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OVERSIGHT OF THE U.S. COAST GUARD BUDGET

HEARING

BEFORE THE

SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES, AND COAST GUARD

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

MARCH 6, 2008

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ONE HUNDRED TENTH CONGRESS

SECOND SESSION

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OVERSIGHT OF THE U.S. COAST GUARD BUDGET

THURSDAY, MARCH 6, 2008

U.S. SENATE,
SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES, AND COAST GUARD,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:34 a.m. in room SR–253, Russell Senate Office Building, Hon. Maria Cantwell, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. The Senate Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard will come to order.

We are here today to have a hearing on the U.S. Coast Guard budget, and will hear from Admiral Thad Allen, as well as Stephen Caldwell, Director of Homeland Security and Justice Issues.

So, thank you, gentlemen, for being here.

We are joined by the Chairman of the full Committee, and I would like to ask Senator Inouye if he would like to make an opening statement.

STATEMENT OF HON. DANIEL K. INOUYE, U.S. SENATOR FROM HAWAII

Senator INOUYE. I thank you very much, Madam Chair.

The Coast Guard celebrated significant achievements in 2007. The men and women of the Coast Guard intercepted and seized a record 355,755 pounds of cocaine. And more impressively, they saved more than 5,000 lives, reaching an incredible landmark of saving more than one million lives since the Coast Guard's inception.

I would like to commend the men and women of the Coast Guard for their diligent and tireless efforts. Their many accomplishments only begin to illustrate the extent to which the American people rely on the Coast Guard. From protecting the American people to protecting our natural resources, the Coast Guard is tasked with 11 critical missions. The Congress must work to ensure that the Coast Guard has sufficient resources to carry out all of these critical missions.

The Coast Guard's Fiscal Year 2009 budget proposal, however, fails to include a funding request for the development of Interagency Operation Command Centers, which are mandated by the

SAFE Port Act. The command centers are essential to providing a unified and effective command and control structure in the event of a transportation disruption in our Nation's ports and waterways. Furthermore, in the wake of the events of 9/11, the Coast Guard has faced new security responsibilities. However, I am, once again, concerned that the Coast Guard budget proposal does not adequately fund some of the traditional Coast Guard missions. While I support priority funding for security missions, including the Coast Guard's recent efforts to increase its intelligence and awareness regimes, we should not neglect programs like the Coast Guard's Living Marine Initiatives. I'm particularly concerned with the lack of resources in Hawaii's District 14, especially since District 14 is responsible for monitoring approximately 43 percent of the Pacific area. While I applaud District 14's recent interceptions of illegal fishing in the Pacific, I am concerned it cannot maximize its capabilities if it is faced with a budget shortage.

And so, Madam Chair, I look forward to hearing today's testimony from Admiral Allen and Mr. Caldwell, and to working together to determine how we can address these important issues.

I thank you very much, Madam.

Senator CANTWELL. Thank you, Senator Inouye. And thank you for attending this important budget hearing.

Again, I want to thank Admiral Allen and Mr. Caldwell for being here this morning, and for your dedicated service to our Nation, and for your testimony that we are about to hear.

I want to also thank—take the time now, at the beginning, to start off and thank the Coast Guard and Admiral Allen. At the end of last year, Washington State was pummeled by a severe storm and flooding, and, at one point, 150-mile-an-hour winds were clocked, off the coast of Washington. And with what really was swift action by the Coast Guard, relocation of a command center, the Coast Guard worked in very difficult conditions to literally save hundreds of lives, and we are very grateful for the efforts that the Coast Guard did in actually becoming the command-center focus in rescuing over 100 of our constituents who were in very treacherous situations. I think it was an example of the Coast Guard at its finest.

On a national scale, the Coast Guard's responsibilities are just as challenging. For example, last year the Coast Guard responded to over 27,000 search-and-rescue cases, stopped more than 6,000 illegal immigrants from entering the U.S., responded to 162 significant oil and chemical spills, protected our communities by seizing a record number of illegal drugs, worth billions of dollars.

And a few people are aware of the unique role that the Coast Guard plays in Iraq. During 2007, the Coast Guard supported operations in Iraq with more than 800 deployed personnel and six patrol boats, helping secure sea lanes, train Iraqi forces, and protect Iraq's offshore oil infrastructure. And again, we are grateful for those services.

When looking at all of this, we always do have the question of asking how you balance the increasing demand in evolving homeland security missions, while ensuring the traditional missions of the Coast Guard are not set aside. And we will definitely discuss that further, and have questions.

But, I think this morning's hearing—and focus on the 2009 budget request—that one issue continues to concern me, as a Member of the U.S. Senate, and, I think, our Committee, and that is the Deepwater Program. The Coast Guard has taken important steps toward fixing the failings of the past. And I'm glad that the Coast Guard is implementing many of the reforms that the Senate passed—the Integrated Deepwater Reform Act, including phasing out its focus on a failed private lead systems integrator approach, and moving toward a full and more competitive acquisition process.

While these are important steps, make no mistake, I am nowhere close to satisfied with the Coast Guard's progress on Deepwater, and believe that there is much work to still be done. We are not done fixing this program, and there are many potential problems that still lie ahead.

The Offshore Patrol Cutter is estimated to cost more than $8 billion, and the largest Deepwater acquisition still exists only on paper. That ship, and many of the other acquisitions that lie ahead, are fraught with risks and uncertainty.

The recently completed Alternatives Analysis, a thorough review of the Deepwater Program by an independent third party, makes a compelling case that Deepwater needs to continue to change course.

We cannot repeat the problems of the past, and I assure you that, every step of the way, we are going to make sure that the taxpayers' dollars are spent wisely and effectively in this program.

The Coast Guard needs to complete its mission safely and effectively, and taxpayers need to know what they are getting for their dollar. And, beyond Deepwater, I have concerns about the current fulfillment of other responsibilities by the Coast Guard.

Over the past several years, I've heard a growing chorus of worry from my constituents, and, I'm sure, from my colleagues, about the Coast Guard, in its traditional responsibilities; in particular, for—maritime safety to oil spill response, I believe list—is on a list of growing concerns, but at the top of the list. As you know, Admiral Allen, recent events, such as the COSCO BUSAN oil spill in San Francisco, has re-emphasized the need for even greater vigilance in the Coast Guard's mission of environmental protection and oil-spill response.

I know that we have had separate hearings on this, and rulemaking, and we'll, I'm sure, have a chance, in the questions, to elaborate further on that.

I also am concerned about preparing for the future, and I'm concerned that the Coast Guard is unprepared for the coming challenges presented by global warming and an increasing vulnerable Arctic. I believe our Nation is asleep at the wheel on the future of the Arctic, and staying on path with what can become very devastating impacts to our national interests.

The President still refuses to put forward a national policy on the fate of our Polar Icebreaker fleet, or Arctic issues in general, and, as a result, our icebreaker fleet is wasting away, held prisoner under the budget pressures of today. This is both unacceptable and dangerous.

The Coast Guard has always been proud of saying it does more with less, and it has worked hard to be efficient, and always

strived for greater efficiency. At some point, though, there is a limit, where the Coast Guard can only do with what we are giving them, and we need to start seeing that an agency could be overextended and can't go beyond doing more with less.

I look forward to discussing these issues, and I am optimistic that the Coast Guard, if it continues to make changes and moves in the right direction, we will continue to meet the challenges that our Nation sets before the Coast Guard.

So, I look forward to your testimony, Admiral Allen and, to Mr. Caldwell, your statement, as well.

So, with that, I'm awaiting the arrival of my colleague, Senator Snowe. We'll go ahead and start with you, Admiral Allen.

STATEMENT OF ADMIRAL THAD W. ALLEN, COMMANDANT, U.S. COAST GUARD, DEPARTMENT OF HOMELAND SECURITY

Admiral ALLEN. Thank you, Madam Chair. I'm pleased to be here today. And thank you, Chairman Inouye, for being here, as well.

I'm pleased to discuss the President's Fiscal Year 2009 budget. I have a written statement, that I'd offer for the record, and will make brief opening remarks.

Madam Chair, last year I sat before you and opened with a brief discussion on the direction I wanted to take the Coast Guard, followed by a more detailed discussion of the Deepwater Program. Despite challenges with Deepwater, and the concerns that you've raised, I'm proud to say that we have taken action to get the program back on track, and we're moving ahead smartly.

Deepwater assets are taking to sea and the sky for development and evaluation, and initial indications are, they are performing admirably at every turn. The Flagship National Security Cutter BERTHOLF begins sea trials in December and is on track for a summer delivery.

Just 2 weeks ago, one of our new HC–144 Alpha Ocean Sentry aircraft diverted from training, unexpectedly, to complete the aircraft's first search-and-rescue case for the Coast Guard. Its on-scene capabilities exceeded expectations, particularly command-and-control. You may remember, there were two F–15s that collided, south of Tyndall Air Force Base, in the Gulf of Mexico. The aircrew leveraged a modern suite of avionics to locate a downed Air Force F–15 aircraft in the Gulf of Mexico, identified Good Samaritan vessels nearby, and coordinated the rescue of a surviving pilot. At various times during that evolution, the aircraft was controlling the movements of seven to ten other aircraft, and used AIS to locate a Good Samaritan vessel to divert.

And, although we still face challenges with Deepwater, we are solving problems, we remain committed to transparency, and we are steaming ahead. As I have said before, I am responsible [inaudible] task. You've indicated your ongoing concern; that matches mine. I commit to working with you, moving forward.

I'd like to shift gears now and provide a context for our Fiscal Year 2009 budget request, if you would indulge me as I share some personal thoughts on the pressing challenges the service faces today.

As I said, last month in my second State of the Coast Guard Address, the spectrum of threats, hazards, and challenges we face

continues to grow on all fronts, and increases demands for our services. Threats to our maritime safety, security, and prosperity at home and on the high seas are real, and they are dynamic.

The demands we face from the rapidly growing global maritime transportation system, expanding coastal development, and changing conditions in the Arctic strain our current capacity and challenge conventional notions of mission responsibilities.

We're also facing threats of transnational terrorism, increased sophistication in human smuggling and drug trafficking, and expeditionary demands to support the global war on terror in a time of persistent conflict.

Internally, we face pressing challenges that transcend all missions and threaten our ability to meet national responsibilities. Our first and most significant challenge is that we have a *bona fide* capacity shortage. We have authorities, capabilities, and competencies for all missions, but there is a limit to what any organization can accomplish when the overall end strength has not materially changed in 50 years, despite steadily increasing statutory responsibilities and external demands.

The President's Fiscal Year 2009 request for the Coast Guard helps build new capacity in critical areas; most notably, it adds 276 new positions for our marine safety program, and over 100 new multimission watch standards for our busiest sector command centers. Make no mistake, however; these are downpayments in critical areas that demand a broader discussion of capacity.

Second, we are hamstrung by the burdens associated with operating and maintaining an aging and rapidly deteriorating inventory of cutters, aircraft, and shore facilities. We operate the 37th oldest of 39 similar naval fleets in the world. Our oldest cutter, the ACUSHNET, earned battle scars in World War II, is beginning her 64th year of commissioned service to the Nation. Several weeks ago, one of her two propellers broke off during routine operations in the North Pacific, and she is now out of service, standing by for major repairs.

