordination across a range of air and marine activities, including reconstituting the DHS Aviation Management Council and Marine Vessel Management Council. Areas under consideration for increased coordination could include the colocation of proximate OAM and USCG units and the five activities identified by officials as resulting in cost savings, including sharing intelligence, dividing up responsibilities for missions, advance sharing of mission schedules, joint training, and logistics.

Agency Comments and Our Evaluation

We provided a draft of this report to DHS and DOD for their review and comment. DOD did not comment on the report, but DHS provided written comments which are reprinted in Appendix V. In commenting on the draft report, DHS concurred with the recommendations and described actions underway or planned to address them. While DHS did not take issue with the recommendations, DHS provided details in its response that merit additional discussion in two areas.

In its letter, DHS states that additional context regarding CBP's processes and documentation was necessary to provide a more balanced assessment of the manner in which OAM allocates scarce resources in support of its air and marine asset deployment and describes the historical development of OAM as well as its processes for allocating resources. We believe that the report presents appropriate context,

balanced and fair analyses of the allocation of OAM personnel and flight hours using OAM's data, and measures OAM's performance results using its primary and most important performance measure for fiscal year 2010—OAM's capability to launch an aircraft when a request is made for support. In addition, in commenting on the draft report, DHS also states CBP was unable to verify or duplicate GAO's analysis of fiscal year 2010 data from TECS, but was taking steps to confirm actual figures.⁶⁹ As the report states, we worked closely with OAM system officials to extract the underlying data from the AMOR system and discussed our preliminary analyses with OAM officials along with the methodology we used in calculating OAM's performance results. OAM officials stated that they could not duplicate our analyses due to limitations with AMOR's reporting capabilities. DHS states that OAM has coordinated with the Office of Information and Technology to develop and test a TECS report following a methodology that will accurately report performance results within 60 days.

In regard to the recommendation that CBP document analyses, including mission requirements and threats, that support decision on the mix and placement of OAM's air and marine assets, DHS concurred. DHS stated that CBP is finalizing its Fiscal Year 2012-2013 Aircraft Deployment Plan and that in the next iteration of this plan, which CBP plans to initiate in the third quarter of fiscal year 2013; CBP will provide additional documentation of its analysis supporting decision of the mix and placement of air and marine resources, including mission requirements and threats. Such actions should increase transparency and demonstrate that resource deployment decisions are responsive to customer need and threat.

DHS also concurred with the recommendation to reassess the mix and placement of OAM's air and marine resources to include mission requirements, performance results, and anticipated CBP strategic and technological changes to the extent that the benefits outweigh the costs stating that it planned to complete such actions as part of the next iteration of the Aircraft Deployment Plan. Further, DHS states that based on budgetary forecasts, OAM expects that its budget will continue to decrease and that as a result, OAM will meet a lower percentage of

⁶⁹The Air and Marine Operations Reporting system (AMOR) is a module housed in TECS, a legacy DHS system.

requests for air support in coming years. We acknowledge these concerns and believe that a reassessment of the right mix and placement of resources is particularly important in a constrained budgetary environment and should provide reasonable assurance that it is most effectively allocating its scarce resources and aligning them to fulfill its mission needs and related threats.

Regarding the recommendation to disclose data limitations relating to the accuracy of OAM's reported performance results for support provided, DHS concurred. It also reported that CBP is modifying its performance measure beginning with the reporting of fiscal year 2011 results and plans to disclose applicable data limitations related to performance results. Such actions should improve transparency for achieving program results and provide more objective information on the relative effectiveness of the program.

In regard to the recommendation that DHS assess the feasibility of actions it could take to improve coordination across a range of air and marine activities, including reconstituting the DHS Aviation Management Council and Marine Vessel Management Council, DHS concurred and described multiple initiatives it had underway to improve coordination across air and marine activities. Such activities included DHS meetings between CBP and USCG aviation officials to explore options for joint acquisitions, colocation, air operations, and aviation governance; and a cost-benefit assessment analyzing potential efficiencies with DHS aviation activities including maintenance, training, and ground handling equipment. DHS also identified coordination efforts of its component-level Boat Commodity Council to transfer used vessels from USCG to CBP. DHS discussed attendance at a January 2012 interagency meeting hosted by CBP that discussed helicopter and marine vessel acquisitions, the P-3 aircraft Service Life Extension Program, potential opportunities for consolidation of facilities and locations of new support units and the Fiscal Year 2012-2013 Aircraft Deployment Plan. While these are positive initial steps and could help improve coordination, we continue to believe that it will be important for DHS to assess the feasibility of actions to further improve coordination of air and marine activities on a more permanent basis, such as reconstituting the DHS Aviation Management Council and Marine Vessel Management Council, among other possible actions.

DHS also provided technical comments that we incorporated as 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, the Secretary of Defense, and interested congressional committees as appropriate. The report will also be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any further questions about this report, please contact me at (202) 512-8777 or gablerr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors are listed in appendix VI.



Rebecca Gambler
Acting Director, Homeland Security and Justice Issues

Appendix I: Objectives, Scope, and Methodology

Objectives

This report addresses the extent that the U.S. Customs and Border Protection (CBP) has the right mix of air and marine assets in the right locations to meet customer needs, and effectively coordinated with the U.S. Coast Guard (USCG). Specifically, we reviewed the extent that the Office of Air and Marine (OAM):

- (1) met air and marine support requests across locations, customers, and missions,
- (2) has taken steps to ensure that its mix and placement of resources met its mission needs and addressed threats, and
- (3) coordinated the operational use of its air and marine assets and personnel with the USCG.

Scope and Methodology

For all three objectives, we collected and analyzed relevant operational documents; annual reports; cooperation agreements and memoranda among federal agencies; budget information; and other relevant information issued by the Department of Homeland Security (DHS), DHS's Program Analysis and Evaluation office, CBP's Office of Border Patrol and OAM, U.S. Immigration and Customs Enforcement (ICE), USCG, and the Department of Defense (DOD). We also collected relevant information, data and documentation, such as cooperative agreements between local agencies, at each of the site visits. We also interviewed officials from DHS's Program Analysis and Evaluation office, Division of the Office of the Chief Financial Officer, as well as headquarters officials from CBP, OAM, Border Patrol, ICE, and USCG. In addition, we met with DOD officials responsible for programs intended to enhance maritime and air domain awareness and obtained relevant reports and documents on these efforts. We also reviewed past GAO reports and DHS studies discussing opportunities for increased coordination and discussed ongoing DHS efforts to increase oversight over air and marine assets with officials from DHS's Chief Administrative Officer. We also conducted a site visit to OAM's Air and Marine operations Center at Riverside, California where we interviewed officials and were provided a briefing on the Air and Marine Operations Center operations, including a tour of the center.

We conducted site visits to 4 of the 23 OAM branch offices, including air and marine units associated with those branches. At the site visits, we conducted semi-structured interviews with personnel from OAM operational air and marine units, USCG, ICE, and the Border Patrol, as

well as some local law enforcement officials (OAM marine and the USCG are not present at one location we visited). We selected these 4 locations because they illustrated OAM operations at both the northern and southern U.S. borders, a mix of threats (terrorism, drug smuggling, and illegal immigration), operating environments for air (desert, forest, urban and rural), as well as marine operations along the coasts, on the Great Lakes, and, in the case of a southeast location, interactions with the Joint Interagency Task Force-South (JIATF-S) at Key West, Florida. All 4 also provide support for ICE and Border Patrol operations in the interior of the country. In addition, the 4 sites provided coverage in terms of the three geographic regions into which OAM units are divided administratively (southwest, southeast, northern). Three of the 4 sites include both OAM and USCG entities with air and/or marine assets in close geographic proximity, and the agencies use an array of air and marine assets under varying operational conditions. We also interviewed officials from JIATF-S to obtain information on that location's coordinated operations covering parts of the Gulf of Mexico, the straits of Florida, the Caribbean and the Central and South America transit zone for illegal smuggling of persons and contraband.

AMOR System Data

To address objectives 1 and 2, we obtained performance data for fiscal year 2010 covering the time period of October 1, 2007, through September 30, 2010, from OAM's system of record—the Air and Marine Operations Reporting System (AMOR)—which is a module in ICE's Case Management System, which is in turn part of TECS, a legacy DHS system. This performance data primarily included the number of air and marine support requests that were met and not met, and the reasons why the requests were not met.

Due to the lack of (1) documentation as to the number and identity of the AMOR tables, (2) the keys required to join them, (3) the business rules required to use the data correctly, and (4) AMOR subject matter experts, we were unable to obtain copies of the AMOR data files.¹ Instead, we obtained copies of the temporary data extract files produced when individual reports are requested and produced by the AMOR system for the following reports:

¹Tables are the basic structures within databases that are used to store data; table keys are required to uniquely identify each record in a table, and to link similar records from different tables.

