

# DEPARTMENT OF HOMELAND SECURITY

## Office of Inspector General

### Annual Review of Mission Performance

#### United States Coast Guard (FY 2005)



Office of Audits

OIG-06-50

July 2006

*Office of Inspector General*

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



**Homeland  
Security**


July 17, 2006

Preface

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the Homeland Security Act of 2002 (*Public Law 107-296*) by amendment to the Inspector General Act of 1978. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the department.

This report presents the annual review of the U.S. Coast Guard's mission performance and resource hours, as required by the Homeland Security Act of 2002, Public Law 107-296, November 25, 2002. It is based on interviews with employees and officials of relevant agencies and institutions, direct observations, and a review of applicable documents.

It is our hope that this report will result in more effective, efficient, and economical operations. We express our appreciation to all of those who contributed to the preparation of this report.

  
Richard L. Skinner  
Inspector General

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## Abbreviations

ATON	Aids to Navigation
CBP	Customs and Border Protection
DHS	Department of Homeland Security
EEZ	Exclusive Economic Zone
FY	Fiscal Year
LMR	Living Marine Resources
OIG	Office of Inspector General
P.L.	Public Law
PWCS	Ports, Waterways, and Coastal Security
SAR	Search and Rescue

*Department of Homeland Security  
Office of Inspector General*

## Executive Summary

This report presents the annual review of the U.S. Coast Guard's mission performance as required by the Homeland Security Act of 2002.<sup>1</sup> To address the Act's requirements, we reviewed the Coast Guard resource hours used to perform the various homeland security and non-homeland security missions, as well as performance goals and results, from FY 2001 through FY 2005.

**Total Mission Hours Have Increased.** Coast Guard data shows that total mission hours have increased in every period from FY 2001 through FY 2005. Since FY 2001, more resource hours have been dedicated to homeland security missions than for non-homeland security missions. However, after an initial drop in FY 2002, non-homeland security resource hours have increased every period, and have now returned to within 3% of baseline levels.

**Despite Increases in Mission Hours, Performance Still Leaves Room for Improvement.** The Coast Guard has been more successful in meeting goals for its traditional non-homeland security missions, meeting 22 of 28 goals (79%) where measurable goals and results existed, but still leaving room for improved performance. Not including the Ports, Waterways, and Coastal Security mission, by far the largest user of resource hours of any Coast Guard mission, the Coast Guard achieved only 26% of its homeland security goals (5 of 19).

**Barriers to Improving Performance Still Exist.** Growth in total resource hours has leveled off. Since resource hours are based on the limited and finite number of available assets, the Coast Guard will be unable to increase total resource hours without the acquisition of additional aircraft, cutters, and boats. Consequently, the Coast Guard has a limited ability to respond to an extended crisis, and therefore must divert resources normally dedicated to other missions. To improve performance within their overall constraints, the Coast Guard must ensure that a comprehensive and fully defined performance management system is implemented, and that experienced and trained personnel are available to satisfy increased workload demands.

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<sup>1</sup> Public Law 107-296, November 25, 2002. Section 888 directs the Inspector General to conduct an annual review that assesses the performance of all Coast Guard missions, with a particular emphasis on non-homeland security missions.

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## Background

**Coast Guard Missions.** Section 888 of the *Homeland Security Act of 2002* defines the Coast Guard's missions as either non-homeland security missions or homeland security missions as follows:

### Non-Homeland Security Missions

- Search and Rescue
- Aids to Navigation
- Ice Operations
- Living Marine Resources
- Marine Safety
- Marine Environmental Protection

### Homeland Security Missions

- Illegal Drug Interdiction
- Undocumented Migrant Interdiction
- Other Law Enforcement
- Defense Readiness
- Ports, Waterways, and Coastal Security

In addition, Section 888 of the *Homeland Security Act of 2002* prohibits the Secretary from substantially or significantly reducing the missions of the Coast Guard or the Coast Guard's capability to perform those missions.

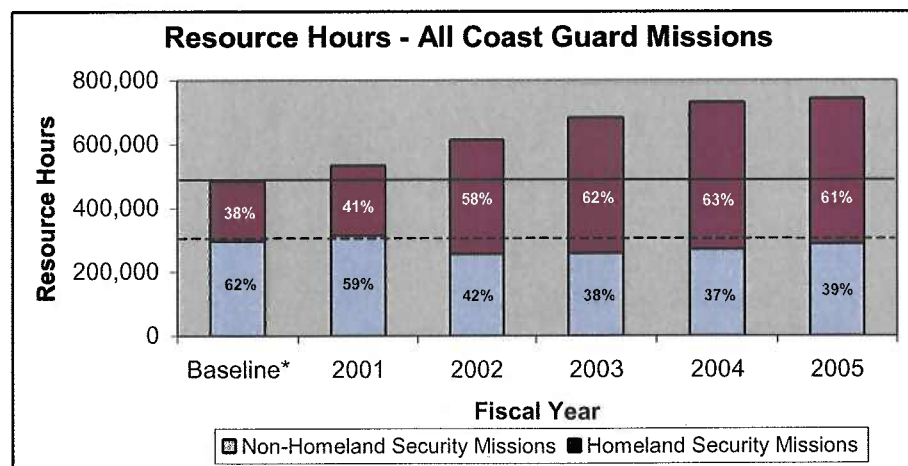
**Resource Hours.** The Coast Guard uses resource hours – generally the number of flight hours (for aircraft) and underway hours (for boats and cutters) dedicated to a specific mission – to determine the amount of time that is utilized in each of its non-homeland security and homeland security mission areas. During our review, we analyzed the total number of resource hours reported by the Coast Guard prior to September 11, 2001 (“baseline”) through FY 2005. We did not, however, verify the resource hour data reported by the Coast Guard, nor did we validate that the Coast Guard had accurately classified resource hour use for each mission. Our analysis did not include resource hour data for the marine safety and marine environmental protection missions because these missions are personnel intensive and are largely carried out without using Coast Guard aircraft, cutter, and boat assets. We assessed total resource hours for the nine individual missions in order to identify the changes in each.

**Performance Goals and Results.** The Coast Guard uses outcome-oriented performance goals and measures to assess results of each Coast Guard mission in achieving current year goals, and to report past performance. Performance results provides information that enables the President, Department, Congress, and the public to assess the effectiveness of the Coast Guard’s mission performance and stewardship of resources. Managers and executives use performance results to help gauge performance against resources appropriated by Congress for each Coast Guard mission, which are aligned with the Department of Homeland Security’s strategic goals. Performance measures are also used to monitor actions and enable executives to make decisions regarding future priorities.

## Results of Audit

### Total Mission Hours Have Increased

The Coast Guard uses mission hours – generally the number of flight hours (for aircraft) and underway hours (for boats and cutters) – as a form of measurement to determine the amount of time dedicated to each of its non-homeland security and homeland security mission areas. Increases in resource hours have occurred in every period from FY 2001 through FY 2005, as depicted in the following chart.



\* Coast Guard-calculated baseline (annual average based on eight fiscal year quarters preceding September 11, 2001) from which changes in resource hours since the September 11 attacks could be estimated.

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Prior to FY 2001, the non-homeland security missions represented the largest percentage of resource hours within the Coast Guard. Following September 11, 2001, the Coast Guard dedicated a larger percentage of resource hours to homeland security missions than for non-homeland security missions, as depicted in the chart above. While total resource hours grew each year, the percentage of resource hours dedicated to homeland security also grew until FY 2005, when the percentage of resource hours dedicated to non-homeland security missions increased for the first time. This shift in resource hours may be attributed to the Coast Guard's response to Hurricane Katrina, when over one-third of all Coast Guard aviation assets were deployed to the Gulf Coast.<sup>2</sup>

In addition, total non-homeland security resource hours have returned to baseline levels. After an initial drop in non-homeland security resource hours in FY 2002, the non-homeland resource hours have increased every year, and in FY 2005 were within 3% of baseline levels. Not only are the total non-homeland security mission resource hours approaching baseline levels, but individual missions that comprise the non-homeland security category are also approaching the pre-9/11 levels in the post-9/11 environment.