The average age of our 378-foot High Endurance Cutters, the flagships of our fleet, stands at nearly 40 years, and their age is showing. Earlier this year, the High Endurance Cutter RUSH had to abort a search-and-rescue mission south of the Aleutian Islands due to a split seam in the forward hold that caused it to take on water.

The Medium Endurance Cutter ALEX HALEY had a failure of its onboard drinking-water system, creating a hazardous condition for the health and safety of the crew.

The High Endurance Cutter DALLAS aborted a drug interdiction mission last month due to a failure of flight-deck lighting just as she was preparing to launch a helicopter in pursuit of a smuggling vessel. In the words of the DALLAS's commanding officer, "It appears the inopportune failure of another piece of obsolescent equipment lost the day."

Be assured, our failing assets, increasing operating costs, reduced readiness, and—adversely impact our workforce and our capabilities.

We face similar challenges sustaining our aging shore infrastructure, in the buoy tender fleet, and Polar Icebreakers, all of which are old and growing ever more obsolete.

Additionally, our maintenance costs are rapidly escalating. During the past year, we've spent over $76 million on unanticipated repairs to cutter and—cutters and aircraft. Today, we carry an estimated maintenance backlog of nearly $750 million. We are replacing aging assets and repairing shore infrastructure as fast as resources permit, but it is not fast enough. In the near term, maintenance costs will continue to rise, and we will struggle to maintain our readiness. Our recapitalization needs have multi-mission impacts. They are urgent, and they are real. I need every dollar in the budget.

Finally, like our other Armed Forces, our challenges are compounded by an environment of fiscal constraint and unprecedented scrutiny over preparation of financial statements which threaten policy development and mission execution. I am committed to modernizing our organizational structure to focus on mission execution, including improved command and control, life cycle support, fiscal accountability, and base management. However, management efficiencies, while workable in the near term, are inconsistent with the long-term need to grow capacity and accelerate recapitalization.

With regard to our workforce, I was surprised to learn, last week, of dramatic trends in forfeiture of leave among Active Duty personnel. As background, any leave balances beyond 60 days are generally forfeited at the beginning of each fiscal year. In Fiscal Year 2003, the Coast Guard workforce lost some 10,000 days of leave due to this standard policy. The trend has increased in each subsequent year, culminating in more than 70,000 lost days of leave in Fiscal Year 2007. This profound increase troubles me, and I believe growth in demands for our services and the maintenance needs of our aging vessels, aircraft, and shore infrastructure are taking a toll on our workforce.

I'd like to briefly update you on plans and progress with two major issues, I know, that are especially important to the Committee: efforts to improve rulemaking and review of the COSCO BUSAN response.

Our current slate of rules to be developed by the Coast Guard exceeds 90; on 9/11/2001, it was approximately 50. Despite tremendous effort by our personnel, many important rules have been queued, awaiting required resources. This is unsatisfactory, as I testified in December. We are taking aggressive action. I sent a letter to the Committee, with our current priority for rulemaking, and I look forward to the discussion on rulemaking as we move forward.

I also testified, in December, I initiated an incident-specific performance review of our response to the COSCO BUSAN which involved third parties. Phase one of the report was released on the January 28, 2008. It addressed the first 2 weeks of the response and provided 110 lessons learned and 128 recommendations to improve preparedness and response in the San Francisco Bay community. The recommendations fall into several broad categories that include emphasis on area contingency planning processes, the use of drills and exercises, the incorporation of local response capabili-

ties and information sharing throughout the incident command structure. The second phase of the report will address the remainder of the response, and is due to me in May 2008. I will provide the results of my plans for the way ahead to the Congress.

Beyond this incident-specific review, we are partnering closely with the DHS IG on their audit of the response.

In closing, our people are courageous, dedicated, and resilient. They defend our Nation and our values every day. They are confronting historic national challenges, protecting against a radical enemy, and ensuring safe and efficient commerce within an increasingly sophisticated maritime transportation system. Their opportunity is now, and they're facing the greatest challenges of any Coast Guard generation in history.

I request your full support of our funding request in 2009. I look forward to answering any questions you may have.

[The prepared statement of Admiral Allen follows:]

PREPARED STATEMENT OF ADMIRAL THAD W. ALLEN, COMMANDANT, U.S. COAST GUARD, DEPARTMENT OF HOMELAND SECURITY

Good morning, Madam Chair and distinguished Members of the Committee. I am pleased to be here to discuss the President's Fiscal Year (FY) 2009 budget request for the Coast Guard.

First, I thank you for the enduring support you have shown to the men and women of the United States Coast Guard and ask for your full support of the President's request. The Coast Guard FY 2009 budget request sustains service delivery, continues critical recapitalization efforts and builds capacity in three strategic areas: marine safety, command and control, and intelligence and awareness. We need every dollar the President has requested.

I open by sharing my professional views as Commandant on our strategic operating environment and the most immediate challenges facing the service today. These challenges provide an important backdrop for our budget request and the premium our workforce places on growth, pace of recapitalization and emergency sustainment.

The Coast Guard delivered historic national results in 2007. We saved over 5,000 lives, removed a record $4.7 billion of cocaine from the global narcotics stream, rescued over 6,000 migrants on the high seas, and cosponsored one of the largest oil spill exercises ever conducted. It was a banner year for the Coast Guard on all fronts, punctuated by celebration of our one millionth life saved since Alexander Hamilton established the Revenue Cutter Service in 1790 as Secretary of the Treasury.

As you know, our people are courageous, dedicated and resilient. They defend our Nation and our values every day. They are confronting historic national challenges such as protecting America against a radical enemy while ensuring safe and efficient commerce within an increasingly sophisticated maritime transportation system. In addition, they are working longer and harder than ever before. In fact, multi-year trends presented to me last week show record levels of increasing, obligatory annual leave forfeiture among the active duty workforce. I am committed to reviewing the associated drivers in more detail but know the President's FY09 request will bring critical resources needed to alleviate field burdens associated with emergency maintenance and sustainment, as well as increased demand for our services.

Despite our successes, significant challenges lie ahead. The rapidly growing global Marine Transportation System (MTS), expanded coastal development, and changing conditions in the Arctic challenge conventional notions of our approach to mission execution. Added to this are specters of transnational terrorism, increased sophistication in human smuggling and drug trafficking, and expeditionary demands to support the global war on terror in a time of persistent conflict.

Looking forward, we must position ourselves to meet the emerging challenges of the 21st century. As with our Armed Service counterparts, I believe we must reset, reconstitute and revitalize the Coast Guard to meet today's demands and those of the future. The President's FY 2009 budget request begins this process on many fronts.

Our Aging Fleet

Our readiness is continually challenged by our reliance on outdated, rapidly-aging assets, systems, and shore infrastructure. In fact, during the past 12 months, the Coast Guard spent over $76M on major unanticipated repairs to cutters and aircraft. These and other casualties have a direct impact on our readiness and ability to execute our missions for the Nation. In FY 2007 alone, High Endurance Cutter operational days were reduced 27 percent due to engineering casualties. Our large deferred maintenance backlogs (*i.e.,* $631M shore, $87M aircraft, and $27M cutters) also present a major challenge to Service readiness, and they continue to grow. I ask that you fully fund our request for AC&I and OE resources to ensure our recapitalization and emergency maintenance needs are met.

Operating Efficiencies, Financial Management Scrutiny, and Reporting Requirements

Efficiencies

We are operating in an austere fiscal environment with growing demands for our services. Our budget request maximizes efficiencies and reflects the realities of very difficult top line choices. Our request balances many important priorities including continuing critical recapitalization efforts, annualizing FY 2008 Emergency Funding, and starting new initiatives that leave the homeland more secure. We are identifying $68 million in efficiencies to fund these priorities.

I remain committed to modernizing our organizational structure to focus on mission execution, including better command and control, lifecycle support of our assets, fiscal accountability, and base management.

Financial Management Transformation

While certain weaknesses are impediments to CFO Act compliance, I strongly disagree with portions of Inspector General Skinner's latest testimony before the Committee. We are making significant strides identifying and tackling the root causes of our financial material weaknesses. It is important to understand that remediation of internal controls is just the first step to improving our financial statement assertions. We must also establish a strong financial management organization, integrate our vast IT systems, and remediate our legacy balances. This is a long journey, but we have a trackline and are committed to it.

Over the past 3 years, we have reallocated over $100M in base funding to pay for financial transformation and audit initiatives, including last year's establishment of the Office of Financial Transformation and Compliance (CG–85). CG–85 is coordinating our Financial Strategy for Transformation and Audit Readiness (FSTAR), a multi-year plan to earning a sustainable clean audit opinion.

Within DHS, the Coast Guard faces unique challenges with respect to CFO Act compliance. These challenges are not excuses, they are realities. We are the Department's only Armed Service and most capital asset-intensive component. Our broad spectrum of missions, authorities, and diverse operating assets creates a complex web of financial management challenges. Moreover, our financial management capacity was "Streamlined" in the 1990s because, at the time, it was not deemed a core competency in a military organization focused on operational effectiveness. We changed this culture long ago and are moving forward smartly.

Reporting Requirements

I have serious concerns over the growing burden of reporting requirements.

I assure you, I am committed to transparency on all fronts and have no objections to providing comprehensive information to our Congressional committees of jurisdiction. However, the current scheme of overlapping reports, with widely divergent submission schedules, will ultimately have an adverse impact on policy formulation and mission execution.

Each mandated report diverts scarce resources from project management to report management. This approach is not sustainable.

I propose a consolidated reporting scheme, developed through collaboration with our committees of jurisdiction, that I believe would satisfy congressional needs without unduly burdening Coast Guard program staffs. I seek your full support as we move forward.

"A Cause for Action"

These conditions form the basis of what I call 'a cause for action.' That is, a call to create a Coast Guard that is more appropriately structured and adaptable to meet our modern, 21st Century mission demands and responsibilities Our Fiscal Year 2009 budget request seeks resources needed to begin this journey and I again seek your full support as we move forward.

Before discussing the details of the request, I would like to explain how I view the roles and missions of the Coast Guard and the strategic direction in which we are taking the Service. The Coast Guard sources and operates to strategy, and our Fiscal Year 2009 request directly supports our strategic imperatives.

Roles and Missions

The U.S. Coast Guard is one of the five Armed Services of the United States and the only military organization within the Department of Homeland Security (DHS).

Responsibilities

The U.S. Coast Guard is the principal Federal agency responsible for maritime *safety, security, and environmental stewardship.* As such, the Coast Guard protects vital economic and security interests of the United States including the safety and security of the maritime public, our natural and economic resources, the global transportation system, and the integrity of our maritime borders. The Coast Guard is committed to addressing all threats and all hazards throughout the maritime domain including in U.S. ports and inland waterways, along the coasts, on the high seas, and in other regions where U.S. maritime equities are at stake.

Service to the Public

The Coast Guard's value to the Nation resides in its multi-mission authorities, resources, and capabilities. The Service's *safety, security, and stewardship* missions are integrated like a tightly-knit fabric; valued for its protective durability and light weight. The Service's operational model is flexible, efficient, and effective across a wide range of complex maritime scenarios. Indeed, the Coast Guard's ability to field versatile platforms and personnel with broad authorities is the U.S. Government's most important strength in the maritime environment, adjacent coastal areas, and inland waterways. The Service is unique in the Nation and in the world.