- Enforcement Support Report 02: Support Requests by Agency
- Miscellaneous Report 01: No Launch Activities by Branch
- Flight Hours Report 06: Flight Hours by Type of Aircraft
- Flight Hours Report 09: Flight Hours by Mission
- Service Hours Report 03: Service Hours by Type of Vessel

We found that data on unmet air and marine support requests prior to fiscal year 2010 may not have been entered consistently and only used data from fiscal year 2010 in our analysis. For example, at two of the four locations we visited, we found that a number of unmet air support requests were not entered properly prior to fiscal year 2010. We also found that many of the data entries for unmet support requests identifying which agency an activity (e.g., flight) supported were left blank for fiscal year 2010, including 16 percent in support of requests for air enforcement activities and 93 percent in support of requests for marine enforcement activities. In interviews with OAM officials, they said these blank entries represented unmet support requests most likely in support of OAM. Based on these limitations, we did not report unmet support requests by customer for marine activities.

We used the 2010 Air data from Enforcement Support Report 02 and Miscellaneous Report 01 to replicate OAM's performance measure calculation by branch. First, we determined which Miscellaneous Report 01 no launches were in support of Border Patrol (BPL) as follows:

- Include only no launches where BPL is listed in any of the five in support of codes
- Exclude the following no launch categories:
 - 39: Canceled by requester
 - 01: Target Legal
 - 03: Lost Target- prior to launch
 - 07: Visual sighting
 - 08: Locate only
 - 11: Insufficient/Inadequate
 - 16: Weather
 - 17: Information not timely
 - 27: Target return to foreign
 - 40: Request did not meet GSA requirements
 - 41: Suspect no show
 - 42: Geographic limitation/Distance too
 - 44: No launch/Ground
 - 45: No launch/NAV violation
 - 46: No country clearance

- 56: Static display—not operated for display
- 57: Certificate of Authorization Restrictions

We then determined the number of BPL launches from Enforcement Report 02 and calculated the OAM performance measure for BPL support as follows:

- Total requests = launches + no launches
- Percentage of support requests met = launches / total requests

Finally, we mapped the Border Patrol sectors to the OAM branches as follows:

Table 4: OAM Branches that Serve Border Patrol Sectors

Border Region	Border Patrol Sector	OAM Branch
Northern	Blaine	Bellingham Air and Marine Branch
	Buffalo	Buffalo Air and Marine Branch
	Detroit	Great Lakes Air and Marine Branch
	Grand Forks	North Dakota Air Branch
	Havre	Montana Air Branch
	Houlton	Houlton Air Branch
	Spokane	Spokane Air Branch
	Swanton	Plattsburgh Air Branch
Southeast	Miami	Jacksonville Air and Marine Branch
		Miami Air and Marine Branch
	New Orleans	New Orleans Air and Marine Branch
	Ramey	Caribbean Air and Marine Branch
Southwest	Del Rio	Del Rio Air Branch
	El Centro	El Centro Air Branch
	El Paso	El Paso Air Branch
	Laredo	Laredo Air Branch
	Big Bend	Alpine Air Branch
	Rio Grande Valley	Houston Air and Marine Branch
		McAllen Air and Marine Branch
	San Diego	San Diego Air and Marine Branch
	Tucson	Tucson Air Branch
	Yuma	Yuma Air Branch

Source: GAO analysis of Border Patrol and OAM information.

Note: In fiscal year 2010, the Border Patrol requested and received air support from OAM NASOCs and did not request air support from the National Capital Region Air Branch.

As part of our data reliability assessment, we performed electronic data testing for the data elements in the report extract files that we used; reviewed available system and user documentation, including user guides and data dictionaries; compared totals for the same time periods between similar variables from different reports; and reviewed our preliminary analyses with knowledgeable OAM officials, including the TECS Systems Control Officer.² We determined that the AMOR data used in the report were sufficiently reliable for the purposes of this report.

Web-based Self-administered Survey

To address objectives 1 and 3, we conducted a web-based, self-administered questionnaire survey about coordination and related issues with all OAM air, OAM marine, USCG air and USCG marine units nationwide and in the Caribbean identified as being likely to coordinate with each other by OAM and USCG headquarters. We asked OAM and USCG headquarters points of contact to identify the USCG units that were most likely to be coordinating their operations in some regard with proximately located OAM air and marine units. A total of 86 OAM and USCG units were identified by the headquarters' points of contact and senior officers from these units were asked to respond.³

The survey questions, although nearly identical, were tailored specifically to each type of unit—OAM air, OAM marine, USCG air and USCG marine. OAM air and OAM marine were asked about the sufficiency of their assets to perform certain types of missions; this was not included in the USCG questionnaires, as it was considered outside the scope of the engagement. The survey questions and summary results are included in appendix II. The questionnaire was pre-tested with two OAM air units and two OAM marine units. In addition, draft versions were reviewed by cognizant OAM and USCG headquarters' personnel, and by a survey methodologist at GAO. We made adjustments to question wording and order based on pre-test results and review comments we received.

The survey was conducted using a self-administered questionnaire posted on the web. We contacted intended recipients via e-mail before

²The process we used to extract, reconcile, and convert OAM operational data for analysis took over 6 months to complete.

³An 87th unit, an OAM marine unit in San Juan, Puerto Rico, was closed by OAM in the spring of 2011, and did not answer the survey. Since the unit closed, we did not include it in the count of eligible units.

the survey to establish that the correct respondent had been identified, and later with passwords and links to the questionnaire. We made follow-up contacts with nonrespondents by e-mail and phone throughout the field period. Headquarters (USCG and OAM) points of contact were also sent email reminders to those not yet responding. The survey data were collected from May 4 through May 24, 2011. We received completed questionnaires from all the recipients, for a 100 percent unit-level response rate, although not all units answered each question in the survey. Table 5 below shows the proximately located OAM and USCG air and marine units to which the survey was sent.

Table 5: OAM and USCG Units to Which the Survey Was Sent

OAM Air Locations	USCG Air Location
Bellingham Air and Marine Branch	Air Station Port Angeles
Brown Field Air Unit	Sector San Diego
San Diego Air and Marine Branch	
Buffalo Air and Marine Unit	Air Station Detroit
Great Lakes Air and Marine Branch	
Plattsburgh Air Unit	
Caribbean Air and Marine Branch	Air Station Borinquen
Houlton Air Unit	Air Station Cape Cod
Houston Air and Marine Branch	Air Station Houston
McAllen Air Branch	
Jacksonville Air and Marine Branch	Helicopter Interdiction Tactical Squadron – Jacksonville
NASOC – Jacksonville	
Miami Air and Marine Branch	Air Station Miami
NASOC – Corpus Christi	Sector Corpus Christi
National Capital Region Air Branch	Air Station Atlantic City / National Capital Region Branch
New Orleans Air and Marine Branch	Air Station New Orleans
Sacramento Air Unit	Air Station Sacramento
Tampa Air Unit	Air Station Clearwater
OAM Marine Location	USCG Marine Location
Bellingham Marine Unit	Station Bellingham
Brownsville Marine Unit	Station South Padre Island
Buffalo Marine Unit	Station Buffalo
Corpus Christi Marine Unit	Station Port Aransas
Erie Marine Unit	Station Erie

Appendix I: Objectives, Scope, and Methodology

Fort Lauderdale Marine Unit	Station Fort Lauderdale
Fort Myers Marine Unit	Station Fort Myers Beach
Fort Pierce Marine Unit	Station Fort Pierce
Galveston Marine Unit	Station Galveston
Jacksonville Marine Unit	Station Mayport
Key Largo Marine Unit	Station Islamorada
Marathon Marine Unit	Station Marathon
Miami Marine Unit	Station Miami Beach
Ponce Marine Unit	Station Ponce De Leon Inlet
Port Angeles Marine Unit	Station Port Angeles
Port Huron Marine Unit	Station Port Huron
Rochester Marine Unit	Station Rochester
San Diego Marine Unit	Station San Diego
Sandusky Marine Unit	Station Marblehead
Sault Ste. Marie Marine Unit	Station Sault Ste. Marie
Saint Thomas Marine Unit	Marine Safety Detachment Saint Thomas
Tampa Marine Unit	Station Saint Petersburg
Trenton Marine Unit	Station Belle Isle
West Palm Marine Unit	Station Lake Worth Inlet

Source: GAO.

We conducted this performance audit from June 2010 through February 2012 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.

Appendix II: GAO Survey Responses

The questions we asked in our survey of OAM and USCG air and marine units are shown below. Our survey was comprised of closed-ended and open-ended questions. In this appendix, we include all the survey questions and aggregate results of responses to the closed-ended questions; we do not provide responses to the open-ended questions for ease of reporting. The tables of aggregated response totals to each question are broken down by branch and type of unit. Not all eligible respondents answered each question. Questions 16, 17, and 18 were included only in the OAM surveys. For a more detailed discussion of our survey methodology see appendix I.

Survey of Coordination of Air Operations and Assets at OAM/USCG Locations U.S. Government Accountability Office

The U.S. Government Accountability Office (GAO) is reviewing the assets and operations of CBP's Office of Air and Marine (OAM). As part of this effort, GAO is reviewing the coordination between OAM and the U.S. Coast Guard (USCG).

This questionnaire gathers information on coordination-related issues regarding air missions (including air patrols, interdiction of contraband or other illegal activities, surveillance, etc.), air-related training, determining air asset requirements, and the extent to which you have the appropriate resources for mission activities.