Assessments of resource hours for all Coast Guard missions, and individual non-homeland security missions and homeland security missions, are included in Appendices A, B, and C.

## **Despite Increases in Mission Hours, Performance Still Leaves Room for Improvement**

The Coast Guard is not meeting all of its performance goals, despite steady increases in mission hours. The Coast Guard has been much more successful in meeting its goals for its traditional non-homeland security missions, meeting 22 of 28 goals (79%) where measurable goals and results existed, compared to 5 of 19 (26%) for homeland security missions. However, for the safety and environmental missions that comprise the non-homeland security missions, meeting 79% of established goals leaves much room for improved performance by the Coast Guard. For the homeland security missions, the Coast Guard achieved only 26% of its goals. This does not include the Ports, Waterways, and Coastal Security mission, by far the largest user of resource hours of any Coast Guard mission.

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<sup>2</sup> Non-homeland security aircraft resource hours for the 4th Quarter of FY 2005 were more than 60% greater than the 4th Quarter FY 2004 level.

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Of the 11 Coast Guard missions (6 non-homeland security and 5 homeland security), only 2, Aids to Navigation and Marine Environmental Protection, achieved the established goals for the entire 5-year period. In addition, the Marine Safety mission met its goals for the 3 years for which goals were established and results were available. Seven of the remaining missions did not consistently meet the goals, including Living Marine Resources, Search and Rescue, Ice Operations, Illegal Drug Interdiction, Undocumented Migrant Interdiction, Other Law Enforcement, and Defense Readiness. Lastly, the Coast Guard only recently developed a risk-based performance measure for the Ports, Waterways, and Coastal Security mission.

Assessments of performance goals and results for all Coast Guard missions, and individual non-homeland security missions and homeland security missions, are included in Appendices A, B, and C.

## **Barriers to Improving Performance Still Exist**

The Coast Guard faces three major barriers to improving or sustaining its mission performance:

1. Growth in resource hours has leveled off;
2. Limited and finite assets to respond to crises; and
3. Lack of comprehensive and fully defined performance management system.

### **Growth In Resource Hours Has Leveled Off**

Growth in total Coast Guard resource hours, which are significantly greater than baseline levels, has leveled off. The increase in total resource hours from FY 2004 to FY 2005 was less than 1.5%, and total resource hours for the Coast Guard are reaching a maximum. Based on total resource hour data (displayed in the previous chart), coupled with Coast Guard's limited and finite level of aircraft, cutters, and boats, the Coast Guard is within 4% of its statistically projected maximum level of resource hours. Given that resource hours are based on the limited and finite number of available assets, the Coast Guard will be unable to increase its total resource hours without the acquisition of additional aircraft, cutters, and boats.

### **Limited and Finite Assets To Respond To Crises**

The Coast Guard has a limited and finite number of assets, and therefore available resource hours, to respond to an extended crisis. With no additional reserve assets for use in catastrophic situations, the Coast Guard must use



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resource hours normally dedicated to other missions to respond to crises and to meet often drastically changing mission priorities.

For example, in the aftermath of Hurricane Katrina, the Coast Guard deployed over one-third of its aviation assets from all over the country to the Gulf Coast to aid in Search and Rescue operations. As a result, this had a significant effect on resource hours—more than a 60% increase in hours used for non-homeland security missions in the 4th Quarter of FY 2005 versus the 4th Quarter FY 2004. During a November 2005 congressional hearing,<sup>3</sup> the Commandant noted that in moving these assets to the Gulf Coast, the Coast Guard did incur additional risk throughout the rest of the country, such as fewer counter-drug, fisheries enforcement, and migrant interdiction operations conducted in the Caribbean and Florida Straits. The Commandant noted that this is of particular concern due to the age and condition of the Coast Guard's assets.

The Coast Guard's limited capacity is further exacerbated by extended crisis operations, because the heavy use of these assets during the operations results in significant maintenance and reconditioning of those assets during the following months. This loss of resources following extended crisis operations can affect readiness for other missions. Extended crisis operations also result in deferred training, further depleting resource hour availability. During his November 2005 testimony, the Commandant also noted that while the Coast Guard is well positioned for immediate and effective first response, its limited "bench strength," i.e., reserve capability, makes it impossible to sustain these operations for an extended period of time.

### **Lack of Comprehensive and Fully Defined Performance Management System**

In September 2004, we reported that the lack of a comprehensive and fully-defined performance management system impedes the Coast Guard's ability to gauge its performance, allocate resources effectively, and target areas for improved performance.<sup>4</sup> In addition, we stated that the workload demands on the Coast Guard would continue to increase and require experienced and trained personnel, contradicting recent declining experience levels among its personnel. We also stated that sustaining a high operating tempo due to growing homeland security and national emergency demands would further tax the Coast Guard's infrastructure including its aging cutter and aircraft

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<sup>3</sup> Joint hearing before the House Homeland Security Subcommittee on Science and Technology and the Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities regarding "Responding to Catastrophic Events: The Role of the Military and National Guard in Disaster Response," November 9, 2005.

<sup>4</sup> OIG Report Number OIG-04-43.

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fleet. The Coast Guard's Short-range Aids-to-Navigation (ATON) program is a case in point.

The Coast Guard's ATON program utilizes a fleet of seagoing and coastal buoy tenders, ice-breaking tugs, inland construction tenders, river tenders, harbor tugs, self-propelled barges, and small boats to maintain a system of about 50,000 federal signal stations with buoys, lights, and daybeacons. The fleet is also utilized to perform a number of non-ATON-related missions such as search and rescue; ports, waterways, and coastal security; marine environmental protection; defense readiness; and law enforcement. We are concerned that the non-ATON-related workload demands and an aged ATON fleet may be undermining ATON program performance. For example, between FYs 2002 and 2005, the ATON fleet logged 510,000 resource hours for all Coast Guard missions, of which 103,000 hours (20%) were devoted to non-ATON-related missions (6% non-homeland security missions and 14% homeland security missions). During the same period, the ATON availability rate<sup>5</sup> dropped from 98.3% to 97.6%, well below the target rate of 99.7%.

Further, over 20% of the buoy inventory and the bulk of the ATON fleet are aged and in need of replacement or rehabilitation. Of particular concern are reports that the ATON fleet has significant safety, supportability, environmental compliance, and habitability concerns that have existed for decades. The Coast Guard estimates the cost of rehabilitating and replacing these ATON assets could exceed \$500 million; however, to date, the Coast Guard has done little to mitigate or eliminate these concerns. The Coast Guard will have to address these ATON issues to avoid further deterioration of the navigation availability rate and to maintain the ability of the ATON fleet to perform its non-ATON-related missions.