Coast Guard roles and missions are *enduring*—long standing responsibilities, accrued over two centuries of service. They are inherently governmental, serve the collective good and are accomplished most effectively by a single Federal maritime force. The Coast Guard creates value for the public through solid prevention and response efforts. Activities involving oversight and regulation, enforcement, maritime presence, and public and private partnerships foster increased maritime safety, security, and stewardship. Additionally, *unified, immediately-deployable and adaptive force packages* are always poised and available to respond to attacks, disasters, and casualties.

Multi-Mission Integration

Effective maritime governance hinges upon an integrated approach to safety, security, and stewardship.

The United States is a maritime nation, reliant upon the seas for trade, security, and access to critical natural resources. To protect our maritime interests, the U.S. Government must safeguard our sovereignty and protect the environment, facilitate the safe transportation of people and cargo, rescue people in distress, and preserve marine resources for future generations. None of these objectives are independent—they are interlocking challenges requiring an in-depth understanding of the maritime domain as a system of inter-related public and private activities.

The Coast Guard is ideally-structured to meet these challenges and advance the Nation's maritime interests. Today, as in the past, the Coast Guard continues to leverage its multi-mission structure, diverse capabilities, and established partnerships to protect the American public and global marine transportation system.

Strategies for Success in the Maritime Domain

Strategic Context: Emerging Threats

America's security, resilience and economic prosperity are intrinsically-linked to the oceans. Our maritime domain is larger than our land domain, providing shipping channels, recreational opportunities and access to natural resources that help to sustain the Nation and the world. *The maritime domain is also vulnerable to a wide range of threats and challenges. The U.S. Coast Guard must be prepared to meet these challenges today and in the future.*

Border Security

The United States has over 95,000 miles of shoreline that is in parts international border, coastal shipping route, tourist and recreation attraction, and home to a variety of economic enterprises. Criminals and terrorists seek to exploit the maritime border by smuggling people, weapons, illicit drugs and other items into the country. As controls over our land and air borders tighten, the sea borders become an attractive alternative for greater exploitation. The key to effective border security is a layered, networked system across the land, air, and maritime domains. *We must look beyond our borders to defeat threats far from our shorelines through the continual maturation of maritime security regimes, awareness, and operational capabilities.*

Safety and Security of the Marine Transportation System (MTS)

The global MTS is a complex, inter-connected system of public and private seaports, waterways, terminals, intermodal trans-shipment points, vessels, and people. This system is the economic lifeblood of the global economy and critical to U.S. national economic and security interests. Total global maritime cargo volume has tripled over the past 10 years, and seaborne trade through U.S. ports is expected to double by 2025. *The Coast Guard must have the capabilities and authorities needed to ensure the continued safety, security, and efficiency of the rapidly-growing global MTS.*

Transnational Terrorists and Criminals

Terrorists and criminals, including modern-day pirates, regularly seek to exploit the maritime domain and global transportation network. WMD, contraband smuggling, armed hijacking, and small vessel threats such as water-borne improvised explosive devices (WBIEDs) present the greatest terrorism and security risks to maritime commerce. Additionally, today's trafficking of illegal drugs and migrants is becoming increasingly sophisticated. *Defeating transnational terrorists and criminals in the maritime domain requires effective use of the Coast Guard's broad authorities and adaptable multi-mission capabilities.*

Expanded Use of the Arctic and Other Regions

Changing environmental conditions and advances in technology are expanding activity in the Arctic Region, U.S. Exclusive Economic Zone (EEZ), and Outer Continental Shelf (OCS). The potential for access to new energy reserves and more efficient shipping routes is fueling demand. The U.S. EEZ covers over 3.4 million square nautical miles of ocean territory and is among the most valuable and productive natural resources on Earth. Continued growth in commerce, tourism and exploratory activities is increasing risks to mariners and ecosystems while challenging law enforcement regimes, operational capabilities, and conventional assumptions of sovereignty. *The U.S. Coast Guard must be capable of protecting America's interests in the Arctic Region, EEZ and OCS.*

Coastal Development

Coastal regions and ports have in recent years become heavily-developed and densely-populated. Catastrophic incidents, whether natural or man-made, have enormous consequences in coastal areas that quickly disrupt regional, national, and global commerce. The devastation of Hurricanes Katrina and Rita illustrates the potential scope of coastal disasters. *The Coast Guard must continue to provide immediately-deployable and adaptive force packages to mitigate the safety, security, and environmental impacts of catastrophic events.*

The Coast Guard is best-suited to address these challenges through its comprehensive, complementary authorities, flexible and adaptive operational capabilities, and centuries of expertise protecting America's national interests.

In the near term, the Coast Guard will defeat these threats by:

- *recapitalizing operating assets and sustaining aging infrastructure;*
- *enhancing our Marine Safety Program;*
- *improving command and control capabilities; and*
- *establishing comprehensive intelligence and awareness regimes.*

Strategic Intent: The Way Ahead

The Coast Guard sources and operates to strategy. Our near-term decisions are guided by a family of strategic documents outlining organizational imperatives and executive intent as articulated in the National Security Strategy and National Strategy for Homeland Security. These include *The National Strategy for Maritime Security,* the *DHS Strategic Plan, The Coast Guard Strategy for Maritime Safety, Security, and Stewardship,* and the joint, ground-breaking *A Cooperative Strategy for 21st Century Seapower* co-authored by the Navy, Marine Corps and Coast Guard. We will continue to refine strategy and doctrine to guide response and enforcement activities in the future. *Implementation of strategy requires effective integration of budget, programs, policy, and legislation.*

Coast Guard Modernization Strategy

The Coast Guard is modernizing its legacy command and control structures, support systems, and business practices to ensure continued superior mission execution in a changing global environment. Integral to this modernization effort is new authority to realign field-level leadership positions for improved service delivery.

Strategic modernization is designed to create efficiencies that make the Coast Guard more capable of addressing 21st century threats and challenges. The strategic modernization effort will improve resource allocation, financial management, risk management, training, and unity of effort within the DHS and across multiple layers of government. It will strengthen Headquarters and field alignment, improve readiness management, and greatly enhance mission execution in all areas.

Legislative Priorities—Coast Guard Authorization Act of Fiscal Year 2008

The Administration is seeking authorities to enhance the organization and operations of the Service and, by extension, the maritime safety, security, and stewardship of the United States. The more significant provisions of the Coast Guard Authorization Act would facilitate—

- *The Coast Guard's strategic modernization effort,* by increasing alignment with other armed forces and Federal agencies, ensuring greater organizational flexibility, and enhancing command, control and system support improvements.
- *The government's prosecution of maritime alien smugglers.* The recent escalation of lucrative maritime human smuggling operations poses a significant threat to the lives of migrants and our national security. Although the Coast Guard continues to improve its ability to detect and interdict smugglers, current law impedes prosecution.
- *The protection and fair treatment of seafarer witnesses.* This provision would facilitate the availability of foreign seafarer witnesses for Coast Guard investigations and support seafarers abandoned by shipowners in the United States. This provision fits into the Coast Guard's overall efforts to ensure the fair treatment of all seafarers in all circumstances.

The House of Representatives is poised to consider these provisions when it takes up H.R. 2830, the "Coast Guard Authorization Act of 2007." Although we have some important concerns with the H.R. 2830, we strongly support these provisions of the bill and note that a swift enactment of a bill that includes these provisions would significantly improve safety, security, and stewardship in the maritime domain.

Strategy for our People

The Coast Guard succeeds through the courage, devotion, and sacrifice of its people. Our Service members epitomize core values of honor, respect, and devotion to duty in words and deeds. Our future success hinges upon our ability to continue building competencies to meet emerging demands and mission responsibilities.

Our goal is to foster and deploy an energetic, diverse, well-educated, highly-capable workforce of active, reserve, and civilian personnel dedicated to mission execution and Coast Guard core values, supported by the Nation's premier volunteer organization, the U.S. Coast Guard Auxiliary.

Strategic Budget Priorities for Fiscal Year 2009

In order to meet emerging threats and growing demand for services, the Coast Guard is focusing on the following major strategic areas in Fiscal Year 2009. Our comprehensive effort to address these challenges requires coordinated budget, program, policy, and legislative action.

- Recapitalizing Operating Assets and Sustaining Aging Infrastructure;
- Enhancing the Marine Safety Program;
- Improving Command and Control Capabilities; and
- Establishing Comprehensive Intelligence and Awareness Regimes.

Recapitalizing Operating Assets and Sustaining Aging Infrastructure

The Coast Guard needs to replace aging vessels, aircraft, and shore infrastructure. The cost of maintaining and operating the out-dated assets is continually increasing, as are major unplanned maintenance evolutions and reductions in readiness. Vital shore infrastructure required to maintain our front line assets is also in critical need of renovation and repair. Ultimately, the future operational success of the Coast Guard is dependent upon a comprehensive recapitalization of front line assets and shore and support infrastructure.

Earlier this year, the aging High Endurance Cutter USCGC RUSH had to divert to homeport from a search and rescue mission south of the Aleutian Islands when she began taking on water due to a hull crack in one of the vessel's compartments. Though numerous modifications and refits have taken place over their service life, the average age of our High Endurance Cutters stands at over 39 years and, like much of our fleet of cutters and aircraft, their age is showing. Cutters like RUSH and ACUSHNET are preeminent examples of the Coast Guard's urgent need to recapitalize and sustain.

Enhancing the Marine Safety Program

With strong Congressional support, we recognized the potential threat posed to our Nation by radical extremists and took prompt and substantial action to fortify our ports, waterways, coastal areas, and maritime infrastructure after 9/11. Today, with maritime security needs better-addressed, we are revitalizing our long-standing efforts to enhance the safety of the Marine Transportation System (MTS).

The success of the marine transportation system hinges upon an integrated approach to safety, security, waterways management, and environmental protection. The goals in preventing or responding to safety and security incidents in our ports and waterways are the same: save lives and protect property, the environment, and the global economy.

The maritime industry is experiencing unprecedented growth and intermodal complexity, while also facing increased risk from transnational threats. The Coast Guard is acting now to improve marine safety capacity and performance, enhance service delivery to mariners, and expand outreach and advisory mechanisms. As a result of a comprehensive Marine Safety program review, the Coast Guard established a roadmap to improve the effectiveness, consistency, and responsiveness of the program to promote safe, secure, and environmentally sound marine transportation. This roadmap includes reinvigorating industry partnerships, improving mariner credentialing services, bolstering inspector and investigator capacity, improving technical competencies through new marine safety Centers of Excellence, and expanding rulemaking capability to ensure we meet current and future program needs. Additional details on the Coast Guard's strategy to enhance marine safety can be found under the "Marine Safety" tab at *http://homeport.uscg.mil.*

Improving Command and Control Capabilities

The maritime environment continues to grow in complexity as the global transportation system matures. The Coast Guard faces a critical need to update its command and control capability to better identify and classify safety and security threats in the maritime realm and coordinate an integrated response.