If you would like to see or print the questionnaire before completing it online, [click here to open](#). You will need Adobe Acrobat Reader to view this. If you do not have this program, [click here to download this software](#).

If you have a question about this questionnaire or the GAO review, please call or email either:

[names and contact information redacted]

About You and Your Location

Question 1: Who is the person primarily responsible for completing this questionnaire whom we can contact in case we need to clarify a response? Enter text or numbers in each of the spaces below.

Name: [Open-ended answers not displayed]

Title/Rank: [Open-ended answers not displayed]

Organization [Open-ended answers not displayed]
(e.g., Great Lakes Air and Marine Branch)

Location (City, State): [Open-ended answers not displayed]

Phone: [Open-ended answers not displayed]

Email: [Open-ended answers not displayed]

Coordination of Air/Maritime Mission Activities

Question 2: We realize that different OAM locations may have varying needs for coordination with the USCG unit there or nearby, and may not need to coordinate if operating areas and activities do not overlap. The next two questions ask whether your unit participates in any formal or informal entities intended to enhance or promote coordination, and in what specific ways, if any, it coordinates with the USCG.

At your location, do OAM and USCG currently use any of the following entities to coordinate in advance of air/maritime missions, and if so, about how frequently is each entity used to coordinate?

(Coordination prior to air/maritime missions might include sharing schedules or intelligence, among other things.) Click the one button in each row that best describes your use or nonuse of that entity for mission coordination. [Table II.1 Answers to Survey Question 2]

		Not currently used	Used daily	Used weekly or bi-weekly	Used monthly	Used annually	Used on ad hoc basis	Don't Know	Number of Respondents
National coordinating entity (e.g., DHS Air Council, DHS Boat Commodity Council)	OAM Air	12	1				4	1	18
	OAM Marine	22			2		1	2	27
	USCG Air	11		1		1			13
	USCG Marine	20				1		7	28
Regional coordinating entity (e.g., JIATF-S)	OAM Air	9	4		2		2	1	18
	OAM Marine	19	1	1	3	1	2		27
	USCG Air	6	4	1		1	1		13
	USCG Marine	18		1	2	2	2	3	28

Appendix II: GAO Survey Responses

		Not currently used	Used daily	Used weekly or bi-weekly	Used monthly	Used annually	Used on ad hoc basis	Don't Know	Number of Respondents
Local coordinating entity (e.g., San Diego Maritime Unified Command, or Interagency Operations Center)	OAM Air	6	4	1	2		4	1	18
	OAM Marine	16	5	1	2		3		27
	USCG Air	4	3	3	1		2		13
	USCG Marine	10	4	3	4		5	2	28
Informal local coordinating group (e.g., one that does not have a charter)	OAM Air	7	4	1	1		4	1	18
	OAM Marine	6	9	8	2		2		27
	USCG Air	6	1	2	2		1	1	13
	USCG Marine	6	4	8	4	1	3	2	28
Informal contacts between individuals prior to air missions / maritime missions	OAM Air	5	3	1			8		17
	OAM Marine	2	14	4	1		5	1	27
	USCG Air	3	2	1	2		5		13
	USCG Marine	4	5	12	1		5	1	28
Other entities - describe in box below:	OAM Air	6	2				1	3	12
	OAM Marine	11	2	2	3		1	1	20
	USCG Air	5			1		1		7
	USCG Marine	5	1	3	4			8	21

IF OTHER:

[Open-ended answers not displayed]

Question 3: At your location, do OAM and USCG currently coordinate air/maritime missions, activities, or resources in any of the following ways? And if so, about how often do you think that form of coordination is used? [Table II.2 Answers to Survey Question 3]

		Not currently used	Frequently Used	Occasionally used	Rarely used	Don't know	Number of Respondents
Advance sharing of mission schedules	OAM Air	7	9	1	1		18
	OAM Marine	8	14	4	1		27
	USCG Air	3	5	3	2		13
	USCG Marine	6	9	11	2		28
Joint prioritization of missions	OAM Air	9	4	4	1		18
	OAM Marine	6	8	9	4		27
	USCG Air	6		5	2		13
	USCG Marine	7	7	10	4		28

Appendix II: GAO Survey Responses

		Not currently used	Frequently Used	Occasionally used	Rarely used	Don't know	Number of Respondents
Dividing up mission assignments	OAM Air	8	4	4	2		18
	OAM Marine	10	4	9	4		27
	USCG Air	5	1	4	3		13
	USCG Marine	4	8	11	5		28
Dividing up responsibilities for unscheduled, emergent or missions in-progress	OAM Air	8	4	4	2		18
	OAM Marine	6	7	10	4		27
	USCG Air	6	1	5	1		13
	USCG Marine	5	9	9	5		28
Sharing of intelligence	OAM Air	5	9	3	1		18
	OAM Marine		22	4	1		27
	USCG Air	2	2	3	4	2	13
	USCG Marine	3	13	9	3		28
Joint air-related / maritime-related training opportunities	OAM Air	10	1	3	4		18
	OAM Marine	2	5	16	4		27
	USCG Air	4	1	5	3		13
	USCG Marine	6	4	15	3		28
Requesting new assets or changes to assets	OAM Air	14		2	1	1	18
	OAM Marine	15		1	8	3	27
	USCG Air	7			5	1	13
	USCG Marine	16		5	7		28
Logistics	OAM Air	12		3	2	1	18
	OAM Marine	6	4	9	3	4	26
	USCG Air	7		3	3		13
	USCG Marine	8	9	8	3		28
Maintenance	OAM Air	14		2	2		18
	OAM Marine	14	7	2	3	1	27
	USCG Air	9		1	3		13
	USCG Marine	15	6	3	4		28
Other ways - describe in box below:	OAM Air	6	1	1	1	3	12
	OAM Marine	8	3	3		4	18
	USCG Air	6			1	1	8
	USCG Marine	7	4	1		5	17

IF OTHER:

[Open-ended answers not displayed]

Question 4: IF ANY AIR/MARITIME MISSION COORDINATION TAKES PLACE:

What is the one USCG/OAM unit with which your unit has the most coordination? Please enter approximate distance between your unit and the coordinating unit as a whole number of miles.

[Table II.3 Answers to Survey Question 4]

Unit name: [Open-ended answers not displayed]
 Unit location: [Open-ended answers not displayed]
 Distance to that unit in miles: ___ miles

	Distance to that Unit in Miles								Number of Respondents
	Minimum	10th	25th	Mean	Median	75th	90th	Maximum	
		Percentile	Percentile			Percentile	Percentile		
OAM Air	1	1	2	70.8	50	90	150	360	14
OAM Marine	0	1	2	13.7	4	10	30	120	25
USCG Air	1	1	1	58.0	25	60	200	260	11
USCG Marine	1	1	1	12.8	4	15	30	110	18

Question 5: IF NO AIR/MARITIME MISSION COORDINATION IN QUESTIONS 2 AND 3 ABOVE:

What is the reason(s) why there is no coordination between OAM and USCG on air/maritime missions, activities, and resources at this location? [Table II.4 Answers to Survey Question 5]

	Little or no overlap in operating areas or activities	Other reason - describe in box below:	Number of Respondents
OAM Air	6	2	8
OAM Marine	2	6	8
USCG Air	2	1	3
USCG Marine	1	6	7

IF OTHER:

[Open-ended answers not displayed]

IF NO AIR/MARITIME MISSION COORDINATION IN QUESTIONS 2 AND 3: Click the link below to skip to question 13, the next applicable question. (If you do coordinate, continue with next page.)

[Click here to skip to Question 13](#)

Guidance for Coordination

Question 6A: Are any of the following types of written guidance (including policies, agreements, MOUs) used to govern, guide or carry out any coordination prior to air/maritime missions between OAM and USCG at or near your location? Please click yes or no for each type. [Table II.5 Answers to Survey Question 6]

		Yes	No	Number of Respondents
DHS guidance / interagency agreements - Used?	OAM Air	4	8	12
	OAM Marine	16	9	25
	USCG Air	4	7	11
	USCG Marine	13	9	22
USCG guidance - Used?	OAM Air	4	8	12
	OAM Marine	17	8	25
	USCG Air	3	8	11
	USCG Marine	19	2	21
Locally-developed guidance / MOU - Used?	OAM Air	7	5	12
	OAM Marine	16	9	25
	USCG Air	7	4	11
	USCG Marine	10	12	22
Other guidance - Used?	OAM Air	3	6	9
	OAM Marine	5	12	17
	USCG Air	1	5	6
	USCG Marine	2	16	18

Question 6B: If yes, how helpful are they to furthering coordination on air/maritime missions?