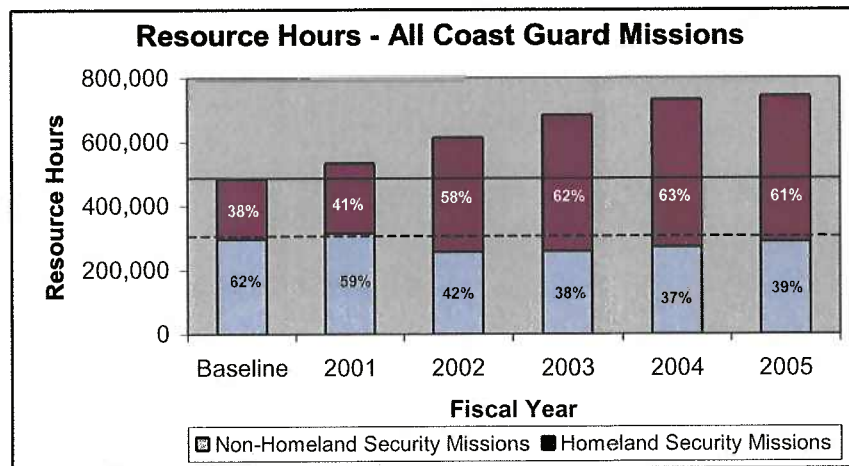
For all Coast Guard missions, the Coast Guard has been sustaining performance through increases in resource hours. However, since the Coast Guard is near its resource hour capacity, it cannot "squeeze out" any more resource hours from its existing assets to ensure the capacity and readiness to respond to future crises or major terrorist attacks. To improve performance, the Coast Guard must ensure that a comprehensive and fully defined performance management system is implemented and that experienced and trained personnel are available to satisfy increased workload demands.

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<sup>5</sup> ATON availability is a measure of the maintenance of established aids to navigation. It measures program effort, reliability of equipment, and personnel performance. While the ATON availability rate is not a true outcome measure, it was used by the Coast Guard as an interim performance measure until the current measure was developed.

**Appendix A**  
**All Coast Guard Missions**

**Total Resource Hours Have Increased.** Total Coast Guard resource hours have significantly increased since the baseline period, with increases in every period through FY 2005, as depicted in the chart below. Note, however, that the increase in total resource hours has leveled off, as the increase in total resource hours from FY 2004 to FY 2005 was less than 1.5%. Based on the data displayed in the chart below, and given the limited and finite level of aircraft, cutters, and boats, the Coast Guard is within 4% of its statistically projected maximum resource hours. Since resource hours are based on the available assets, the Coast Guard will be unable to sustain an increase in total resource hours without the acquisition of additional aircraft, cutters, and boats.



Prior to FY 2001, the non-homeland security missions represented the largest percentage of resource hours within the Coast Guard. Following September 11, 2001, the Coast Guard dedicated a larger percentage of resource hours to homeland security missions than for non-homeland security missions, as depicted in the chart above. While total resource hours grew each year, the percentage of resource hours dedicated to homeland security also grew until FY 2005, when the percentage of resource hours dedicated to non-homeland security missions increased for the first time. This shift in resource hours may be attributed to the Coast Guard's response to Hurricane Katrina, when over one-third of all Coast Guard aviation assets were deployed to the Gulf Coast.

**Overall Coast Guard Performance Goals and Results.** Of the 11 Coast Guard missions (6 non-homeland security and 5 homeland security), only 2, Aids to Navigation and Marine Environmental Protection, achieved the established goals for the entire 5-year period. In addition, the Marine Safety mission met its goals for the 3 years for which goals were established and results were available. Seven of the remaining missions did not consistently meet the goals, including Living Marine Resources, Search and Rescue, Ice

**Appendix A**  
**All Coast Guard Missions**

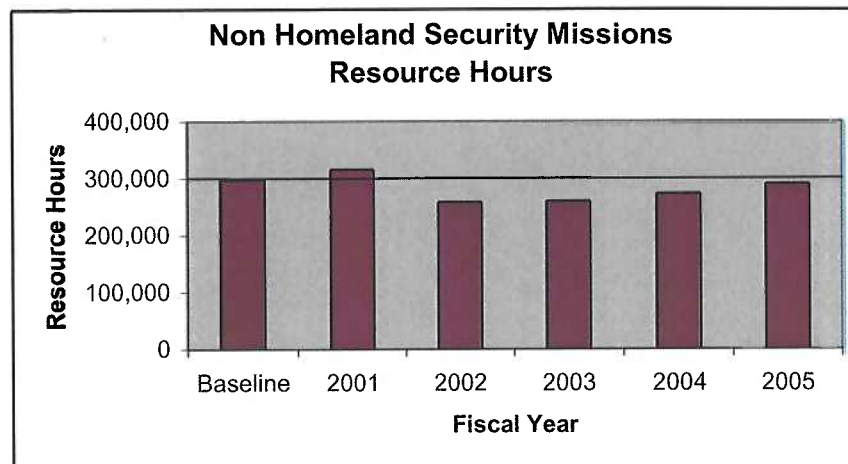
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Operations, Illegal Drug Interdiction, Undocumented Migrant Interdiction, Other Law Enforcement, and Defense Readiness. Lastly, the Coast Guard only recently developed a risk-based performance measure for the Ports, Waterways, and Coastal Security mission. The Coast Guard has been much more successful in meeting its goals for its traditional non-homeland security missions, meeting 22 of 28 goals (79%) where measurable goals and results existed, compared to 5 of 19 (26%) for homeland security missions (not including the Ports, Waterways, and Coastal Security mission, by far the largest user of resource hours of any Coast Guard mission).

## Appendix B Non-Homeland Security Missions

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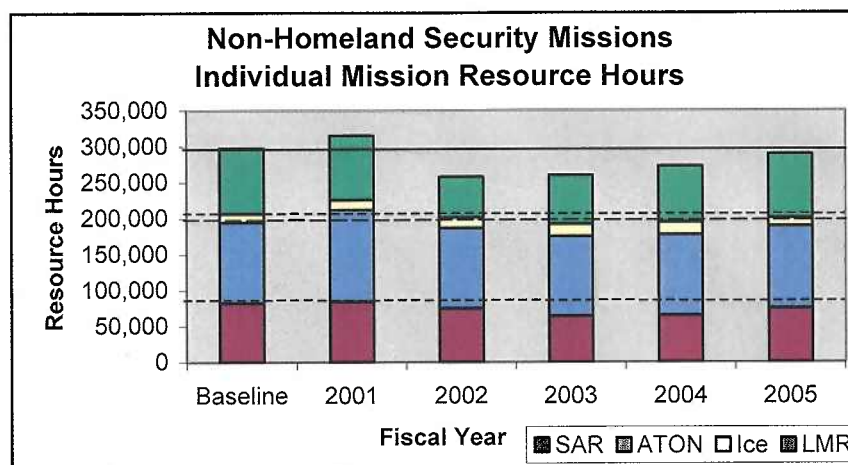
**Non-Homeland Security Resource Hours Are At Baseline Levels.** After an initial drop in non-homeland security resource hours in FY 2002, the total non-homeland resource hours have slowly increased in every year, nearly reaching baseline levels during FY 2005. As seen in the chart below, non-homeland security resource hours for FY 2005 were within 3% of baseline levels.



In addition, the percentage of resource hours dedicated to non-homeland security missions had decreased through FY 2004, from 62% in the baseline period to 37% in FY 2004. This trend was reversed in FY 2005, when 39% of resource hours were dedicated to non-homeland security missions, an increase of 2 percentage points. These figures are depicted in the chart on page 8.

**Individual Missions Are Approaching Pre-9/11 Resource Hour Levels.** Individual non-homeland security missions are approaching the pre-9/11 levels in the post-9/11 environment. The individual missions that comprise the non-homeland security missions – Search and Rescue (SAR), Aids to Navigation (ATON), Ice Operations, and Living Marine Resources (LMR) – are all within 10% of their baseline levels, as depicted in the following chart.

**Appendix B  
Non-Homeland Security Missions**



For the three major non-homeland security missions – SAR, ATON, and LMR – the resource hours have steadily increased after the initial post-9/11 drop. The weather-dependant Ice Operations is less than 4% of the total non-homeland security resource hour total. These major missions have shown significant and steady increases in the past 2 years, suggesting that the Coast Guard has rebounded from the post-9/11 decreases, and is sustaining these levels of effort.