Polar Presence and Capabilities

Recent years have seen a significant increase in Polar activity, including efforts by multiple Arctic nations to define and claim Arctic seabed and access to natural resources. Energy security needs, protection of U.S. sovereignty, increased Arctic shipping, prevention and response activities, as well as the growing need for Arctic domain awareness will increase the tempo of Coast Guard operations in the region. The Coast Guard is often the sole Federal presence in the Arctic and the only entity positioned and capable of protecting U.S. sovereignty while supporting scientific research. The Coast Guard is aggressively considering alternatives to improve and

sustain operational presence in the Polar Regions, and I am requesting funds to study future mission requirements in the Polar Regions in the FY 2009 budget.

Establishing Comprehensive Intelligence and Awareness Regimes

Collecting, fusing, and sharing intelligence is critical to securing the border and protecting the Nation against determined terrorists and criminals. It is equally important to safeguard our intelligence resources from compromise and exploitation. As a member of the Intelligence Community, the Coast Guard must be fully and properly vested in equipment and intellectual capital capable of meeting responsibilities of intelligence collection, information sharing, long-range tracking, and interagency partnerships.

Fiscal Year 2009 Budget Request

The Coast Guard's FY 2009 budget request sustains service delivery and continues critical recapitalization efforts while focusing on: *enhancing marine safety, improving command and control, and establishing comprehensive intelligence and awareness regimes. Budget request highlights include:*

Recapitalizing Aging Vessels, Aircraft, and Shore Infrastructure

Integrated Deepwater System (IDS) Surface Assets—$540.7M

The budget requests $540.7M for the following IDS surface asset recapitalization or enhancement initiatives:

- Completion of National Security Cutter #4 — $353.7M
- Production of three Fast Response Cutters — $115.3M
- Operational enhancement of five Medium Endurance Cutters — $35.5M
- Operational enhancement of three 110-foot Patrol Boats — $30.8M
- Offshore Patrol Cutter requirements analysis — $3M
- Development/production of IDS Cutter Small Boat — $2.4M

Integrated Deepwater System (IDS) Air Assets—$231.3M

The budget requests $231.3M for the following IDS air asset recapitalization or enhancement initiatives:

- Delivery of two HC–144A Maritime Patrol Aircraft — $86.6M
- HH–65 conversion to modernized components, cockpit, and enhanced interoperability for 22 aircraft — $64.5M
- HH–60 engine sustainment and avionics, wiring, and sensor upgrades for eight aircraft — $52.7M
- HC–130H avionics and sensor upgrades for nine aircraft and one center wing box replacements — $24.5M
- Unmanned Aircraft System project analysis — $3M

Integrated Deepwater System (IDS) Other—$218.4M

The budget requests $218.4M for the following IDS equipment and services:

- Upgrades to IDS command, control, computer, intelligence, surveillance, and reconnaissance (C4ISR) items — $88.1M
- Government Program Management for contract oversight and execution — $58M
- Development of logistics capability and facility upgrades — $37.7M
- Systems Engineering and Integration funds — $33.1M
- Prevention of IDS asset obsolescence by replacing aging technology — $1.5M

Depot Level and Emergency Maintenance—$29.2M

The budget requests $29.2M for urgent extraordinary maintenance requirements including vital crew safety needs on cutters, emergency maintenance, and post-casualty maintenance. Specifically, this request funds overhauls of habitability, sanitary, electrical, fire/flooding alarm systems and asbestos/lead remediation on cutters; restores required cutter dockside scope and intervals, restores aircraft repair intervals, funds required spare parts replenishment; and funds unanticipated repairs on legacy cutters and aircraft, unscheduled drydocks/dockside availabilities, and fire damage remediation.

Inland River Assets—$9M

The budget requests $4M in critical maintenance and renovation funding to address emergency safety and habitability needs on 25 aging Aids to Navigation (ATON) cutters. This project will serve as a bridging strategy to future replacement. The $5M AC&I request will be for survey and design funding to chart a suitable course of action which may include additional sustainment measures and/or a multi-mission replacement due to obsolescence. Although originally designed specifically

for ATON work, many of these vessels serve as a critical Federal presence on the inland waterways.

Response Boat-Medium (RB–M)—$64M

The budget requests $64M for 14 boats to replace the aging 41-foot utility boat (UTB) and other non-standard boats with an asset more capable of meeting the USCG's multi-mission requirements.

Shore Facilities and ATON Recapitalization Projects—$50M

The budget requests a total of $50M, an increase of $12.1M over FY 2008. The Coast Guard occupies more than 22,000 shore facilities with a replacement value of approximately $7.4B. The FY 2009 funding is crucial to maintaining safe, functional and modern shore facilities that efficiently and effectively support USCG assets and personnel. FY 2009 projects include:

- Sector Delaware Bay—Construct new consolidated facilities; upgrade work spaces and living quarters $13M
- CG Housing Cordova, AK—Six new duplex units $11.6M
- CGA Chase Hall—Renovate cadet barracks $10.3M
- AIRSTA Cape Cod—Replace runway lighting $5M
- Waterways ATON Infrastructure $4M
- TISCOM—Construct a 5,000 square-foot addition $2.5M
- Survey and Design—Planning and engineering of outyear shore projects $2.1M
- Station Montauk—Purchase three housing units $1.6M

Operation & Maintenance (O&M) of Surface and Air Assets

$40.2M/199 positions

The budget requests a total of $40.2 million to fund O&M of the following cutters, boats, aircraft and associated subsystems delivered through the IDS acquisition project:

- Four HC–144A aircraft $24M
- C4ISR upgrades for legacy cutters, boats, aircraft, and operations centers $7.1M
- National Security Cutters #1–#2 $5.6M
- Fast Response Cutter (FRC–B) Primary Crew Assembly Facility $1.4M
- FRC–B #1 $1.2M
- Airborne Use of Force aircraft & equipment $0.8M

Enhancing the Marine Safety Program

Marine Inspection Program—$20M/276 positions

The budget requests $20M for 276 additional Marine Inspectors to address growth in maritime commerce and the Nation's regulated vessel fleet, including the inspection of approximately 5,200 towing vessels mandated by the FY 2004 Coast Guard Authorization Act. Inspection and investigation demand is expected to increase as a result of additional Liquefied Natural Gas ships and facilities, towing vessel examinations, non-tank vessel response plan reviews, ballast water management oversight, and regulatory development. This initiative is critical to maintaining the safety and efficiency of the Nation's MTS.

DHS Regulatory Program—$2.6M

The budget requests $2.6M to fund additional contract support and improve rulemaking throughput and capacity. Before 9/11, there were 59 Coast Guard rulemaking projects outstanding. In the year following 9/11, this backlog increased to 75 and now stands at approximately 100 rulemaking projects. This initiative provides much needed technical writers and environmental and economic analyses critical to the development of safety, security, and environmental protection regulatory regimes. In the interim, we are completing a rulemaking review and reform project and implementing performance measures to maximize throughput.

Improving Command and Control

Rescue 21—$87.6M/97 positions

The budget requests $87.6M to continue full rate production of towers and equipment for sectors including Great Lakes, Hawaii, Guam, and Puerto Rico. This request also includes funding for one additional watch section (five persons) at 15 of the busiest Sector Command Centers. Rescue 21 replaces the existing National Distress and Response System and enhances the Coast Guard's ability to execute all of its missions through improved communications and command and control capabilities in the coastal zone. The additional watchstanders included in this request

support the increased capability provided by Rescue 21 and ensure proper monitoring of the additional communications circuits and coordination of response operations.

Situation Unit Watchstanders—$6.3M/101 positions

The budget requests $6.3M for additional watchstanders at Sectors, Districts, Area, and Headquarters Command Centers to meet increasing operational demands and support the additional vessel monitoring, information collection and interagency coordination capability provided by the Command 21 initiative. The additional watchstanders are responsible for fusing intelligence and information with vessel movements and other port activities to increase Maritime Domain Awareness (MDA) and maintain a thorough, integrated local tactical picture.

Acquisitions Directorate Personnel Increase—$9M/65 positions

The budget requests $9M to complete consolidation of the Integrated Deepwater System, the existing Acquisition Directorate, the Head Contracting Authority, and the procurement policy staff into a combined Acquisition Directorate (CG–9). This request provides funding for 65 personnel to perform the lead system integrator role for all acquisition projects, and develop lifecycle support plans for newly delivered Deepwater assets. This initiative complement's the Acquisition Directorate's formal assignment of technical authority to the Directorates for Engineering & Logistics, Personnel, and Information Management for all acquisition projects.

Establishing Comprehensive Intelligence and Awareness Regimes

Nationwide Automatic Identification System (NAIS)—$25.5M/10 positions

The budget requests $14.6M to provide Initial Operational Capability for Increment Two of NAIS, providing receive coverage out to 50 nautical miles and transmit coverage out to 24 nautical miles for CG Sectors Hampton Roads, Delaware Bay, and Mobile. This request also includes $10.9M for network operating and maintenance requirements for Increment One of NAIS already installed in 55 ports and nine coastal areas.

MAGNet 2.0—$12.3M/17 positions

The budget requests $12.28M for Maritime Awareness Global Network (MAGNet) 2.0. MAGNet 2.0 provides the intelligence information technology capability that serves as a data repository, fusion platform and enterprise-sharing device to consolidate information from 20 separate national level sources and provide timely intelligence and maritime related information to operational commanders, interagency, and port partners. MAGNet is a proven, robust intelligence-sharing architecture.

Command 21—$1M

The budget requests $1M for Command 21 to continue the survey and design, software development and project management initially funded in FY 2008. Command 21 provides an integrated system of "surveillance and notice" to meet the requirements of the Maritime Transportation Security Act (MTSA) and the SAFE Port Act, which states, *"the Secretary shall establish interagency operational centers for port security at all high-priority ports. . . ."* Command 21 will support interagency operations centers at Coast Guard Sectors by providing information-sharing and situational awareness tools to close the gaps in our current port and coastal surveillance capability while facilitating greater cooperation and coordination with port partners.

Cryptologic Service Group & Direct Support—$3.3M/46 positions

The budget requests $3.34M to establish three Coast Guard Cryptologic Service Groups and five Direct Support Teams for deployment on legacy cutters. Cryptologic capabilities greatly contribute to the number of successful security and intelligence-related missions at-sea, including security and law enforcement interceptions, vessel boardings, and drug and migrant interdictions. DOD's current personnel support for Coast Guard cryptologic needs terminates in FY 2009.

Counter-Intelligence (CI) Service Initiative—$2.0M/29 positions

The budget requests $2M to bring the Coast Guard's Counter-intelligence Service to a minimum staffing level necessary to execute counter-intelligence activities. A functional counter-intelligence service will preserve the operational integrity of the Coast Guard by shielding its operations, personnel, systems, facilities, and information from the intelligence activities of foreign powers, terrorist groups, and criminal organizations.

Fiscal Year 2009 Organizational Reinvestments

The Coast Guard's FY 2009 budget request creates efficiencies which shift resources to support new assets scheduled for delivery in FY 2009 and offset required annualizations from FY 2008 program initiatives.