For those used, please additionally click one "helpfulness" button. [Table II.6 Answers to Survey Question 6]

Appendix II: GAO Survey Responses

		Very helpful	Moderately helpful	Slightly helpful	Not at all helpful	Don't know	Number of Respondents
DHS guidance / interagency agreements - IF YES:	OAM Air		2	2		4	8
	OAM Marine	9	4	4	1	1	19
	USCG Air		2	3			5
	USCG Marine	4	3	4	2	1	14
USCG guidance - IF YES:	OAM Air	1	2	1		4	8
	OAM Marine	7	5	7	1	1	21
	USCG Air	1	2	1			4
	USCG Marine	6	5	7	3		21
Locally-developed guidance / MOU - IF YES:	OAM Air	4	2	1		2	9
	OAM Marine	11	3	2		1	17
	USCG Air	2	2	3			7
	USCG Marine	3	6	1	2		12
Other guidance - IF YES:	OAM Air	2	1			1	4
	OAM Marine	3			1	2	6
	USCG Air	1					1
	USCG Marine	1		1	1	2	5

IF OTHER:

[Open-ended answers not displayed]

Question 7: IF YES TO ANY GUIDANCE:

If an electronic copy of the guidance is available, please upload that file(s) by browsing to its location on your computer, using the box below. Please only upload files under 2Mb in size.

[No results to report because this asked for copies of guidance]

Opinions on Coordination

Question 8: How much of an increase in effectiveness, if any, has resulted from using any of the following entities to coordinate between OAM and USCG at or near your location prior to air/maritime missions? Click the one button in each row that best describes the increase in effectiveness from coordinating through that entity. If that entity is not used, click "Not currently used." [Table II. 7 Answers to Survey Question 8]

Appendix II: GAO Survey Responses

		Not	A			No	Don't	Number of
		currently	A great	moderate	A slight	increase	know	Respondents
		used	increase	increase	increase			
National coordinating entity (e.g.,	OAM Air	11				2		13
DHS Air Council, DHS Boat	OAM Marine	15	1	4	1	2	1	24
Commodity Council)	USCG Air	9			1		1	11
	USCG Marine	9			1	2	10	22
Regional coordinating entity (e.g.,	OAM Air	5	2	1	2	2	1	13
JIATF-S)	OAM Marine	14	1	4	1	3	1	24
	USCG Air	5	3	1	2			11
	USCG Marine	9		1	3	2	7	22
Local coordinating entity (e.g., San	OAM Air	2	2	3	3	1	2	13
Diego Maritime Unified Command,	OAM Marine	10	4	2	3	4	1	24
or Interagency Operations Center)	USCG Air	3	2	3	2		1	11
	USCG Marine	2	3	5	4	3	5	22
Informal local coordinating group	OAM Air	2	3	3	3	1	1	13
(e.g., one that does not have a	OAM Marine	3	6	7	7	1		24
charter)	USCG Air	4	1	5	1			11
	USCG Marine	1	8	4	3	5	1	22
Informal contacts between	OAM Air	1	2	6	2		2	13
individuals prior to air missions /	OAM Marine		9	8	3	3	1	24
maritime missions	USCG Air	4	2	3	2			11
	USCG Marine		10	5	4	3		22
Other entities - describe in box	OAM Air	2	1		1		3	7
below:	OAM Marine	5	3	1			2	11
	USCG Air	4					1	5
	USCG Marine	5	2			2	3	12

IF OTHER:

[Open-ended answers not displayed]

Question 9: Overall, how effective is the current level of air-related/maritime-related coordination between OAM and USCG at your location? [Table II.8 Answers to Survey Question 9]

Appendix II: GAO Survey Responses

	Very effective	Moderately effective	Somewhat effective	Slightly effective	Not at all effective	Don't know	Number of Respondents
OAM Air	2	4	3	3		1	13
OAM Marine	8	9	2	3	1		23
USCG Air	1	5	2	2	1		11
USCG Marine	6	9	2	3	2		22

Question 10: How much reduction in duplication of air/maritime missions, activities and resources, if any, has resulted from using any of the following entities to coordinate between OAM and USCG? Click the one button in each row that best describes the reduction in duplication from coordinating through that entity. If that entity is not used, click "Not currently used." [Table II.9 Answers to Survey Question 10]

		Not currently used	A great reduction	A moderate reduction	A slight reduction	No reduction	There was no duplication to reduce	Don't know	Number of Respondents
National coordinating entity (e.g., DHS Air Council, DHS Boat Commodity Council)	OAM Air	8				3	2		13
	OAM Marine	15	2	1	1	2	1	2	24
	USCG Air	6				1	2	2	11
	USCG Marine	11				2	3	6	22
Regional coordinating entity (e.g., JIATF-S)	OAM Air	4			2	3	3	1	13
	OAM Marine	14	1	4	1	2	1	1	24
	USCG Air	5	1		1	2	1	1	11
	USCG Marine	10			2	2	4	4	22
Local coordinating entity (e.g., San Diego Maritime Unified Command, or Interagency Operations Center)	OAM Air	2	1	1	3	1	4	1	13
	OAM Marine	9	1	5	2	3	2	1	23
	USCG Air	1	1	2	2	2	2	1	11
Informal local coordinating group (e.g., one that does not have a charter)	USCG Marine	3	2	2	4	2	4	4	21
	OAM Air	4	2		3	1	3		13
	OAM Marine	3	4	5	5	4	3		24
	USCG Air	4		2	2		2	1	11
Informal contacts between	USCG Marine	1		6	6	2	4	2	21
	OAM Air	1	2	1	3	1	4	1	13

Appendix II: GAO Survey Responses

		Not currently used	A great reduction	A moderate reduction	A slight reduction	No duplication to reduce	There was no duplication to reduce	Don't know	Number of Respondents
individuals prior to air missions	OAM Marine		5	6	5	3	4	1	24
	USCG Air	3	2	1	2		2	1	11
	USCG Marine		4	6	2	3	4	2	21
Other entities - describe in box below:	OAM Air	2	1		1	2	1	1	8
	OAM Marine	6	3		1		1	3	14
	USCG Air	4					1	1	6
	USCG Marine	5		1			2	4	12

IF OTHER:
[Open-ended answers not displayed]

Question 11: Overall, how effective is the current level of coordination between OAM and USCG at your location at reducing duplication of air/maritime missions, activities, and resources? [Table II.10 Answers to Survey Question 11]

	Very effective	Moderately effective	Somewhat effective	Slightly effective	Not at all effective	No duplication to reduce	Don't know	Number of Respondents
OAM Air	1	2	1	3		6		13
OAM Marine	4	5	4	3	2	5	1	24
USCG Air		2	4	1	1	3		11
USCG Marine	6	4	3	4	3	1	1	22

Question 12: How much cost savings for your unit, if any, has resulted from coordination prior to air/maritime missions between OAM and USCG in any of the following ways? Click the one button in each row that best describes the amount of cost savings resulting from that type of coordination. If that type of coordination is not used, click "Not currently used." [Table II.11 Answers to Survey Question 12]

		Not currently used	Great savings	Moderate savings	Slight savings	No savings	Don't know	Number of Respondents
Advance sharing of mission schedules	OAM Air	1	1	2	4	4	1	13
	OAM Marine	6		2	3	8	5	24

Appendix II: GAO Survey Responses

		Not currently used	Great savings	Moderate savings	Slight savings	No savings	Don't know	Number of Respondents
Joint prioritization of missions	OAM Air	3	2	1	2	3	2	13
	OAM Marine	5		2	4	8	5	24
Dividing up mission assignments	OAM Air	3	2		1	5	2	13
	OAM Marine	8		2	4	5	5	24
Dividing up responsibilities for unscheduled, emergent or missions in-progress	OAM Air	3	2	2	1	4	1	13
	OAM Marine	5		3	5	6	5	24
Sharing of intelligence	OAM Air	2	4	1	1	2	3	13
	OAM Marine	1	1	3	4	10	5	24
Joint air-related training opportunities	OAM Air	7	1		2	3		13
	OAM Marine	3	1	1	4	12	3	24
Requesting new assets or changes to assets	OAM Air	8			1	3	1	13
	OAM Marine	12			2	6	4	24
Logistics	OAM Air	6		1		3	2	12
	OAM Marine	5	3	1	5	4	5	23
Maintenance	OAM Air	8		1	1	3		13
	OAM Marine	9		1	3	4	7	24
Other ways - describe in box below:	OAM Air	3			1	2	1	7
	OAM Marine	6	3	1		2	4	16

IF OTHER:

[Open-ended answers not displayed]

Question 13: In your opinion, should there be more, less, or about the same amount or frequency of coordination on air/maritime missions, activities, or resources between OAM and USCG at or near your location in each of the following ways? If there is currently no coordination in a particular way, and that is the appropriate level, click "About the same" for that row. [Table II.12 Answers to Survey Question 13]

		Much more	Somewhat more	About the same	Somewhat less	Much less	Don't know	Number of Respondents
Advance sharing of mission schedules	OAM Air	1	2	15				18
	OAM Marine	3	4	18	1	1		27
	USCG Air	2	4	7				13
	USCG Marine	7	11	9				27