**Performance Goals and Results.** The Coast Guard has been much more successful in meeting its goals for its traditional non-homeland security missions, meeting 22 of 28 goals (79%) where measurable goals and results existed. Two non-homeland security mission areas, Aids to Navigation and Marine Environmental Protection, met their goals for every year during the period of FY 2001 through FY 2005. Goals for Marine Safety were met in the 3 years for which goals were established.

Of the remaining non-homeland security missions, Living Marine Resources, Search and Rescue, and Ice Operations met their goals for 3 of the 5 years. During FY 2005, five missions (Search and Rescue, Aids to Navigation, Ice Operations, Marine Environmental Protection, and Marine Safety) met their goals; only Living Marine Resources did not meet its goal. However, for the safety and environmental missions that comprise the non-homeland security missions, meeting 79% of established goals leaves much room for improved performance by the Coast Guard. Specific performance goals and results for each of the non-homeland security missions from FY 2001 through FY 2005 are summarized in the table below and detailed in the following pages.

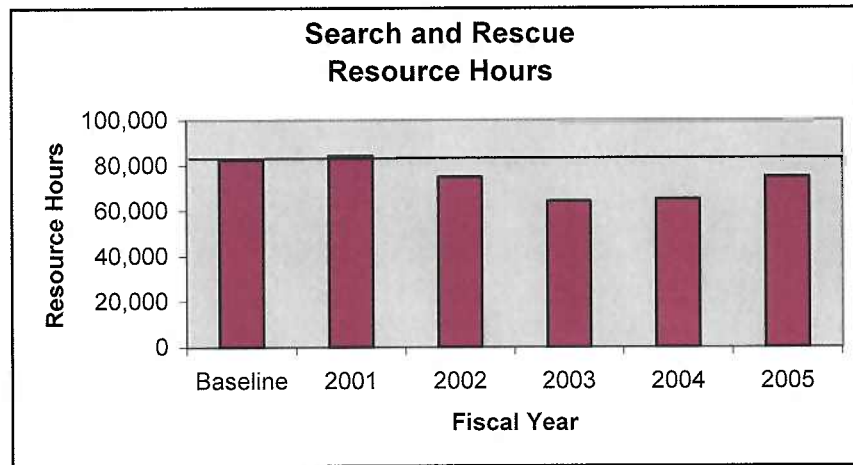
**Appendix B**  
**Non-Homeland Security Missions**

Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	2001	2002	2003	2004	2005	Total Met
Search and Rescue	Percentage of Mariners' lives saved	✗ Not met	✗ Not Met	✓ Met	✓ Met	✓ Met	3 of 5
Aids To Navigation	5-year average collisions, allisions, and groundings	✓ Met	✓ Met	✓ Met	✓ Met	✓ Met	5 of 5
Ice Operations	Days of waterway closures 8 for severe winter 2 for average winter	✓ Met	✗ Not Met	✓ Met	✗ Not Met	✓ Met	3 of 5
Living Marine Resources	Percentage of fishermen complying with Federal regulations	✓ Met	✓ Met	✓ Met	✗ Not Met	✗ Not Met	3 of 5
Marine Environmental Protection	5-year avg. annual oil spills exceeding 100 gallons and chemical discharges per 100M tons shipped	✓ Met	✓ Met	✓ Met	✓ Met	✓ Met	5 of 5
Marine Safety	5-year average annual fatalities and injuries	N/A	N/A	✓ Met	✓ Met	✓ Met	3 of 3
SUBTOTAL Non-Homeland Security		4 of 5	3 of 5	6 of 6	4 of 6	5 of 6	22 of 28

**Non-Homeland Security Mission: Search and Rescue**

The Search and Rescue mission responsibilities include minimizing the loss of life, personal injury, and property loss and damage in the maritime environment by rendering aid to persons in distress and property associated with maritime transportation, fishing, and recreational boating.

**Resource Hours.** Mission resource hour levels for SAR first increased in FY 2001, decreased during FYs 2002 and 2003, and then slightly increased in FY 2004 as illustrated in the chart below. The decrease during FY 2002 and FY 2003 would be expected due to the responses to the September 11, 2001, events and more resources being directed to homeland security missions such as Ports, Waterways, and Coastal Security. However, in FY 2005 Search and Rescue showed a significant increase, attributable to the Coast Guard's response to Hurricane Katrina, approaching baseline levels. These current levels are within 10% of baseline levels, which is a significant increase from its FY 2003 low of 22% below baseline levels.



**Performance Goals and Results.** The Search and Rescue mission measures its performance by the percentage of mariners' lives saved. In FY 2001 and FY 2002 the goal of saving 85% of mariners in distress was not obtained, as shown in the table below. However, since then, the goal has been attained in FY 2003, FY 2004, and FY 2005. This occurred even with an increase in the goal to 86% in FY 2005.



**Appendix B**  
**Non-Homeland Security Missions**

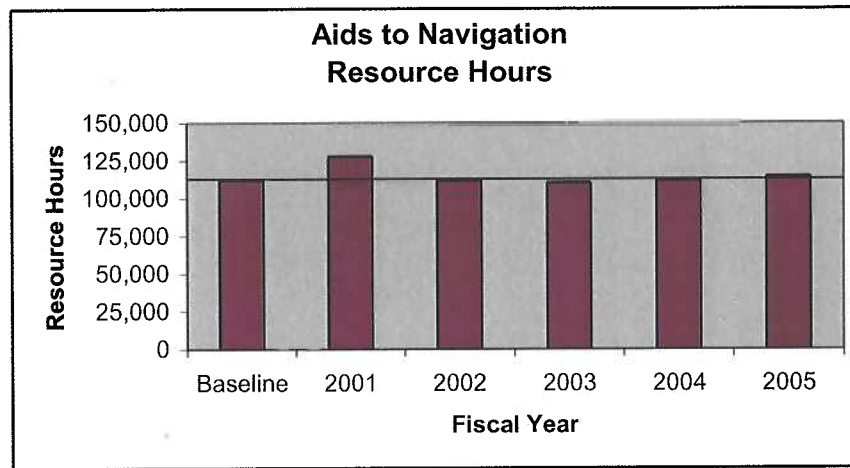
Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Search and Rescue	Percentage of Mariners' lives saved	Goal	85.0%	85.0%	85.0%	85.0%	86.0%
		Actual	84.2%	84.4%	87.7%	86.8%	86.1%
		Result	Not met	Not Met	Met	Met	Met

**Appendix B**  
**Non-Homeland Security Missions**

**Non-Homeland Security Mission: Aids to Navigation**

The ATON mission is a means for the Coast Guard to mark the waters of the United States and its territories to assist boaters in navigation and alert them of obstructions and hazards.

**Resource Hours.** Resource hour levels for ATON tracked similar to the Search and Rescue mission: increased in FY 2001, showed a decrease during FY 2002 and FY 2003, and then again slightly increased in FYs 2004 and 2005. This resulted in levels slightly above baseline levels, as illustrated in the chart below.



**Performance Goals and Results.** The Coast Guard has shown progress in the ATON mission for the last 5 years. This mission, which is measured based on a 5-year average of collisions, allisions, and groundings, has been successful in accomplishing its established goals for each of the past 5 years, as depicted below.

Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Aids To Navigation	5-year average collisions, allisions, and groundings	Goal	2,261	2,098	2,010	1,923	1,831
		Actual	2,215	2,098	2,000	1,876	1,825
		Result	Met	Met	Met	Met	Met

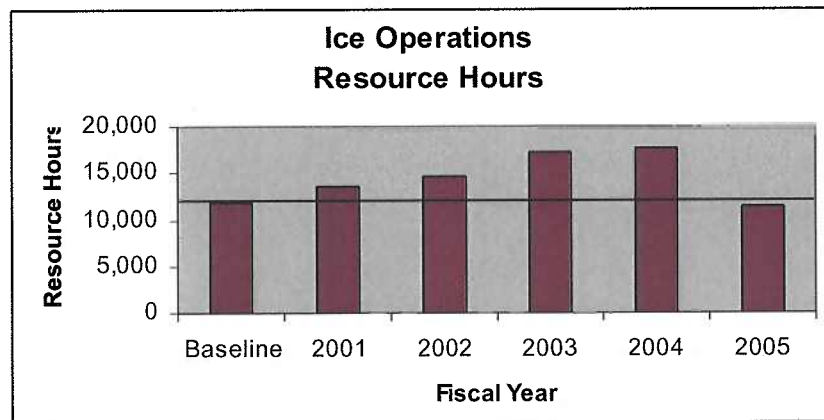
**Appendix B**  
**Non-Homeland Security Missions**

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**Non-Homeland Security Mission: Ice Operations**

The Ice Operations mission is responsible for icebreaking activities in the Great Lakes and Northeast.<sup>6</sup> This facilitates the movement of bulk cargoes carried by regional commercial fleets during the winter months. Domestic icebreaking is normally conducted for search and rescue and other emergency situations, prevention of flooding caused by ice, and facilitation of navigation.

**Resource Hours.** Resource hours for Ice Operations steadily increased through FY 2004, as shown in the chart below. Baseline levels were at 11,935, with FY 2004 levels at 17,552, representing an overall increase of 47%. However, in FY 2005 the mission had a major decline in resource hours, ending in levels almost 5% below baseline levels. These are not unusual fluctuations since this mission is dependent on ice accumulation, which fluctuates on a yearly basis. The resource hours, however, still remain very near baseline levels.



**Performance Goals and Results.** The success of the Ice Operations mission is measured by days of waterway closures: no more than 8 days of closure for winters considered severe and 2 days of closure for winters considered average. The established goals were accomplished in FY 2001 and FY 2003 (both severe winters), and again in FY 2005 (average winter), as shown in the table below. The goals were not attained in FY 2002 and FY 2004 (average winters). Since the Coast Guard achieved its goal in both average and severe winters, it appears that the type of winter is not the deciding factor in whether the Coast Guard meets its goals.

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<sup>6</sup> In addition to domestic ice operations, the Coast Guard operates the only U.S.-controlled icebreakers capable of operations in the polar regions. The Coast Guard operates these cutters and is reimbursed for their operation and maintenance by the National Science Foundation. Resource hours for polar operations are included in the chart; however, only Coast Guard-directed domestic ice operations performance goals are measured.

**Appendix B**  
**Non-Homeland Security Missions**

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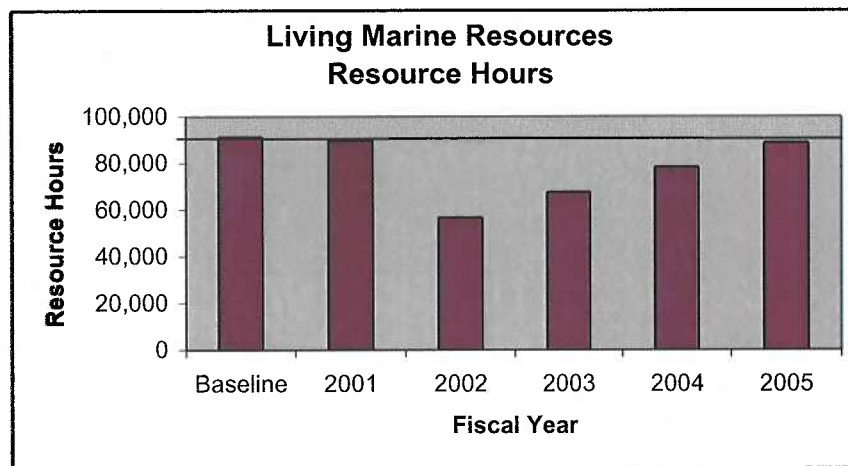
Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Ice Operations	Days of waterway closures	Goal	8	2	8	2	2
	8 for severe winter	Actual	7	7	7	4	0
	2 for average winter	Result	Met	Not Met	Met	Not Met	Met

**Appendix B**  
**Non-Homeland Security Missions**

**Non-Homeland Security Mission: Living Marine Resources**

The Living Marine Resources mission is responsible for federal living marine resources regulations and enforcing domestic fisheries laws.

**Resource Hours.** After the events of September 11, resource hour levels for Living Marine Resources showed a significant decrease in FY 2002. In FY 2003, the levels began to increase but were still 26% below baseline levels. The resource hours then increased again in FYs 2004 and 2005, resulting in levels within 3% of baseline levels, after a low of almost 38% below baseline levels during FY 2002, as illustrated in the chart below.



**Performance Goals and Results.** The Living Marine Resources mission measures its successes by determining the percentage of fishermen complying with domestic federal fisheries regulations. The goals set for this mission were met in FYs 2001, 2002, and 2003, but were not achieved in FY 2004 and FY 2005, as depicted in the table below. There has been an overall decline in actual compliance since FY 2001.

Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Living Marine Resources	Percentage of fishermen complying with Federal regulations	Goal	97.0%	97.0%	97.0%	97.0%	97.0%
		Actual	98.6%	97.3%	97.1%	96.3%	96.4%
		Result	Met	Met	Met	Not Met	Not Met

**Appendix B**  
**Non-Homeland Security Missions**

**Non-Homeland Security Mission: Marine Environmental Protection**

The Marine Environmental Protection mission is responsible for preventing the introduction of invasive species, stopping unauthorized ocean dumping, and protecting against accidental oil and chemical spills.

**Resource Hours.** We did not analyze the resource hour data for the marine environmental protection mission because this mission is personnel intensive and are largely carried out without using Coast Guard aircraft, cutter, and boat assets.

**Performance Goals and Results.** The Marine Environmental Response mission's successes are measured by the 5-year average annual oil spills and chemical discharges. The Coast Guard has been very successful in reducing the number of incidents year to year, thus accomplishing its goals for the entire 5-year period. As depicted in the table below, the mission has been so successful that the Coast Guard drastically changed its goal by over 50% in FY 2005 (from 41% to 20%), which it still met.

Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Marine Environmental Protection	5-year avg. annual oil spills exceeding 100 gallons and chemical discharges per 100M tons shipped	Goal	47.0	45.0	43.0	41.0	20.0
		Actual	40.3	35.1	29.4	22.1	18.5
		Result	Met	Met	Met	Met	Met

**Appendix B**  
**Non-Homeland Security Missions**

**Non-Homeland Security Mission: Marine Safety**

The Marine Safety mission is responsible for providing safe, efficient, and environmentally sound waterways for the myriad of commercial and recreational users.

**Resource Hours.** We did not analyze the resource hour data for the marine safety mission because this mission is personnel intensive and is largely carried out without using Coast Guard aircraft, cutter, and boat assets.

**Performance Goals and Results.** The Coast Guard measures the success of the Marine Safety mission by comparing 5-year average annual fatalities and injuries. The Marine Safety mission accomplished its goals in FY 2003 through FY 2005, as shown in the table below. Because the goal was revised to become a 5-year average, goals for FY 2001 and FY 2002 were not available.