Organizational Reinvestments—($139.4M)/(295 positions)

FY 2009 savings include:

- Termination of FY 2008 one-time costs ($36.2M)
- Management Efficiencies ($68.2M)
- Decommissioning of six aging aircraft ($22.4M)
- Decommissioning of four aging cutters ($9.5M)
- Annualization of FY 2008 Management of Technology Efficiencies ($3.1M)

Migrating LORAN–C to DHS Directorate for National Preparedness and Protection.

LORAN–C Modernization—($34.5M)/[294 positions]

The administration of the LORAN–C program will migrate to the DHS National Protection and Programs Directorate (NPPD) in preparation for conversion of LORAN–C operations to Enhanced LORAN (eLORAN). NPPD will oversee the development of eLORAN to provide national backup capabilities for position, navigation, and timing. The 2009 request reflects transfer of LORAN–C operations to NPPD, however the Coast Guard will continue operation of the system in 2009 on a reimbursable basis.

Allocation of Budget Authority Across All Missions

I recognize our Mission Cost Model (MCM) tables have generated concerns over the display of allocated budget authority across our 11 missions. The Coast Guard does not budget by mission, however, program performance is informed through the alignment of resources and missions.

Let me be clear, the MCM is not an accurate indicator of our FY 2009 budgetary emphasis nor is it a reliable estimation tool for future level of effort in any mission or allocation or budget authority.

Our appropriation structure supports our multi-mission requirements by allowing us to surge and shift resources across all mission areas. This level of resource flexibility is critical to successful mission execution in our dynamic, demand-driven operational environment. Owing to the nature of our appropriations, it is impossible to definitively determine a particular mission's "level of effort" through analysis of the MCM-projected FY 2009 budget authority allocations.

*The MCM is also **not** an accurate tool for forecasting mission emphasis.* MCM tables are merely a function of the cost to perform a mission and not a representation of level of effort expended on that mission. This is due to asset-intensive missions being inherently more expensive than personnel-intensive missions. For example, the cost to operate a cutter, boat, or aircraft in support of the Ports, Waterways, and Coastal Security (PWCS) mission for 1 hour is substantially greater than the cost for a marine inspector to conduct a 1-hour safety inspection on a commercial vessel.

The MCM's FY 2009 forecasted allocations are based on an average of historical operating hours by mission activity, not actual resource allocations outlined in our budget request. As a result, there is often a significant disparity between forecast allocations and actual expense data from the most recently completed fiscal year. For completed fiscal years, the MCM is a good lagging indicator of mission cost because allocations are based on actual operational data.

In short, our true budgetary emphasis is most accurately discerned through a line-by-line review of our entire budget request in the Congressional Justifications, not the MCM tables.

I am committed to working with Congress to ensure that our Congressional Justification clearly displays our allocation of budget authority. Separately, we will look to improve the MCM as a tool for budget-performance integration.

Unprecedented Service to the Public During FY 2007

The President's Fiscal Year 2009 budget request for the Coast Guard builds on our recent mission successes. Coast Guard professionals delivered unprecedented operational service and record results for the American public in 2007:

- Celebrated *one million lives saved* since the Service's inception in 1790.
- Seized/removed a record 355,000 lbs of cocaine, 12,000 lbs of marijuana, and 350 pounds of heroin from the global narcotics stream, including a 33,359 lbs

cocaine seizure from the Panamanian flagged motor vessel GATUN—*the largest cocaine seizure in Coast Guard history.*

- Responded to over 27,000 Search and Rescue cases and saved over 5,000 lives.
- Supported the Global War on Terror through both Operation Iraqi Freedom and Operation Enduring Freedom with over 800 active and reserve personnel deployed around the world.
- Interdicted over 6,000 migrants attempting to gain illegal entry to the United States.
- Interdicted and seized six Chinese High Seas Drift Net (HSDN) vessels during the 2007 multi-national HSDN enforcement campaign, Operation North Pacific Watch.
- Conducted 44,896 domestic commercial vessel certification or general compliance inspections, 38,837 of which were on commercial vessels requiring a Certificate of Inspection for operation.
- Completed 8,840 Port State Control safety and environmental examinations and 8,814 International Ship and Port Facility Security Code examinations of foreign vessels arriving at U.S. ports.
- Collected biometric information from over 1,100 migrants in the Mona Pass using state-of-the-art handheld scanners. As a result of integration with the US–VISIT database, 257 migrants with criminal records were identified and 72 were brought ashore for prosecution under U.S. laws. Under this program, migrants with criminal histories were detained and prosecuted instead of repeatedly repatriated.
- Asserted U.S. rights of sovereignty, facilitated maritime commerce and supported Operation Deep Freeze (a 40-nation collaborative research project) in the Polar Regions.
- Protected and safely escorted 75 military sealift movements carrying over 6,000,000 square feet of indispensable military cargo in support of ongoing Global War on Terror operations.
- Partnered with FEMA, DHS and other agencies to revise and improve the National Response Plan, now referred to as the National Response Framework.

Established the Deployable Operations Group (DOG)

- Aligned all Coast Guard deployable, specialized forces under a single, unified command, providing "one-stop shopping" for Coast Guard and interagency partners seeking adaptive, tailored force packages for rapid response to worldwide threats. The DOG encompasses 3,000 Coast Guard personnel from 12 Maritime Safety and Security Teams, one Maritime Security Response Team, two Tactical Law Enforcement Teams, eight Port Security Units, and the National Strike Force.

Conducted a Major National Environmental Stewardship Exercise

- Cosponsored (with EPA) the largest SONS exercise to date, involving 11 states, 14 Federal agencies, two Coast Guard Districts, four Coast Guard Sectors, 15 industry partners, and over 5,000 emergency management personnel.

Created the Centralized Acquisition Directorate

- Created a centralized acquisition directorate to be responsible for the Coast Guard's major acquisition projects. As part of this reorganization, the Coast Guard implemented the *Blueprint for Acquisition Reform* to enhance mission execution, creating a more responsive, competent and efficient acquisition organization. Since inception, program execution, contracting practices, research and development, and industry oversight have significantly improved.
- Commenced an Alternatives Analysis for major Deepwater assets, designated technical authorities for Hull, Mechanical, Engineering and C4ISR design review, and resolved many outstanding contractual issues on the National Security Cutter through an acquisition and academic best-practice known as a Consolidated Contracting Action (CCA).

Recapitalized Aging Assets, Maintaining and Improving Capability

- Improved Search and Rescue capability by establishing state-of-the-art Rescue 21 VHF–FM communications systems in three additional major coastal areas.
- Achieved NAIS "receive" capability in 55 ports and nine coastal waterways. The NAIS system substantially enhances MDA by providing the ability to continu-

ously track the movement of AIS-equipped vessels both within and in the approaches to major ports.

- Leveraged existing organic maintenance capability to complete successful Mission Effectiveness Projects (MEPs) on four 210-foot/270-foot Medium Endurance Cutters (MECs) and one 110-foot Patrol Boat (WPB). MEP replaces obsolete, unsupportable and maintenance-intensive systems allowing for the continued operation of the current MEC and WPB fleets in a more economical manner until they are replaced by more capable IDS assets. Post-MEP MECs have shown a 22 percent improvement in Percent of Time Free of major casualties.
- Completed replacement of engines on 95 HH–65 helicopters on budget and ahead of schedule. This replacement increased aircraft power by 40 percent, significantly increasing aircraft capability and operating safety margins.
- Established an in-house maintenance capability to overhaul HC–130s at the Aircraft Repair and Supply Center in Elizabeth City, NC. In 2007, the Coast Guard achieved the best C–130 quality and schedule for Progressive Structural Inspections in agency history. This directly resulted in higher availability rates, fewer operational gaps, and the ability to respond quickly to mandated inspections of an aging aircraft.

Conclusion

As a maritime Nation, our security, resilience, and economic prosperity are intrinsically linked to the oceans. Safety and freedom of transit on the high seas are essential to our well-being, yet are very fragile. Moreover, threats to border security, growth in the global marine transportation system, expanded use of the Arctic, and burgeoning coastal development are challenging conventional paradigms. The Coast Guard is *ideally-suited* to address these and other challenges through its comprehensive, complementary authorities, flexible and adaptive operational capabilities, and centuries of experience protecting America's national security interests. *The Coast Guard's integrated approach to safety, security, and stewardship remains the most effective method of governance in the maritime domain.*

The people of the Coast Guard delivered record national results in 2007. Punctuated by the celebration of over *one million lives saved* since 1790 and removal/seizure of over 350,000 pounds of cocaine, *"Semper Paratus,"* the Coast Guard motto, guides our effort every day and in every mission. Our men and women performed with courage, sacrifice and dignity, and are eager and prepared to answer the Nation's call now and into the future.

As our Nation faces the long-term struggle against radical extremism in a period of persistent conflict, the Coast Guard must be prepared to conduct operations across a broad spectrum of potential threats and hazards. We must position America's Coast Guard to answer the call, to be *Semper Paratus,* and to execute the mission. While much has been achieved, developing comprehensive maritime safety, security, and stewardship regimes for the Nation remains a work in progress. Our Fiscal Year 2009 budget request and current legislative priorities are critical steps in the right direction.

Thank you for the opportunity to testify before you today. I am pleased to answer your questions.

Senator CANTWELL. Thank you, Admiral Allen.

Mr. Caldwell?

STATEMENT OF STEPHEN L. CALDWELL, DIRECTOR, HOMELAND SECURITY AND JUSTICE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. CALDWELL. Senator Cantwell, Senator Inouye, thank you very much for inviting GAO back to testify on the Coast Guard's budget and performance and other related issues.

It's been 10 years now that GAO has been providing Congress with detailed analysis of the Coast Guard's budget and performance, and we appreciate being able to help with hearings like this.

Overall, this budget request represents about a 7-percent increase over last year. Some of the major increased items in the OE request are for people, which is as Commandant Allen said, one of his key priorities. Those additional people are generally for marine

inspections, watchstanding, maintenance, command and control, cryptology, counter-intelligence, and acquisition.

The AC&I request includes a funding increase for Deepwater as that program's funding regains momentum after taking a pause last year. But, again, Deepwater dominates AC&I funding to such a degree that it leaves relatively little room for other items, including ATON, which is another item mentioned by Commandant Allen.

Now I'll discuss mission balance, which is a key issue with this Committee.

In the aftermath of 9/11, the Coast Guard, understandably, shifted a lot of its resources to security. This shift has raised concerns, because of the magnitude of this shift, regarding the resources for traditional missions. Some may have concluded that, with 9/11 getting further in the rearview mirror, the security missions had somehow leveled off, which would allow rebalancing, and even a growth, in potential resources for the non-homeland security missions. However, GAO's recent work has, instead, shown continued growth in security mission requirements. These increases have been brought about through a number of factors, from MTSA to the SAFE Port Act to internal Coast Guard initiatives, as well as increasing maritime activity across the board.

My written statement provides some examples of areas where security requirements have been on the increase. And today we are releasing a report, to the full committee, on Coast Guard inspections of domestic maritime facilities. As you know, the SAFE Port Act doubled the number of facility inspections required of the Coast Guard. This will likely increase the number of Coast Guard resources needed to complete those missions, and to ensure that such facilities are complying with their security plans.