Appendix II: GAO Survey Responses

		Much more	Somewhat more	About the same	Somewhat less	Much less	Don't know	Number of Respondents
Joint prioritization of missions	OAM Air		3	15				18
	OAM Marine	3	6	16		1	1	27
	USCG Air	3	3	7				13
	USCG Marine	7	12	7		1		27
Dividing up mission assignments	OAM Air		2	16				18
	OAM Marine	1	5	18		1	2	27
	USCG Air	2	2	8			1	13
	USCG Marine	7	9	10			1	27
Dividing up responsibilities for unscheduled, emergent or missions in-progress	OAM Air		4	14				18
	OAM Marine	2	5	17	1		2	27
	USCG Air	1	3	7			2	13
	USCG Marine	6	6	15				27
Sharing of intelligence	OAM Air	2	7	9				18
	OAM Marine	4	8	14				26
	USCG Air	5	4	2			2	13
	USCG Marine	14	9	4				27
Joint air-related/maritime-related training opportunities	OAM Air	1	3	12			1	17
	OAM Marine	6	8	12		1		27
	USCG Air	2	3	8				13
	USCG Marine	8	15	4				27
Requesting new assets or changes to assets	OAM Air		3	12			3	18
	OAM Marine	2	2	11		1	10	26
	USCG Air	1		8			4	13
	USCG Marine	4	4	9	1	1	7	26
Logistics	OAM Air	1	1	14			2	18
	OAM Marine	1	4	14			8	27
	USCG Air	1		12				13
	USCG Marine	3	2	19			2	26
Maintenance	OAM Air	1		15			2	18
	OAM Marine		2	15		1	9	27
	USCG Air			11			2	13
	USCG Marine	3	3	17			3	26
Other ways - describe in box below:	OAM Air	3		8			2	13
	OAM Marine	1		5			9	15
	USCG Air		1	5			1	7
	USCG Marine	1		4			7	12

IF OTHER:

[Open-ended answers not displayed]

Challenges and Opportunities

Question 14: What are the challenges, if any, to effectively and efficiently coordinating air/maritime missions, activities, or resources between OAM and USCG at or near your location?

[Open-ended answers not displayed]

Question 15: And what are the opportunities and resources, if any, for effectively and efficiently coordinating air/maritime missions, activities, or resources between OAM and USCG at or near your location?

[Open-ended answers not displayed]

Resources for Mission Activities

[Questions in this section were only administered to OAM Air and Marine units.]

Question 16: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate type(s) of aircraft/vessels (i.e. with the necessary capabilities) to perform the following mission activities? For example, if interdicting air targets/suspect vessels is a mission need at your location, how satisfied are you that you have aircraft/vessels with the capability to undertake and effectively perform interdictions (e.g., a C-550 Citation II Interceptor aircraft / 39' Midnight Express, or a 38' or a 33' SAFE Boat)? If your unit accomplished some missions using aircraft/vessels that were not the most appropriate or best suited to perform the requested activity effectively, please consider those instances as well as missions that your unit could not undertake at all for lack of an aircraft/vessel type. Also, if an activity is not relevant to your location, and the need for that activity does not arise, click "We do not perform this activity." [Table II.13 Answers to Survey Question 16]

Appendix II: GAO Survey Responses

		We do not perform this activity			Neither satisfied nor			Don't know	Number of Respondents
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Somewhat dissatisfied	Very dissatisfied			
Radar patrol: air-to-air	OAM Air	6	5	3	1		3	18	
/ Maritime patrol	OAM Marine		16	6		3	2	27	
Radar patrol: air-to-surface (water)	OAM Air	4	4	3			7	18	
Interdiction / Maritime interdiction	OAM Air	2	6	3	1	3	3	18	
	OAM Marine		18	5		1	3	27	
Surveillance (e.g., vehicle, vessel, or land)	OAM Air		11	5	2			18	
	OAM Marine		9	8	1	3	6	27	
Search (e.g. land, person, or vessel)	OAM Air	3	7	6	1	1		18	
Undercover support	OAM Air	4	6	4	2		2	18	
	OAM Marine	3	5	5	2	6	6	27	
Security support	OAM Air	2	9	5	2			18	
	OAM Marine	2	14	4	3	1	2	27	
Warrant execution	OAM Air	2	11	3	2			18	
	OAM Marine	6	8	5	5		3	27	
Apprehending illegal aliens	OAM Air	1	9	6	2			18	
	OAM Marine		16	7	2	2		27	
Information gathering	OAM Air		6	9	1	1	1	18	
	OAM Marine		10	10	2	4	1	27	
Enforcement relocation (e.g. air-mobile support, marine-mobile support)	OAM Air		5	7	2	2	2	18	
	OAM Marine	2	13	4	4	2	1	27	
Controlled delivery	OAM Air		10	5	1	1	1	18	
	OAM Marine	4	5	6	4	3	3	27	
Recon/Photo	OAM Air		12	4	1			17	
	OAM Marine	1	7	5	4	6	3	26	
Logistics/Transportation	OAM Air	1	7	2	2	3	3	18	
Humanitarian aid	OAM Air	1	5	5	3	3		17	
	OAM Marine	2	10	4	8	1	1	26	
Other activity - describe in box below:	OAM Air		2		4	1	3	12	
	OAM Marine	3	1	1	1		3	11	

Appendix II: GAO Survey Responses

IF OTHER:

[Open-ended answers not displayed]]

Question 17: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate number of mission capable aircraft/vessels to effectively perform the following mission activities?

This would include instances, for example, where you had one Blackhawk but needed two to effectively complete insertion requests. [Table II.14 Answers to Survey Question 17]

		We do not perform this activity		Neither satisfied nor dissatisfied			Don't know	Number of Respondents
		Very satisfied	Somewhat satisfied	Very dissatisfied	Somewhat dissatisfied	Very dissatisfied		
Radar patrol: air-to-air / Maritime patrol	OAM Air	6	4	1	2	1	4	18
	OAM Marine		13	10	1	2	1	27
Radar patrol: air-to-surface (water)	OAM Air	3	3	3	1	1	7	18
Interdiction / Maritime interdiction	OAM Air	1	4	6		4	3	18
	OAM Marine		14	8	1	3	1	27
Surveillance (e.g., vehicle, vessel, marina or land)	OAM Air		7	7		3	1	18
	OAM Marine	1	9	5	3	4	5	27
Search (e.g. land, person, or vessel)	OAM Air	2	5	6	1	3	1	18
Undercover support	OAM Air	2	5	4	2	4	1	18
	OAM Marine	3	6	5	3	6	4	27
Security support	OAM Air	1	5	4	2	3	2	17
	OAM Marine	2	13	4	5		2	1
Warrant execution	OAM Air	2	6	6	1	2	1	18
	OAM Marine	5	9	4	6		1	2
Apprehending illegal aliens	OAM Air	1	6	4	2	3	2	18
	OAM Marine		15	7	4		1	
Information gathering	OAM Air		5	7		4	2	18
	OAM Marine		10	8	3	4	1	
Enforcement relocation (e.g. air-mobile support, marine-mobile support)	OAM Air		6	4	2	3	3	18
	OAM Marine	2	12	4	6		2	1

Appendix II: GAO Survey Responses

		We do not perform this activity		Neither satisfied nor dissatisfied			Very dissatisfied	Don't know	Number of Respondents
		Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Somewhat dissatisfied	Very dissatisfied			
Controlled delivery	OAM Air		8	4	1	3	2		18
	OAM Marine	4	6	5	4	3	4		26
Reconnaissance/Photo	OAM Air		8	5	1	2	1		17
	OAM Marine	1	7	6	4	4	4		26
Logistics/Transportation	OAM Air	1	5	3	3	3	3		18
Humanitarian aid	OAM Air	1	4	3	4	4	2		18
	OAM Marine	3	8	6	8		1	1	27
Other activity - describe in box below:	OAM Air		1		1	1	1	3	7
	OAM Marine	4	1		1		2	5	13

*IF OTHER:
[Open-ended answers not displayed]*

Question 18: Overall, considering the number, availability, and qualifications of personnel at your location, how satisfied or dissatisfied are you with the extent to which you have adequate personnel to effectively meet mission needs? [Table II.15 Answers to Survey Question 18]

	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied		Very dissatisfied	Don't know	Number of Respondents
			Somewhat dissatisfied	Somewhat dissatisfied			
OAM Air	2	5		8	3		18
OAM Marine	8	10	2	3	3	1	27

Comments

*Question 19: Do you have any additional explanations of your answers or comments on any of the issues in this questionnaire?
[Open-ended answers not displayed]*

Submit your Questionnaire

Question 20: Are you done with this questionnaire?