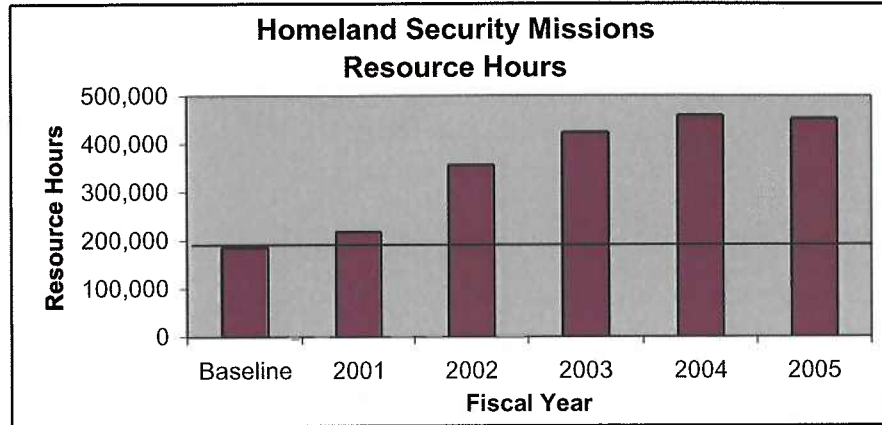
Non-Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Marine Safety	5-year average annual fatalities and injuries*	Goal	N/A	N/A	1,543	1,513	1,317
		Actual	1,651	1,332	1,307	1,293	1,311
		Result	N/A	N/A	Met	Met	Met

\* For FYs 2003 through 2005, the measure included the 5-year average for mariner deaths and injuries, passenger deaths and injuries, and boating deaths. Beginning in FY 2006, the measure will also include the 5-year average for boating injuries.

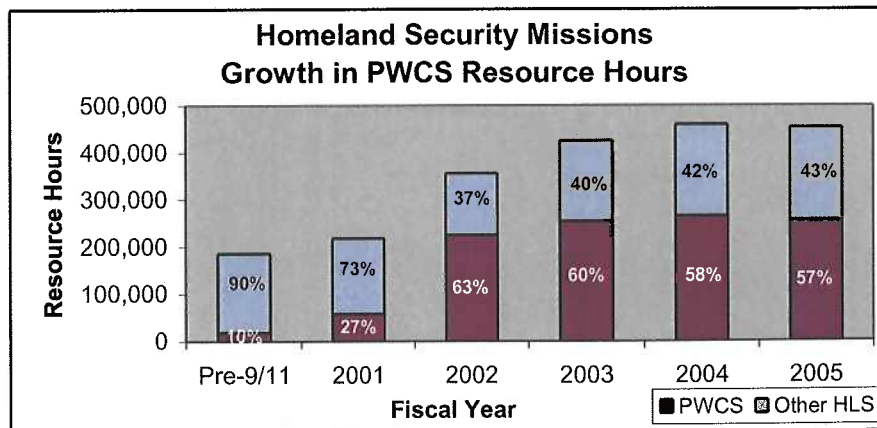


**Appendix C  
Homeland Security Missions**

**Homeland Security Resource Hours.** Overall total resource hours for homeland security missions increased through FY 2004, and then slightly decreased in FY 2005. However, the FY 2005 level is still significantly (142%) above baseline levels, as depicted in the chart below.



Resource hours for some individual homeland security missions increased while others decreased. Ports, Waterways, and Coastal Security (PWCS); Defense Readiness; and Undocumented Migrant Interdiction showed significant increases while Illegal Drug Interdiction and Other Law Enforcement showed decreases. Specifically, through FY 2005, PWCS; Defense Readiness; and Undocumented Migrant Interdiction increased a total of 1,234%; 568% and 142% respectively, while Illegal Drug Interdiction and Other Law Enforcement showed decreases of 39% and 27% respectively. The significant growth of the PWCS mission, compared to all other Homeland Security missions, is depicted in the following chart. Individual homeland security missions are discussed in the following pages.





**Appendix C  
Homeland Security Missions**

**Homeland Security Performance Goals and Results.** The Coast Guard was not successful in meeting its goals for its homeland security missions, meeting only 5 of 19 goals (26%) where measurable goals and results existed. The Coast Guard did not meet its goals for one homeland-security mission, Defense Readiness, in each of the periods reported between FY 2001 through FY 2005. For Illegal Drug Interdiction, the Coast Guard was successful in attaining its goal in only 1 of 4 years (results for FY 2005 are still pending). For the Other Law Enforcement mission and the Undocumented Migrant Interdiction mission, the Coast Guard met its goals in only 2 of the 5 years. For the Ports, Waterways, and Coastal Security mission, by far the largest user of resource hours of any Coast Guard mission, the Coast Guard only recently developed a risk-based performance measure; and established its baseline level in FY 2005. Performance goals and results for the five individual homeland security missions, from FY 2001 through FY 2005, are summarized in the table below and detailed on the following pages.

<b>Homeland Security Missions Performance Goals and Results</b>							
<b>Mission</b>	<b>Measure</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Total Met</b>
Illegal Drug Interdiction	2001-2003: Cocaine Seizure	✗ Not Met	✗ Not Met	✗ Not Met	✓ Met	* Unknown	1 of 4
	2004-2005: Cocaine Removal Rate						
Undocumented Migrant Interdiction	Percentage of migrants interdicted or deterred	✗ Not Met	✓ Met	✗ Not Met	✓ Met	✗ Not Met	2 of 5
Other Law Enforcement	Foreign Vessel incursions into U.S. EEZ	✗ Not Met	✗ Not Met	✓ Met	✗ Not Met	✓ Met	2 of 5
Defense Readiness	Percentage of units meeting C-2 combat readiness level	✗ Not Met	✗ Not Met	✗ Not Met	✗ Not Met	✗ Not Met	0 of 5
Ports, Waterways, and Coastal Security	Risk-based measure developed; baseline for 2005 and future targets established.	**	No Measure	No Measure	No Measure	Measure Baseline	
SUBTOTAL Homeland Security		0 of 4	1 of 4	1 of 4	2 of 4	1 of 3	5 of 19

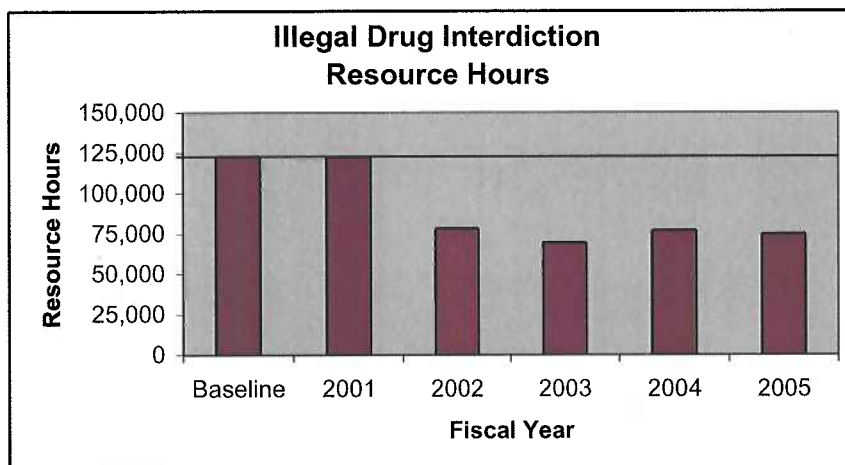
\* FY 2005 actual results are pending publication of the non-commercial maritime flow in the Interagency Assessment of Cocaine Movement.

\*\* PWCS program was formally established after the events of September 11, 2001.

**Homeland Security Mission: Illegal Drug Interdiction**

The Coast Guard's Illegal Drug Interdiction mission is a key player in combating the flow of illegal drugs to the United States. The Coast Guard's mission is to reduce the supply of drugs from the source by denying smugglers the use of air and maritime routes in the Transit Zone, a six million square mile area, including the Caribbean, Gulf of Mexico, and Eastern Pacific. The Coast Guard is the lead federal agency for maritime drug interdiction and shares lead responsibility for air interdiction with the U.S. Customs and Border Protection (CBP).