But, similar to the security requirements, nonsecurity requirements are also growing in such areas as all-hazard planning, oil-spill prevention and management, protection of marine sanctuaries, and increasing Polar operations.

Some additional resources are on the way. Congress provided plus-ups, in the 2008 appropriation, for small boats and their crews. This will allow additional vessel escorts in water-borne security patrols.

In addition, the Coast Guard's 2009 request, as already noted, has asked for more personnel in a variety of areas.

As for the Deepwater Program, which is of big concern to this Committee, I'd like to recognize my colleague, John Hutton, sitting behind me here. Mr. Hutton is leading GAO's work on the acquisition and contractual aspects of Deepwater and I may call upon him if there's a question that comes up I can't answer.

The Coast Guard appears to be turning the corner on Deepwater. But, just as you can't turn a big ship on a dime, it takes some time to fully turn the Deepwater Program in the right direction. Nevertheless, our report to this Subcommittee, which will be released next week, does point out several positive steps that the Coast Guard has taken to implement needed changes.

Even if the Coast Guard changes to the Deepwater Program accomplish the hoped for turnaround and provides the needed assets within the revised budgets and schedules, the sheer size of the

funding for Deepwater will continue to be a long-term challenge for both the Coast Guard, as well as Congress, in terms of funding longer-term needs.

Finally, Deepwater problems in the recent past, such as the 123′ patrol boats being taken out of service, continue to affect operations. Costs have increased, in terms of added maintenance for the legacy assets; and also, costs have increased, in terms of opportunity costs in lost or reallocated missions. This last type of cost, the opportunity cost, includes such things as shifting boats to District 7 to continue the operations of the migrant interdiction mission, but at a cost in the Living Marine Resources mission in other districts.

That concludes my remarks. Thank you. And I'd be pleased to answer any questions.

[The prepared statement of Mr. Caldwell follows:]

PREPARED STATEMENT OF STEPHEN L. CALDWELL, DIRECTOR, HOMELAND SECURITY AND JUSTICE ISSUES, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Madam Chair and Members of the Subcommittee:

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

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

This statement will discuss:

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

The Coast Guard is a multi-mission, maritime military service within the Department of Homeland Security. The Coast Guard's responsibilities fall into two general categories—those related to homeland security missions, such as ports, waterways, and coastal security (including conducting harbor patrols and other activities to prevent terrorist attacks), defense readiness, and undocumented migrant interdiction; and those related to non-homeland security missions, such as search and rescue, marine environmental protection (including oil spill response), illegal drug interdiction, and polar ice operations.

An assessment of the Coast Guard's Fiscal Year 2009 budget should be considered in the context of broader Federal budgetary issues. As we have reported elsewhere, the Federal Government's deteriorating long-range financial condition and long-term fiscal imbalance are matters of increasing concern. The Nation faces large and growing structural deficits due primarily to rising healthcare costs and known demographic trends that will constrain the government's ability to pay for other obliga-

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

tions and discretionary expenses.[2] Addressing this long-term fiscal issue is an overarching challenge. As a result, there is a need to engage in a fundamental review, repriorization, and reengineering of the base of the government. Understanding and addressing the Federal Government's financial condition and long-term fiscal imbalance are critical to maintain fiscal flexibility so that we can respond to current and emerging social, economic, and security challenges.[3]

An assessment of the Coast Guard's budget should also be considered in the context of risk management. Risk management is a strategy for helping policymakers to make decisions about allocating finite resources and take actions in the face of uncertainty. The Coast Guard cannot afford to protect all maritime areas and facilities against all possible threats. As a result, it must make choices about how to allocate its resources to most effectively manage risk. Risk management has been widely supported by the President and Congress, as a management approach for homeland security, and the Secretary of Homeland Security has made it the centerpiece of departmental policy. The Coast Guard has used risk management to develop security plans for port areas.[4]

This statement is based in part on ongoing work being done for this Subcommittee and on prior GAO work focusing on the Coast Guard's programmatic and management initiatives completed over the past 10 years.[5] In assessing the Coast Guard's budget resources, we analyzed budget, performance, and acquisitions documents and conducted interviews with Coast Guard officials. With regard to the budget assessment, our scope was limited due to the short time available since the release of the President's Fiscal Year 2009 budget request. Additionally, this review did not include evaluating whether the proposed funding levels are appropriate for the Coast Guard's stated needs. Our work on homeland security is based on a series of reviews we conducted in the aftermath of 9/11. This work involved discussions with appropriate Coast Guard and other Federal officials at headquarters and field units in domestic and international locations, reviews of related program documents, analysis of program databases (including reliability assessments), as well as discussions with other domestic and international stakeholders in the maritime industry.

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

We conducted this performance audit from October 2007 to March 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Summary

The Coast Guard's Fiscal Year 2009 budget request is approximately 7 percent higher than its Fiscal Year 2008 enacted budget, which continues the upward trend seen in recent years. Major increases in this year's budget are attributable to operating expenses for the funding of additional marine inspectors and new command and control capabilities. Major increases in this year's budget are also attributed to acquisition, construction and improvements for continued enhancement and replace-

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

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

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

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

ment of aging infrastructure. Within this budget, there are also a number of reallocations that do not impact the total amount of funding. With respect to the agency's performance, the Coast Guard expects to meet its performance goals for 6 of its 11 mission areas for Fiscal Year 2007, consistent with its performance for Fiscal Year 2006. The Coast Guard also continues to develop additional performance measures in an effort to capture additional segments of program activity and to develop ways to better understand the links between resources it expends and the results it achieves.

The Coast Guard continues to face challenges balancing its various missions within its finite resources. For several years, we have reported that the Coast Guard has had difficulties fully funding and executing both homeland security missions and its traditional non-homeland security missions. Our work has shown that the Coast Guard's requirements continue to increase in homeland security in part due to additional statutory requirements. In several cases, the Coast Guard has been unable to keep up with these security demands, for example, by not meeting its own requirements for providing vessel escorts and conducting security patrols at some ports. In other cases, the Coast Guard is facing additional requirements to conduct more inspections of maritime facilities or provide security at a growing number of facilities that import hazardous cargos such as Liquefied Natural Gas (LNG). The Coast Guard faces additional non-homeland security requirements such as updating port plans (as part of an all-hazards approach) and updating regulations related to oil spills and the Oil Spill Liability Trust Fund. The Coast Guard also has additional longer term non-homeland security requirements, such as those related to the protection of marine areas near Hawaii and increased vessel traffic in the Arctic and surrounding areas.

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

Background

The Coast Guard is an Armed Service of the United States and the only military organization within the Department of Homeland Security (DHS). It is the principle Federal agency responsible for maritime safety, security, and environmental stewardship through multi-mission resources, authorities, and capabilities. To accomplish its responsibilities, the Coast Guard is organized into two major commands that are responsible for overall mission execution—one in the Pacific area and the other in the Atlantic area. These commands are divided into 9 districts, which in turn are organized into 35 sectors that unify command and control of field units and resources, such as multi-mission stations and patrol boats. In its Fiscal Year 2009 posture statement, the Coast Guard reported having nearly 49,100 full-time positions—about 42,000 military and 7,100 civilians. In addition, the agency reported that it has about 8,100 reservists who support the national military strategy or provide additional operational support and surge capacity during times of emergency, such as natural disasters. Finally, the Coast Guard reported that it utilizes the services of about 29,000 volunteer auxiliary personnel who conduct a wide array of activities, ranging from search and rescue to boating safety education. The Coast Guard has responsibilities that fall under two broad missions—homeland security and non-homeland security. The Coast Guard responsibilities are further divided into 11 programs, as shown in Table 1.

Table 1.—Homeland Security and Non-Homeland Security Programs by Mission Area

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

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

For each of these 11 mission-programs, the Coast Guard has developed performance measures to communicate agency performance and provide information for the budgeting process to Congress, other policymakers, and taxpayers. The Coast Guard's performance measures are published in various documents, including the Coast Guard's Posture Statement, which includes the Fiscal Year 2009 Budget-in-Brief. The Coast Guard's 2009 Budget-in-Brief reports performance information to assess the effectiveness of the agency's performance as well as a summary of the agency's most recent budget request. The performance information provides performance measures for each of the Coast Guard's mission-programs, as well as descriptions of the measures and explanations of performance results.

To carry out these missions, the Coast Guard has a program underway—called the Deepwater program—to acquire a number of assets such as vessels, aircraft, and command, control, communications, computer, intelligence surveillance, and recon-

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

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

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

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

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

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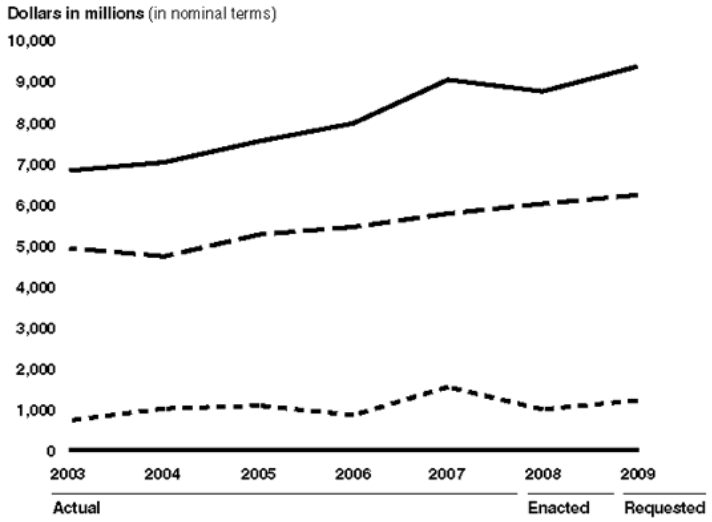
[6] The Coast Guard's "system of systems" approach integrates ships, aircraft, sensors, and communication links together as a system to accomplish mission objectives.

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

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

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

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



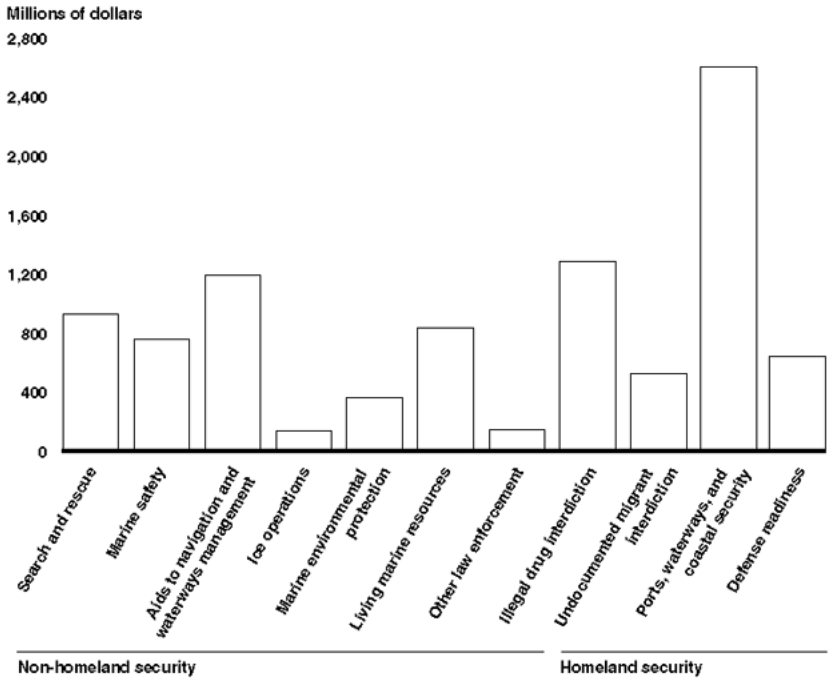
	2003	2004	2005	2006	2007	2008	2009
Total	6,811	7,012	7,525	7,963	9,025	8,741[a]	9,346
OE	4,920	4,718	5,250	5,434	5,763	6,001	6,213
ACI	720	1,007	1,080	846	1,534	988[b]	1,205

Source: GAO analysis of Coast Guard data.