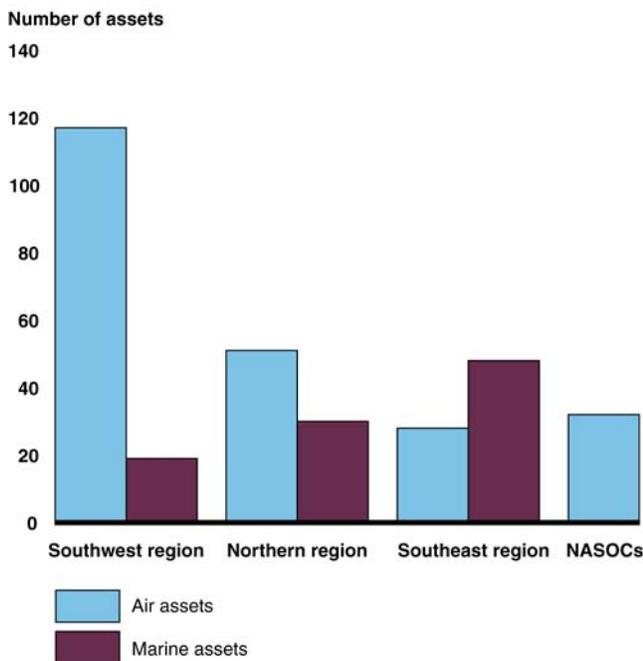
Clicking "Yes" below tells GAO that your answers are final. We will not use your answers unless the "Yes" button is checked when you last exit the questionnaire.
[Table II.16 Answers to Survey Question 20]

	Yes	Number of Respondents
OAM Air	18	18
OAM Marine	27	27
USCG Air	13	13
USCG Marine	28	28
Total	86	86

Appendix III: OAM Air and Marine Assets by Region and National Air Security Operations Centers

Figure 14 displays the number of air and marine assets assigned to OAM's regions, which include its 23 branches and 6 National Air Security Operations Centers (NASOCs).

Figure 14: OAM Air and Marine Assets by Region and National Air Security Operations Centers, as of September 2011



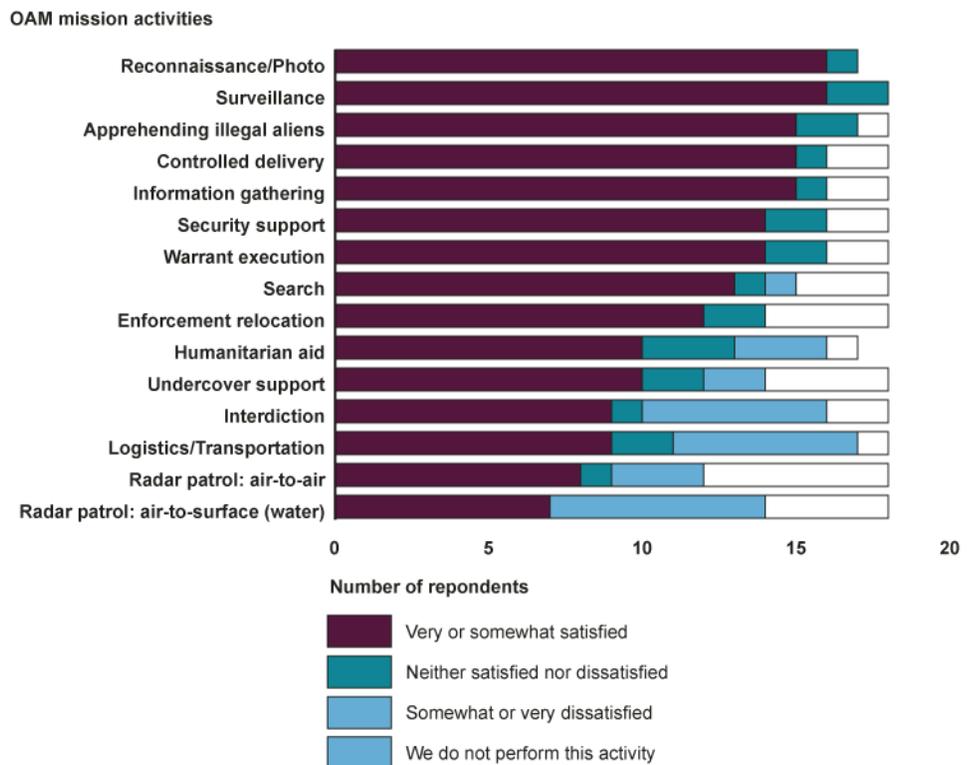
Source: GAO analysis of OAM data.

Note: Air assets include airplanes and helicopters. Marine assets include coastal enforcement, interceptor, and platform vessels. According to OAM officials, OAM also acquires, outfits, and maintains riverine vessels that are operated by Border Patrol agents; the majority of which are located at Border Patrol stations. In September 2011, OAM reported aircraft and marine vessels in other locations, such as 13 aircraft and 16 vessels at training centers and 8 aircraft and 56 vessels at maintenance facilities. Further OAM reported 19 "special operations" vessels assigned for Border Patrol use in rapid response to uncommon law enforcement situations requiring special tactics and techniques, search and rescue, and medical response capabilities.

Appendix IV: Survey Results on OAM Officials' Frequency of Satisfaction with Type and Number of Assets

In this appendix, survey responses from questions 16 and 17 are presented. Only Office of Air and Marine (OAM) air and marine units were surveyed about their satisfaction with aircraft and marine vessels (USCG was not) respectively. Not all eligible respondents answered all parts of each question. Respondents who did not report performing a specific type of mission or who answered "don't know" to a question about that type of mission were not included in the response counts. For a more detailed discussion of our survey methodology see appendix I and for complete survey responses, see appendix II.

Figure 15: Frequency of OAM Survey Respondents' Satisfaction with Type of Aircraft

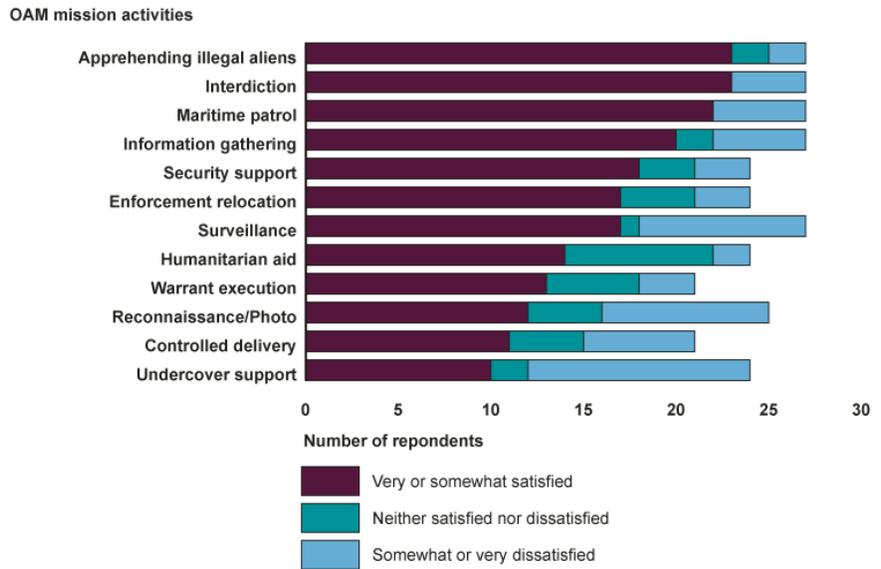


Source: GAO survey of OAM units.

Survey question: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate type(s) of aircraft (i.e., with the necessary capabilities) to perform the following mission activities? (See question 16 in appendix II).

**Appendix IV: Survey Results on OAM Officials'
Frequency of Satisfaction with Type and
Number of Assets**

Figure 16: Frequency of OAM Survey Respondents' Satisfaction with Type of Marine Vessels

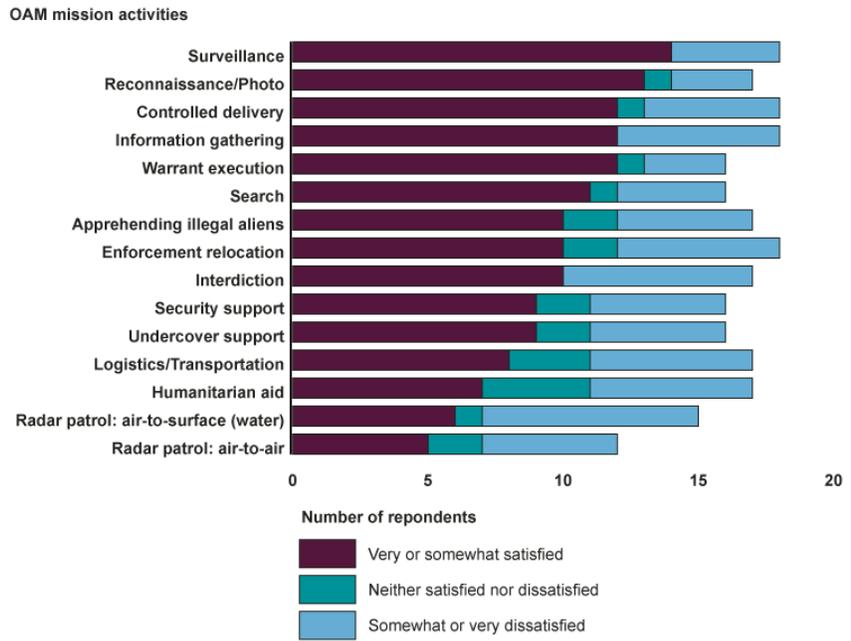


Source: GAO survey of OAM units.

Survey question: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate type(s) of vessels (i.e., with the necessary capabilities) to perform the following mission activities? (See question 16 in appendix II).