**Resource Hours.** The Illegal Drug Interdiction mission had a significant reduction in resource hours through FY 2003, resulting in a 43% decrease from baseline levels. However, the number of resource hours showed a moderate increase of 11% from FY 2003 to FY 2004, and a slight 3% decrease in FY 2005, resulting in a net decrease of 39% below baseline levels. These changes are shown in the chart below.



**Performance Goals and Results.** From FY 2001 through FY 2003, the Illegal Drug Interdiction mission's success was measured by the percentage of cocaine seizures. Starting in FY 2004, the goals will be measured by the cocaine removal rate. The mission failed to accomplish its goal for any of the FYs 2001 through 2003, but did accomplish its goal in FY 2004, as shown in the table below. Results for FY 2005 are pending publication of the non-commercial maritime flow in the Interagency Assessment of Cocaine Movement.

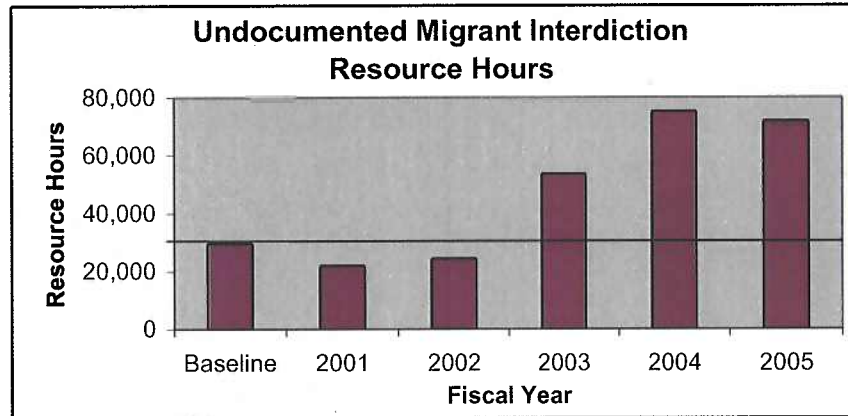
**Appendix C**  
**Homeland Security Missions**

<b>Homeland Security Missions Performance Goals and Results</b>							
<b>Mission</b>	<b>Measure</b>	<b>Perfor- mance</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Illegal Drug Interdiction	2001-2003: Cocaine Seizure	Goal	15.0%	18.7%	20.7%	15.0%	19.0%
	2004-2005: Cocaine Removal	Actual	11.7%	10.6%	16.3%	30.7%	TBD
	Rate	Result	Not Met	Not Met	Not Met	Met	Unknown

**Homeland Security Mission: Undocumented Migrant Interdiction**

The Undocumented Migrant Interdiction mission responsibilities consist of enforcing immigration laws at sea. To fulfill its responsibilities, the Coast Guard conducts patrols and coordinates with other federal agencies and foreign countries to interdict undocumented migrants at sea, denying them entry via maritime routes to the United States, its territories, and possessions.

**Resource Hours.** There was a moderate decrease in Undocumented Migrant Interdiction resource hours in FY 2001, but resource hours began to increase in FY 2002. FY 2003 saw a significant 81% increase in resource hours, and a significant increase from FY 2003 through FY 2004 by an additional 40%. This resulted in an overall increase of 153% from the baseline. However, resources were down slightly for FY 2005, but still above baseline levels by 142%. The chart below documents the changes through FY 2005.



**Performance Goals and Results.** The Undocumented Migrant Interdiction mission successes are measured by the percentage of migrants interdicted or deterred. The mission accomplished its goals in FY 2002 and FY 2004 but failed to do so in FY 2001, FY 2003, and again in FY 2005, as depicted in the table below.

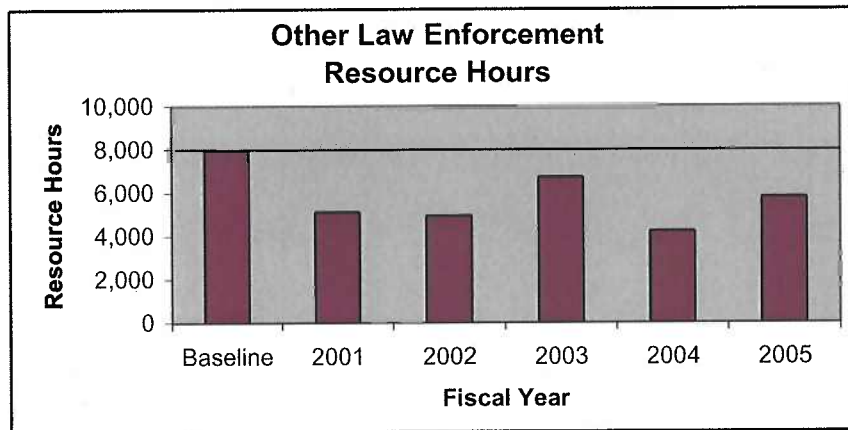
Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Undocumented Migrant Interdiction	Percentage of migrants interdicted or deterred	Goal	87.0%	87.0%	87.0%	87.0%	88.0%
		Actual	82.5%	88.3%	85.3%	87.1%	85.5%
		Result	Not Met	Met	Not Met	Met	Not Met

**Appendix C  
Homeland Security Missions**

**Homeland Security Mission: Other Law Enforcement**

The Fishery Conservation and Management Act of 1976<sup>7</sup> established a 200-mile fishery conservation zone that would subsequently be designated as the U.S. Exclusive Economic Zone (EEZ). The Other Law Enforcement mission protects against foreign incursions into the U.S. EEZ.

**Resource Hours.** The resource hours for the Other Law Enforcement mission have fluctuated widely through FY 2005. The mission showed a decrease through FY 2002, increase in FY 2003, decrease in FY 2004, and increase in FY 2005, resulting in a level 27% below the baseline levels. The chart below depicts these fluctuations.



**Performance Goals and Results.** The Coast Guard measures the Other Law Enforcement mission success by limiting the number of foreign vessel incursions into the U.S. EEZ. In FYs 2001, 2002, and 2004, this mission failed to accomplish its goal; its goal was reached only in FY 2003 and FY 2005, as depicted below.

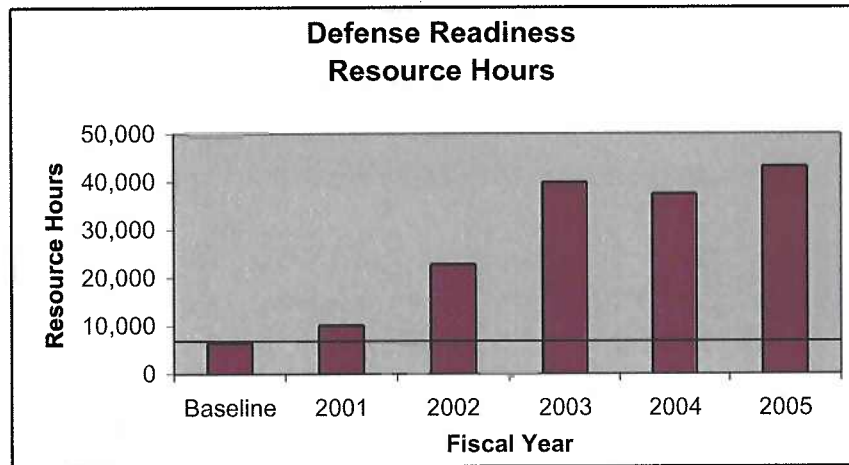
Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Other Law Enforcement	Foreign Vessel incursions into U.S. EEZ	Goal	202	202	202	202	200
		Actual	212	250	152	247	171
		Result	Not Met	Not Met	Met	Not Met	Met

<sup>7</sup> Public Law 94-265, April 13, 1976, later amended and renamed the Magnuson-Stevens Fishery Conservation and Management Act.