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

Overall, the Coast Guard's budget request for homeland security missions represents approximately 40 percent of the overall budget, with the non-homeland security funding representing approximately 60 percent. However, the Coast Guard does not request funding by mission; it does so by appropriation account. Nonetheless, the Coast Guard provides a comparison of homeland security *versus* non-homeland security funding as part of the President's Fiscal Year budget request. According to the Coast Guard, an activity-based cost model is used to estimate homeland security *versus* non-homeland security funding for its missions. This is done by averaging past expenditures to forecast future spending, and these amounts are revised from the estimates reported previously. Although the Coast Guard reports summary financial data by homeland security and non-homeland security missions to the Office of Management and Budget, as a multi-mission agency, the Coast Guard can be conducting multiple mission activities simultaneously. For example, a multi-mission asset conducting a security escort is also monitoring safety within the harbor and could be diverted to conduct a search and rescue case. As a result, it is difficult to accurately detail the level of resources dedicated to each mission. *Figure 2* shows the estimated funding levels for Fiscal Year 2009 by each mission program. However, actual expenditures are expected to vary from these estimates, according to the Coast Guard.

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



Source: GAO analysis of Coast Guard data.

Performance Remains Steady

The Coast Guard expects to meet 6 of 11 performance targets in Fiscal Year 2007, the same overall level of performance as 2006, and overall performance trends for most mission-programs remain steady.[10] In Fiscal Year 2007, as in Fiscal Year 2006, the Coast Guard met 5 targets—Ports, Waterways, and Coastal Security; Undocumented Migrant Interdiction; Marine Environmental Protection; Other Law Enforcement; and Ice Operations—and agency officials reported that the Coast Guard expects to meet the target for one additional program, Illegal Drug Interdiction, when results become available in August 2008.[11] This potentially brings the number of met targets to 6 out of 11. In addition, the Coast Guard narrowly missed performance targets for 3 of its non-homeland security mission-programs, Search and Rescue, Living Marine Resources, and Aids to Navigation; and more widely missed performance targets for two other mission-programs, Marine Safety and Defense Readiness. Performance in 6 of 11 Coast Guard mission-programs improved in the last year, although improvements in the Marine Safety and Search and Rescue mission-programs were insufficient to meet 2007 performance targets. Alternatively, while performance decreased for the Ports, Waterways, and Coastal Security program, the performance target was still met. Meanwhile, three mission-programs that did not meet 2007 performance targets, Defense Readiness, Living Marine Resources, and Aids to Navigation, demonstrated lowered performance in 2007 compared to 2006 performance. (See *App. II* for more information on Coast Guard performance results.)

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

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

In 2006, we completed an examination of the Coast Guard's non-homeland security performance measures to assess their quality.[12] We reported that while the Coast Guard's non-homeland security measures are generally sound and the data used to collect them are generally reliable, the Coast Guard had challenges associated with using performance measures to link resources to results. Such challenges included comprehensiveness (that is, using a single measure per mission-program may not convey complete information about overall performance) and external factors outside of the agency's control (such as weather conditions, which can, for example, affect the amount of ice that needs to be cleared or the number of mariners who must be rescued). According to Coast Guard officials, new performance measures are currently under development to further capture performance for its mission-programs, and that link resources to results. For example, officials described efforts to develop a new measure that captures an additional segment under its search and rescue mission-program, called Lives Unaccounted For. Also, two new measures are under development to further capture the Coast Guard's risk management efforts and link resources to results under the ports, waterways and coastal security mission-program. As we have reported, the Coast Guard appears to be moving in the right direction with these efforts. However, since these efforts are long-term in nature, it remains too soon to determine how effective the Coast Guard's larger efforts will be at clearly linking resources to performance results as certain initiatives are not expected to be implemented until 2010.[13]

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

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

Homeland Security Mission Requirements Continue to Increase

The Coast Guard's heightened responsibilities to protect America's ports, waterways, and waterside facilities from terrorist attacks owe much of their origin to the Maritime Transportation Security Act (MTSA) of 2002.[14] This legislation, enacted in November 2002 established, among other things, a port security framework that was designed to protect the Nation's ports and waterways from terrorist attacks by requiring a wide range of security improvements. The SAFE Port Act, enacted in October 2006, made a number of adjustments to programs within the MTSA-established framework, creating some additional programs or lines of efforts and altering others.[15] The additional requirements established by the SAFE Port Act have added to the resource challenges already faced by the Coast Guard as described below:

- *Inspecting domestic maritime facilities:* Pursuant to Coast Guard guidance, the Coast Guard has been conducting annual inspections of domestic maritime facilities to ensure that they are in compliance with their security plans. The Coast Guard conducted 2,126 of these inspections in 2006. However, Coast Guard policy directed that they be announced in advance. The SAFE Port Act added additional requirements that inspections be conducted at least twice per year and that one of these inspections be conducted unannounced. More recently, the Coast Guard has issued guidance requiring that unannounced in-

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

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

[14] Pub. L. No. 107–295, 116 Stat. 2064 (2002).

[15] Pub. L. No. 109–347, 120 Stat. 1884 (2006).

spections be more rigorous than before. In February 2008, we reported that fulfilling the requirement of additional and potentially more rigorous inspections, may require additional resources in terms of Coast Guard inspectors. Thus, we recommended that the Coast Guard reassess the adequacy of its resources for conducting facility inspections. The Coast Guard concurred with our recommendation.[16]

- *Inspecting foreign ports:* In response to a MTSA requirement, the Coast Guard established the International Port Security Program to assess and, if appropriate, make recommendations to improve security in foreign ports. Under this program, teams of Coast Guard officials conduct country visits to evaluate the implementation of security measures in the host nations' ports and to collect and share best practices to help ensure a comprehensive and consistent approach to maritime security in ports worldwide. The SAFE Port Act established a minimum number of assessments and Congressional direction has called for the Coast Guard to increase the pace of its visits to foreign ports. However, to increase its pace, the Coast Guard may have to hire and train new staff, in part because a number of experienced personnel associated with this inspection program are rotating to other positions as part of the Coast Guard's standard personnel rotation policy. Coast Guard officials also said that they have limited ability to help countries build on or enhance their own capacity to implement security requirements because—other than sharing best practices or providing presentations on security practices—the program does not currently have the resources or authority to directly assist countries with more in-depth training or technical assistance.[17]
- *Fulfilling port security operational requirements:* The Coast Guard conducts a number of operations at U.S. ports to deter and prevent terrorist attacks. Operation Neptune Shield, first issued in 2003, is the Coast Guard's operations order that sets specific security activities (such as harbor patrols and vessel escorts) for each port. As individual port security concerns change, the level of security activities also change, which affects the resources required to complete the activities. As we reported in October 2007, many ports are having difficulty meeting their port security requirements, with resource constraints being a major factor.[18] Thus, we made a number of recommendations to the Coast Guard concerning resources, partnerships, and exercises. The Coast Guard concurred with our recommendations.[19]
- *Meeting security requirements for additional LNG terminals:* The Coast Guard is also faced with providing security for vessels arriving at four domestic onshore LNG import facilities. However, the number of LNG tankers bringing shipments to these facilities will increase considerably because of expansions that are planned or underway. For example, industry analysts expect approximately 12 more LNG facilities to be built over the next decade. As a result of these changes, Coast Guard field units will likely be required to significantly expand their security workloads to conduct new LNG security missions. To address this issue, in December 2007 we recommended that the Coast Guard develop a national resource allocation plan that addresses the need to meet new LNG security requirements. The Coast Guard generally concurred with our recommendation.[20]
- *Boarding and inspecting foreign vessels:* Security compliance examinations and boardings, which include identifying vessels that pose either a high risk for noncompliance with international and domestic regulations, or a high relative security risk to the port, are a key component in the Coast Guard's layered security

[16] GAO–08–12.

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

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

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

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

strategy.[21] According to Coast Guard officials and supporting data, the agency has completed nearly all examinations and boardings of targeted vessels. However, an increasing number of vessel arrivals in U.S. ports may impact the pace of operations for conducting security compliance examinations and boardings in the future. For example, in the 3-year period from 2004 through 2006, distinct vessel arrivals rose by nearly 13 percent and, according to the Coast Guard, this increase is likely to continue.[22] Moreover, officials anticipate that the increase in arrivals will also likely include larger vessels, such as tankers, that require more time and resources to examine. Similarly, the potential increase in the number of arrivals and the size of vessels is likely to impact security boardings, which take place 12 miles offshore, and are consequently even more time- and resource-intensive. While targeted vessels remain the priority for receiving examinations and boardings, it is unclear to what extent increased resource demands may impact the ability of the Coast Guard field units to complete these activities on all targeted vessels.[23]

- *Establishing interagency operational centers:* The SAFE Port Act called for the establishment of interagency operational centers (command centers that bring together the intelligence and operational efforts of various Federal and nonfederal participants), directing the Secretary of Homeland Security to establish such centers at all high-priority ports no later than 3 years after the Act's enactment.[24] The Act required that the centers include a wide range of agencies and stakeholders, as the Secretary deems appropriate, and carry out specified maritime security functions. Four existing sector command centers the Coast Guard operates in partnership with the Navy are a significant step toward meeting these requirements, according to a senior Coast Guard official. The Coast Guard is also piloting various aspects of future interagency operational centers at existing centers and is also working with multiple interagency partners to further develop this project.[25] The Coast Guard estimates that the total acquisition cost of upgrading sector command centers into interagency operational centers at the Nation's 24 high priority ports will be approximately $260 million. This includes investments in information systems, sensor networks, and facilities upgrades and expansions. Congress funded a total of $60 million for the construction of interagency operational centers for Fiscal Year 2008. The Coast Guard has not requested any additional funding for the construction of these centers as part of its Fiscal Year 2009 budget request. However, the Coast Guard is requesting $1 million to support its Command 21 acquisition project (which includes the continued development of its information management and sharing technology in command centers).[26] So, while the Coast Guard's esti-

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

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

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

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

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

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

mates indicate that it will need additional financial resources to establish the interagency operational centers required by law, its current budget and longer term plans do not include all of the necessary funding.