**Appendix IV: Survey Results on OAM Officials'
Frequency of Satisfaction with Type and
Number of Assets**

Figure 17: Frequency of OAM Survey Respondents' Satisfaction with Number of Aircraft

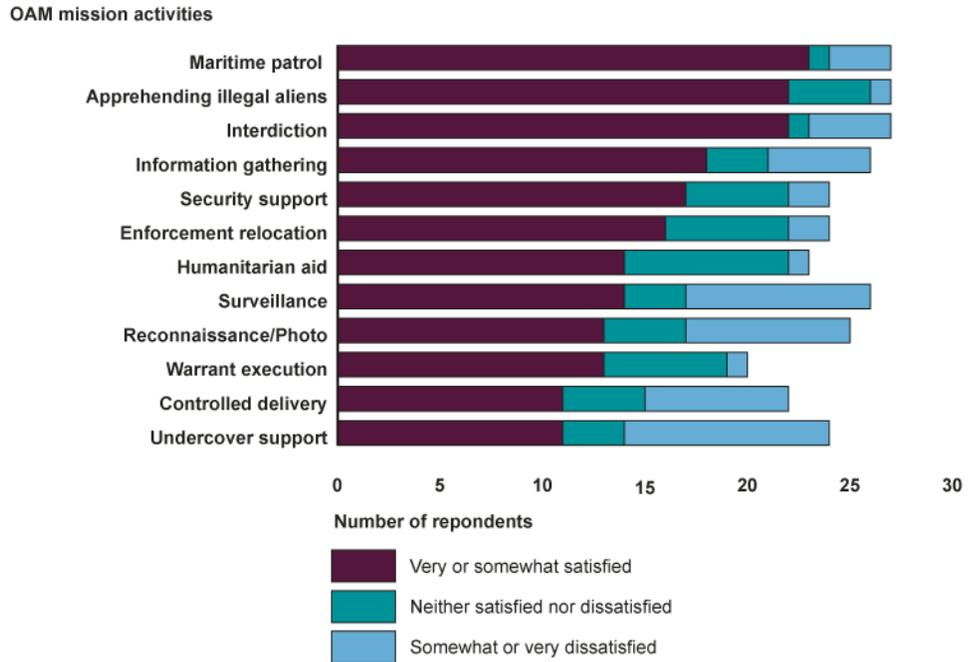


Source: GAO survey of OAM units.

Survey question: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate number of mission capable aircraft to effectively perform the following mission activities? (See question 17 in appendix II).

**Appendix IV: Survey Results on OAM Officials'
Frequency of Satisfaction with Type and
Number of Assets**

Figure 18: Frequency of OAM Survey Respondents' Satisfaction with Number of Marine Vessels



Source: GAO survey of OAM units.

Survey question: Overall, how satisfied or dissatisfied are you with the extent to which you have the appropriate number of mission capable vessels to effectively perform the following mission activities? (See question 17 in appendix II).

Appendix V: Comments from the U.S. Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

March 20, 2012

Rebecca Gambler
Acting Director, Homeland Security and Justice
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Draft Report GAO-12-518, "BORDER SECURITY: Opportunities Exist to Ensure More Effective Use of DHS's Air and Marine Assets"

Dear Ms. Gambler:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased to note GAO's positive acknowledgement of the actions U.S. Customs and Border Protection (CBP) has taken to issue and update its strategic plan for its Office of Air and Marine (OAM) as well as its aircraft deployment plans. The draft report recognizes that the plans have addressed strategic goals, mission responsibilities, threat information, and cost-effectiveness considerations, as well as documented final decisions. It also reiterates the close collaboration between OAM and the Office of Border Patrol (OBP), which is OAM's primary customer of air and marine support, and recognizes many of the factors considered in the planning process. In addition, the report recognizes OAM's resource constraints, and acknowledges ongoing interagency efforts to address that challenge.

However, additional context regarding CBP's processes and documentation are necessary to provide a more balanced assessment of the manner in which it allocates scarce resources in support of its air and marine asset deployment. First, the historical development of OAM is directly relevant to its resource allocation. Second, to understand the efficiency of its asset deployment, one must also consider the actual allocation of personnel, aircraft, vessels, and funding for fuel, which supports its flight and underway hours.

Historical Development

Prior to the establishment of DHS, the assets and personnel that comprise OAM were distributed between the U.S. Border Patrol and U.S. Customs Service. Under the new Department, these legacy resources were consolidated. In 2004, the Air and Marine Operations (AMO) division of the recently formed U.S. Immigration and Customs Enforcement (ICE) was transferred to CBP.

CBP further consolidated the air assets of OBP with the former AMO division in 2005, establishing the Office of CBP Air. CBP officially integrated its marine forces into the Office of CBP Air in 2006, creating what is currently the CBP OAM.

The purpose of these consolidations was to align air and marine law enforcement personnel and assets into one agency to realize greater operational effectiveness and efficiencies, enabling them to better accomplish the new homeland security mission. At the time these forces were consolidated, the locations of the facilities and deployment of these resources were under the direct control of the legacy organizations that are now the customers of OAM, and their asset deployment had been established separately over decades to meet their operational priorities.

Today, these legacy organizations are OAM's customers for air and marine support. The majority of OAM's current mission is to "organize, train, and equip" the air service to support homeland security operations that, by and large, are under the tactical control of other Federal entities, such as OBP, U.S. Immigration and Customs Enforcement, the Joint Interagency Task Force - South, and the Federal Emergency Management Agency. As such, the consolidation did not require significant changes in the deployment of personnel and assets; only relatively minor, incremental changes were needed to consolidate assets and personnel.

Allocation of Resources

This was reflected in a 2007 Report to Congress on the CBP Air Strategic Plan. The strategic plan addressed the aviation coverage and response capabilities needed to respond to homeland security threats and challenges (subsequent strategic plans incorporated the marine program). The report included a modernization plan and was accompanied by an annex that provided an investment model as well as a presentation that identified the current and end state allocation of resources by location. As in subsequent plans, the report stated that, "as threats and intelligence continue to evolve, CBP will review and adjust its plans to properly focus on emerging threats and those of the highest risk, ensuring that high mobility forces are focused on the areas where their capabilities can pay the highest operational dividends."

To accomplish this objective, CBP utilizes a robust process to allocate its personnel, aircraft, marine vessels, and funding for fuel that supports its flight and underway hours. Deployment decisions are made based on the assessment of a wide range of information. This comprehensive and collaborative process includes consideration of current operational capability and capacity; threats and challenges; actionable intelligence; daily ad hoc operational coordination with the Border Patrol; formal discussions of annual Border Patrol requirements; asset acquisitions, maintenance, and requirements; operational initiatives and priorities; quarterly performance reviews, which include applicable data on results; and other evolving factors.

Through daily coordination, strategic and tactical planning, readiness updates, and other reporting, OAM maintains a thorough understanding of its resources. Operating within its resource capacity, this process enables OAM to provide an agile, efficient, and effective response to emerging developments. Asset deployment decisions, such as deployment plans for specific aircraft, aircraft types, or the air fleet in total, are documented and routed through CBP

leadership for concurrence. These deployment plans are developed as necessary, and funding for the fuel for flight and underway hours is allocated annually.

The success of CBP's practices can be seen in the table below, which identifies the actual allocation of OAM personnel, aircraft, and flight hours for both the southwest and northern borders for FY 2010, and illustrates that OAM resources are allocated in direct alignment with the CBP priority given to the Southwest Border.

Table 1: FY 2010 Allocation of OAM Personnel, Aircraft, and Flight Hours to Southwest and Northern Borders

	Southwest Border	Northern Border
Percent of OAM Personnel Allocated	42	19
Percent of OAM Aircraft Allocated	53	23
Percent of Flight Hours Allocated	67	19

In each resource area, OAM dedicated two to three times as many resources to the Southwest Border as the Northern Border, and this resource allocation enabled OAM to meet three times as many air support requests on the Southwest Border. GAO's table on page 36 shows that while OAM met 4,475 requests on the Northern Border (85 percent of the 5,265 requests), OAM met 13,722 requests on the Southwest Border (80 percent of 17,152 requests); three times as many.

This conclusion is further supported by standard aviation readiness and performance indicators used daily within OAM to determine if systemic problems exist or negative trends need to be addressed. These indicators provide a clear picture of aviation readiness and operations support drivers to include: non-mission or partially mission-capable assets due to supply support; non-mission, or partially mission-capable assets due to maintenance; and the impact of assets in non-reporting status due to long-term maintenance or recapitalization.

GAO analyzed data from the Air and Marine Operations Report a module of the Case Management System within the Treasury Enforcement Communications System (TECS), to determine the extent to which OAM had met requests for air and marine support at CBP-designated priority locations. By looking exclusively at this factor, GAO has identified where OAM's current capacity is unable to keep pace with the demand, and where, in an unconstrained environment, OAM would likely allocate additional resources. However, as reported by GAO, OAM has "scarce" resources. Were CBP to reallocate its air and marine resources using the number of requests as the only factor, the reallocation of assets would leave portions of the U.S. border without an OAM presence and incapable of responding to threats that, while less frequent, do arise.