**Homeland Security Mission: Defense Readiness**

The Defense Readiness mission provides essential capabilities to support national security and national military strategies. Resource hours primarily depict the execution of these defense missions, while the performance goals and results measure the Coast Guard’s readiness to perform the mission.

**Resource Hours.** Resource hours for Defense Readiness have increased through FY 2005. Resource hour levels have increased by 516% through FY 2003, slightly decreased by 6% from FY 2003 to FY 2004, and then increased again by 15% in FY 2005 to the highest level ever for Defense Readiness. This level is 568% over baseline levels, or 6.67 times as many hours. These changes in resource hours are shown in the chart below.



**Performance Goals and Results.** The success of the Defense Readiness mission is measured by the percentage of units meeting C-2 combat readiness level, as determined by the Department of Defense. This mission failed to meet any of the established goals for FY 2001 through FY 2005.

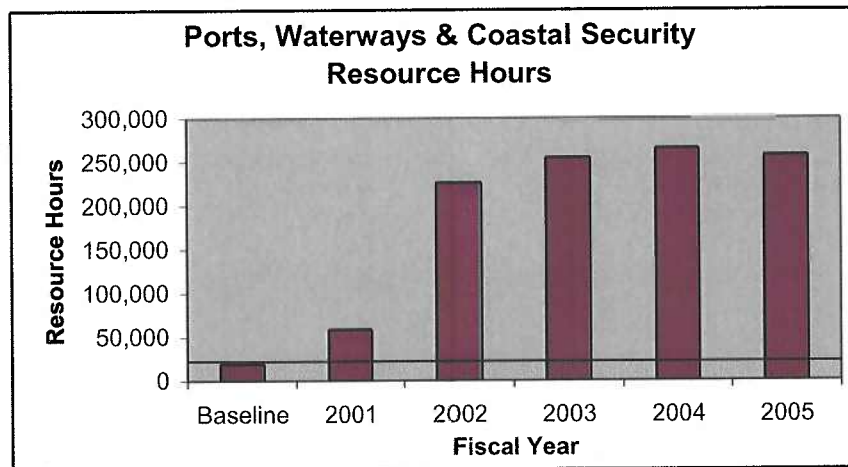
Homeland Security Missions Performance Goals and Results							
Mission	Measure	Performance	2001	2002	2003	2004	2005
Defense Readiness	Percentage of units meeting C-2 combat readiness level	Goal	100%	100%	100%	100%	100%
		Actual	67.0%	70.0%	78.0%	76.0%	67.0%
		Result	Not Met	Not Met	Not Met	Not Met	Not Met



**Homeland Security Mission: Ports, Waterways, and Coastal Security**

The Ports, Waterways, and Coastal Security (PWCS) mission is responsible for preventing and protecting against maritime security threats, reducing America’s vulnerability to those threats, and minimizing the adverse consequences of maritime security incidents that do occur.

**Resource Hours.** Resource hours for PWCS rapidly increased in response to the events of September 11, 2001, resulting in a 1,220% increase over baseline levels by FY 2003.<sup>8</sup> In FY 2004 the levels increased slightly by 4% over FY 2003 levels, and decreased by 3% in FY 2005. Even with the decrease, the mission still showed an increase in resources at a level 1,234% over the baseline level. This is 13 times greater than the baseline level; the chart below shows this rapid increase in resource hours. This mission is by far the largest user of resource hours of any Coast Guard mission. The resource hours used is almost equivalent to all resource hours used by non-homeland security missions combined.



**Performance Goals and Results.** Prior to FY 2005, the Coast Guard had not established performance goals for the Ports, Waterways, and Coastal Security mission. In FY 2005, the Coast Guard established a new risk-reduction performance measure to demonstrate PWCS performance. This risk-based performance measure involves the scoring of high-consequence maritime terrorist attack scenarios with respect to threat, vulnerability, and consequence. Coast Guard operational and regulatory activities that have taken place during the fiscal year are scored against the scenarios with regard to their estimated percent decrease in threat, vulnerability, and consequence.

<sup>8</sup> Prior to FY 2001 and the subsequent formal establishment of the PWCS program, resource hours were collected under a variety of categories that were used to establish the baseline.

## Appendix C Homeland Security Missions

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The resultant measure estimates the reduction in total risk affected by the Coast Guard.

According to the Coast Guard, this baseline risk-reduction initiative was largely an internal self-assessment that will be refined and improved upon in the next several years as the modeling, simulation, and analysis of terror-attack scenarios improves. Future iterations will seek to validate the process and improve the accuracy of the conclusions by including external maritime community stakeholders. External validation will be sought to refine the process for estimating how much maritime security risk the Coast Guard itself is responsible for mitigating.

A key concern regarding this newly established risk-based performance measure is its subjectivity. The measure introduces many layers of subjectivity involving the human scoring of scenarios, and the potential for inconsistent or “uneven” evaluations based on different human input. Therefore, the ability of this measure to accurately depict performance of the PWCS missions – and remain consistent over time - has not been clearly established. As such, the measure may not be representative of the PWCS mission performance, and may restrict the measure’s usefulness for evaluative purposes.

In addition, this mission is by far the largest user of Coast Guard resource hours, and is almost equivalent to all non-homeland security missions combined. However, it has taken the Coast Guard 3 years to develop a performance measure, thereby not measuring performance for the largest portion of Coast Guard resources since FY 2002. Given the critical nature of this mission, and the large percentage of Coast Guard resources devoted to it, the Coast Guard may want to consider dividing this measure into more finite and objective elements.



## Appendix D Purpose, Scope, and Methodology

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Section 888(f)(1) of the Homeland Security Act of 2002 directs the Inspector General to conduct an annual review that assesses thoroughly the Coast Guard's performance of all its missions (both homeland security and non-homeland security missions) with a particular emphasis on examining non-homeland security missions.<sup>9</sup> The objective of this review is to determine the extent that resource hours and performance results and targets for each Coast Guard mission have changed from prior to September 11, 2001, through FY 2005.

To make this determination, we obtained from the Coast Guard performance data and updates to resource hours originally reported by GAO in its March 2004 report "Relationship between Resources Used and Results Achieved Needs to Be Clearer," GAO-04-432. We analyzed the total number of resource hours reported by the Coast Guard prior to September 11, 2001, ("baseline") through FY 2005. We did not, however, verify the resource hour data reported by the Coast Guard, nor did we validate that the Coast Guard had accurately classified resource hour use for each mission. Our analysis did not include resource hour data for the marine safety and marine environmental protection missions because these missions are personnel intensive and are largely carried out without using Coast Guard aircraft, cutter, and boat assets. We assessed total resource hours for the nine individual missions in order to identify the changes in each.

We analyzed the Coast Guard's performance targets and goals to determine whether the goals established for each of the Coast Guard's missions had been accomplished. Information on performance targets and goals were obtained from the Coast Guard FY 2004 Performance Report, the Department of Homeland Security Fiscal Year 2005 Performance and Accountability Report, the FY 2007 Coast Guard Budget in Brief, the FY 2007 Coast Guard Congressional Stage Budget Submission, and specific updates provided by the Coast Guard.

We conducted our audit between October 2005 and April 2006 under the authority of the *Inspector General Act of 1978*, as amended. We followed generally accepted government auditing standards, except that we relied on Coast Guard data and did not verify the data to original documents.

We would like to extend our appreciation for the cooperation and courtesies extended by the Coast Guard to our staff during the review.

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<sup>9</sup> P.L. 107-296, Homeland Security Act of 2002, November 25, 2002, Section 888 "Preserving Coast Guard Mission Performance."

**Appendix E**  
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