In FY 2011, the primary limiting factor for OAM support was funding for the fuel for its flight and underway hours. OAM flew 110,000 flight hours in FY 2010. While OAM had roughly the same number of aircraft and personnel, its budget for fuel decreased. In FY 2011, through internal offsets, OAM actually flew 94,968 hours, more than 100 percent of its originally

allocated flight hours. For FY 2012, OAM has funding to support an estimated 81,484 flight hours. Based on budget forecasts, OAM expects this downward trend to continue. As a result, OAM expects to meet a lower percentage of requests, though this is in no way attributable to the allocation of its assets.

Through its comprehensive and collaborative resource allocation process, CBP continues to ensure OAM resources are deployed to the highest priority locations as efficiently and effectively as possible. As a result of this ongoing process, OAM has addressed many of the specific challenges reported by GAO since the completion of its self-administered questionnaire survey. For example, the deployment of Multi-role Enforcement Aircraft that were delivered in FY 2011 will address the lack of maritime (air to water) patrol and interdiction capabilities reported by some survey respondents. During FY 2011, OAM also made responsible refinements to its personnel deployment in the Southeast Region in recognition of the changing environment. OAM reassigned Marine Interdiction Agent positions among four units to address changes in the level of illegal smuggling activity.

CBP can also address the calculation and reporting of its Government Performance and Results Act (GPRA) goal, and the significant steps OAM has taken to replace TECS, its performance system. In 2008, OAM proactively identified the need to modernize its disparate reporting systems and set aside funding for a multi-year effort to develop the Tasking, Operations, and Management Information System (TOMIS). Currently in development, TOMIS will be a Web-based system that incorporates best practices and functionalities of the systems it is replacing. Progress on TOMIS was hindered when funds provided by Congress in FY 2008 were subsequently reallocated for higher priority requirements, leaving OAM to provide limited resources for development through internal off-sets. Modules of TOMIS include safety, aviation and marine training, targets, management reporting, and case management functions. TOMIS addresses the challenges identified by GAO and will be used in the future to calculate OAM's performance results.

In prior years, OAM correctly used TECS, as the system of record, as required, to report the information resulting from it. GAO analyzed the raw data for six months to come to its determination. To date, CBP has been unable to verify or duplicate GAO's results, which were provided for FY 2010 only. However, CBP is taking steps to confirm actual figures as discussed in our comments to GAO's recommendations.

While OAM is still required to use TECS, as the system of record, OAM does not intend to use the same methodology for future reporting, nor would OAM fail to report data limitations. For FY 2011, OAM is expanding the GPRA goal from a focus on meeting support requests only from OBP, to meeting support requests for homeland security missions. While still operating within TECS, this change will enable OAM to pull data yielding more accurate results.

The draft report contained two recommendations directed at CBP, with which the Department concurs. Specifically, GAO recommended:

Recommendation 1: To help ensure that OAM assets and personnel are best positioned to effectively meet mission needs and address threats, and improve transparency in allocating scarce resources, GAO recommended that the Commissioner of Customs and Border Protection:

Recommendation 1.a: Document analyses, including mission requirements and threats, that support decisions on the mix and placement of OAM's air and marine resources.

Response: Concur. Consistent with *Standards for Internal Control in the Federal Government*, CBP leadership will continue to document decisions based on the related cost and benefit. CBP's existing practices are an effective and efficient use of scarce public resources, and provide the reasonable assurance required of its decisions, which are documented in its strategic and aircraft deployment plans. In future iterations of these plans, CBP will provide additional documentation of its analyses, including mission requirements and threats, which support the allocation of its air and marine resources. This additional documentation will increase transparency into the process and further demonstrate that OAM's decisions are responsive to customer need and threat. CBP is finalizing its FY 2012-2013 Aircraft Deployment Plan. In the next iteration of the Aircraft Deployment Plan, anticipated to begin development in the third quarter of FY 2013, CBP will document the requirements that support the decisions on the mix and placement of OAM's air and marine resources.

Recommendation 1.b: To the extent that benefits outweigh the costs, reassess the mix and placement of OAM's air and marine resources to include mission requirements, performance results, and anticipated CBP strategic and technological changes.

Response: Concur. As previously described, OAM continually assesses its allocation of air and marine resources. CBP is currently finalizing its FY 2012-2013 Aircraft Deployment Plan, which followed its comprehensive allocation practices. In the next iteration of the Aircraft Deployment Plan, anticipated to begin development in the third quarter of FY 2013, CBP will address the mission requirements, performance results, and anticipated CBP strategic and technological changes in its assessment of the mix and placement of OAM air and marine resources.

Recommendation 1.c: Disclose data limitations relating to the accuracy of OAM's reported performance results for support provided.

Response: Concur. Based on its analysis, GAO identified limitations in the data fields TECS was programmed to use to calculate results for the specific measure, "Percent of air support launches accomplished to support border ground agents to secure the border." CBP is modifying this measure beginning with the reporting of FY 2011 results, so that the data reliability issues pertaining to the referenced performance measure no longer apply. The updated performance measure, "Percent of air support launches accomplished to support Homeland Security missions," has been reclassified from a strategic measure to a management measure, and will be reported to Congress in the annual Fiscal Year Homeland Security Plan Report and Budget.

OAM has coordinated with the Office of Information and Technology (OIT), and the two offices have agreed to verify that the new TECS report will duplicate – once reviewed and found to be

appropriate – the methodology used by GAO to accurately report performance results. Developing and testing the report will take approximately 60 days. Following its review, CBP will disclose applicable data limitations related to its performance results.

Recommendation 2: To help DHS to better leverage existing resources, eliminate unnecessary duplication and enhance efficiencies, GAO recommended that the DHS Deputy Secretary assess the feasibility of actions they could take to improve coordination across a range of air and marine activities, including reconstituting the DHS Aviation Management Council and Marine Vessel Management Council. Areas under consideration for increased coordination could include the co-location of proximate OAM and USCG units and the five activities identified by officials as resulting in cost savings, including sharing intelligence, dividing up responsibilities for missions, advanced sharing of mission schedules, joint training, and logistics.

Response: Concur. Multiple initiatives are already underway to improve coordination across air and marine activities. For example, as reported on page 48 of this draft report, in June 2011, the DHS Deputy Secretary and Under Secretary for Management initiated an aviation coordination effort with the United States Coast Guard (USCG) and CBP aviation officials. This effort is still in progress, and the participants have met periodically to discuss opportunities to gain efficiencies by exploring joint acquisition, co-location and the coordination of OAM and USCG air operations, and DHS aviation governance. Additionally, DHS recently completed a cost benefit assessment (CBA) that included an analysis of potential efficiencies within DHS aviation activities, including, among other activities, maintenance, training and certification, and ground handling equipment. The CBA team, which includes representatives from USCG and CBP, is moving forward with plans to increase cross-component collaboration for aviation-related equipment and maintenance.

As noted by GAO, CBP and USCG also co-chair a component level Boat Commodity Council (BCC), which has resulted in successful coordination. For example, the work of the BCC led to the transfer of used vessels from USCG to CBP over the past 3 years. As of September 12, 2011, the USCG had transferred custody of 106 vessels, of which approximately 65 had been refurbished and placed into service in support of CBP's riverine training and operations. In general, the vessels' hulls were transferred in good condition, some provided with the requisite outboard engines. The transfer of these vessels has enabled CBP to offset a portion of its near-term riverine vessel investments totaling nearly \$22 million (including the amount needed to repair and upgrade the vessels and to provide engines). The remaining boats will be entered into service as funding permits, and as ready pool vessels deploy to meet surge requirements, to replace severely damaged vessels, or augment marine sites in response to changing threats.

On January 5, 2012, CBP hosted a formal Executive Air and Marine Council meeting. Attendees included CBP's Acting Commissioner and Deputy Commissioner; The OBP Chief; and Assistant Commissioners and/or representatives of OAM, Office of Field Operations, Office of Intelligence and Information Liaison, the Joint Operations Directorate; USCG; Joint Interagency Task Force – South; U.S. Secret Service; Office of National Drug Control Policy; The Interdiction Committee; and the DHS Office of the Under Secretary for Management. Initiatives discussed among the attendees included helicopter and marine vessel acquisitions, the P-3

**Appendix V: Comments from the U.S.
Department of Homeland Security**

aircraft Service Life Extension Program, opportunities for potential consolidation of facilities, potential locations of new support units, and the FY 2012-2013 Aircraft Deployment Plan.

Again, thank you for the opportunity to review and comment on this draft report. General, technical, and sensitivity comments on the report were previously provided under separate cover. We look forward to working with you on future Homeland Security issues.

Sincerely,



Jim H. Crumpacker
Director
Departmental GAO-OIG Liaison Office

Appendix VI: GAO Contact and Staff Acknowledgments

GAO Contacts

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Staff Acknowledgments

In addition to the contact named above, Cindy Ayers (Assistant Director), Chuck Bausell, Alexander Beata, Richard D. Brown, Frances A. Cook, Jeff R. Jensen, Nancy Kawahara, Stanley Kostyla, Linda S. Miller, Carl M. Ramirez, Richard M. Stana, Clarence Tull, Jonathan Tumin, and Johanna Wong, made significant contributions to this report.

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