- *Updating area maritime security plans:* MTSA, as amended, required that the Coast Guard develop, in conjunction with local public and private port stakeholders, Area Maritime Security Plans. The plans describe how port stakeholders are to deter a terrorist attack or other transportation security incident, or secure the port in the event such an attack occurs. These plans were initially developed and approved by the Coast Guard by June 2004. MTSA also requires that the plans be updated at least every 5 years. The SAFE Port Act added a requirement to the plans specifying that they include recovery issues by identifying salvage equipment able to restore operational trade capacity. This requirement was established to ensure that the waterways are cleared and the flow of commerce through United States ports is reestablished as efficiently and quickly as possible after a security incident.[27] The Coast Guard, working with local public and private port stakeholders, is required to revise their plans and have them completed and approved by June 2009. This planning process may require an investment of Coast Guard resources, in the form of time and human capital at the local port level for existing plan revision and salvage recovery development, as well as at the national level for the review and approval of all the plans by Coast Guard headquarters. In December 2007, we recommended that the Coast Guard develop national level guidance that ports can use to plan for addressing economic consequences, particularly in the case of port closures. The Coast Guard generally concurred with this recommendation.[28]

Non-Homeland Security Mission Requirements Also Continue to Increase

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

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

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

[28] GAO–08–141.

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

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

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

exists daily across coastal and inland waters of the United States. Spills can be expensive with considerable costs to the Federal Government and the private sector. The Oil Pollution Act of 1990[32] (OPA) authorized the Oil Spill Liability Trust Fund, which is administered by the Coast Guard, to pay for costs related to removing oil spilled and damages incurred by the spill when the vessel owner or operator responsible for the spill—that is, the responsible party—is unable to pay.[33] In September 2007, we reported that the Fund has been able to cover costs from major spills—*i.e.,* spills for which the total costs and claims paid was at least $1 million—that responsible parties have not paid, but additional risks to the fund remain, particularly from issues with limits of liability.[34] Limits of liability are the amount, under certain circumstances, above which responsible parties are no longer financially liable for spill removal costs and damage claims. The current liability limits for certain vessel types, notably tank barges, may be disproportionately low relative to costs associated with such spills, even though limits of liability were raised for the first time in 2006.[35] In addition, although OPA calls for periodic regulatory increases in liability limits to account for significant increases in inflation, such increases have never been made.[36] To improve and sustain the balance of the fund, we recommended that the Coast Guard determine what changes in the liability limits were needed. The Coast Guard concurred with our recommendation. Aside from issues related to limits of liability, the fund faces other potential drains on its resources, including ongoing claims from existing spills, spills that may occur without an identifiable source, and therefore, no responsible party, and a catastrophic spill that could strain the Fund's resources.[37]

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

[32] Pub. L. 101–380, 104 Stat. 484 (1990).

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

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

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

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

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

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

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

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

Funding Deepwater Poses a Long Term Affordability Challenge

The Deepwater program represents a significant portion of the Coast Guard's budget, especially for acquisition, construction and improvements (AC&I). The Deepwater program, at $990 million, accounts for approximately 11 percent of the Coast Guard's overall $9.3 billion budget request for the entire agency for Fiscal Year 2009. As noted at the beginning of this statement, the overall Federal Government faces a long-term fiscal imbalance, which will put increased pressure on discretionary spending at individual agencies. In addition, Deepwater dominates the Coast Guard's capital spending as it represents nearly 82 percent of the agency's total AC&I request of $1.21 billion. This leaves relatively little funding for non-homeland security assets which—as we reported last year—compete with the Deepwater program for AC&I resources. For example, many inland Aids to Navigation vessels are reaching the end of their designed service lives and, without major rehabilitation or replacement, their ability to carry out their designated missions will likely decline in the future.[40] While the Coast Guard has considered options for systematically rehabilitating or replacing these vessels, it has requested relatively little funding in the Fiscal Year 2009 budget request. Specifically, the Coast Guard has requested $5 million in AC&I funds for survey and design activities to allow them to begin examining options for a new vessel to replace the aging inland river Aids to Navigation cutters.

As we reported last year, Deepwater continues to represent a significant source of unobligated balances—money appropriated but not yet spent for projects included

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

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

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

in previous years' budgets.[41] The unobligated balances for Deepwater total $566 million as of the end of Fiscal Year 2007, which is about 56 percent of the Coast Guard's Fiscal Year 2009 request for Deepwater.[42] These unobligated balances have accumulated for a variety of reasons—such as technical design problems and related delays—where the Coast Guard has found itself unable to spend previous year acquisition appropriations. For two Deepwater assets where the Coast Guard has postponed acquisition—the Offshore Patrol Cutter and the Vertical Unmanned Aerial Vehicle—the Coast Guard did not request funds for Fiscal Year 2008. In the Fiscal Year 2008 appropriation, Congress rescinded $132 million in unobligated balances for these two assets. For Fiscal Year 2009, the Coast Guard has requested relatively small amounts (approximately $3 million each) for these two assets.

Given the magnitude of the program within Coast Guard's overall and AC&I budgets, affordability of the Deepwater program has been an ongoing concern over the years. Our 1998 report on Deepwater indicated that the Coast Guard's initial planning estimate for Deepwater was $9.8 billion (in then-year constant dollars) over a 20-year period.[43] At that time, we said that the agency could face major financial obstacles in proceeding with a Deepwater program at that funding level because it would consume virtually all of the Coast Guard's projected capital spending. Our 2001 testimony noted that affordability was the biggest risk for the Deepwater program because the Coast Guard's contracting approach depended on a sustained level of funding each fiscal year over the life of the program.[44] In 2005, the Coast Guard revised the Deepwater implementation plan to consider post-9/11 security requirements. [45] The revised plan increased overall cost estimates from $17 billion to $24 billion, to include annual appropriations ranging from $650 million to $1.5 billion per year through Fiscal Year 2026. Continuing into future budgets, Deepwater affordability will continue to be a major challenge to the Coast Guard given the other demands upon the agency for both capital and operations spending.

Coast Guard Making Changes to Improve Management of Deepwater

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

The Coast Guard also continues to make progress in implementing our earlier recommendations to better manage the Deepwater program. In March 2004, we made 11 recommendations to the Coast Guard to address three broad areas of concern: improving program management, strengthening contractor accountability, and promoting cost control through greater competition among subcontractors.[47] Of the five recommendations that remained open as of our June 2007 report, we have closed two, pertaining to the Coast Guard's use of models and metrics to measure the con-

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[41] GAO–07–489T.

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

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

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

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

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

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

tractor's progress toward improving operational effectiveness and establishing criteria for when to adjust the total ownership baseline.[48] The Coast Guard has taken actions on the three recommendations that remain open, such as designating Coast Guard officials as the lead on integrated product teams, developing a draft maintenance and logistics plan for the Deepwater assets, and decreasing their reliance on ICGS, including potentially eliminating the award term provision from the ICGS contract.

Problems with Assets and Delays Create Operational and Resource Challenges

Deferring acquisitions of new vessels and aircraft can affect the cost of operations, in that the cost-savings and reliability advantages of new or modernized assets may not be realized, and the cost of maintaining older assets can increase. For example, delays in the acquisition of new patrol boats have forced the Coast Guard to incur additional costs to maintain the older patrol boats. As part of its Deepwater program, the Coast Guard planned to have ICGS convert all 49 existing 110-foot patrol boats into 123-foot patrol boats with additional capabilities. This conversion project was halted after the first eight 110-foot patrol boats were converted and began to suffer structural and operational problems. In November 2006, all eight 123-foot patrol boats were removed from service and the Coast Guard had to take steps to better sustain its remaining 110-foot patrol boats. In Fiscal Year 2005, as the 123-foot patrol boats conversion was experiencing problems, the Coast Guard initiated the Mission Effectiveness Project to replace portions of the hull structure and mechanical equipment on selected 110-foot patrol boats to improve their overall mission effectiveness until a new replacement patrol boat is ultimately delivered. The Coast Guard has been appropriated a total of $109.7 million for this effort through Fiscal Year 2008, and in its Fiscal Year 2009–2013 Five Year Capital Investment Plan indicates it will need an additional $56.3 million through Fiscal Year 2012. In addition, the Coast Guard plans on implementing a "high tempo, high maintenance" initiative for eight of its 110-foot patrol boats. This initiative is aimed at increasing the number of annual operational hours for these eight patrol boats, at a cost of $11.5 million in Fiscal Year 2008.

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

These additional costs will likely continue until the Coast Guard can acquire the replacement patrol boat—the Fast Response Cutter (FRC)—the FRC was conceived as a patrol boat with high readiness, speed, adaptability and endurance. ICGS proposed a fleet of 58 FRCs constructed of composite materials (later termed FRC–As). Although estimates of the initial acquisition cost for these composite materials were high, they were chosen for their perceived advantages over other materials (*e.g.,* steel), such as lower maintenance and life-cycle costs, longer service life, and lower weight. However, in February 2006 the Coast Guard suspended FRC–A design work

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

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

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

in order to assess and mitigate technical risks.[51] As an alternative to the FRC–A, the Coast Guard planned to purchase 12 modified commercially available patrol boats (termed FRC–Bs). In June 2007, the Coast Guard issued a Request for Proposals for the design, construction and delivery of a modified commercially available patrol boat for the FRC–B. In late 2006, the Coast Guard estimated that the total acquisition cost for 12 FRC–Bs would be $593 million. The Coast Guard expects to award the FRC–B contract in the third quarter of Fiscal Year 2008, with the lead patrol boat to be delivered in 2010. Coast Guard officials stated that their goal is still to acquire 12 FRC–Bs by 2012. The Coast Guard intends to award a fixed price contract for design and construction of the FRC–B, with the potential to acquire a total of 34 cutters.

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

APPENDIX I: STATUS OF SELECTED DEEPWATER ASSETS

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

Table 2: Progress of Selected Deepwater Assets

Deepwater asset	2005 baseline	Current status
Fast Response Cutter	• 58 ships • new design with composite hull • cost $3.2 billion or $55.6 million per ship • first asset delivers in 2007	• original procurement halted because of design concerns • new competition for up to 34 ships based on a commercially available design • Coast Guard intends to acquire 12 ships by 2012 for a cost of $593.0 million, or $49.4 million per ship • first asset delivers in 2010
National Security Cutter	• 8 ships • cost of $2.9 billion or $359.4 million per ship • first asset delivers in 2007	• 8 ships • problems in design and construction will delay first asset delivery to 2008 • cost has increased to $3.5 billion or $431.3 million per ship
Offshore Patrol Cutter	• 25 ships • cost of $7.1 billion or $282.2 million per ship • first asset delivers in 2010	• re-competing asset with new design will delay first asset delivery until fiscal year 2015 • 25 ships • cost is uncertain because of new design; however, 2007 expenditure plan shows cost increase to $8.1 billion or $323.9 million per ship
HH-65 Multi-Mission Cutter Helicopter	• upgrade of 95 helicopters • cost of $575.0 million or $6.1 million per helicopter • first asset delivers in 2012	• upgrade of 102 helicopters in three phases • total cost of $741.0 million or $7.3 million per helicopter • first asset of third and final phase delivers in 2008
Maritime Patrol Aircraft	• 36 aircraft • cost of $1.6 billion or $44.2 million per aircraft • first asset delivers in 2008	• 36 aircraft • cost of $1.7 billion or $47.4 million per aircraft • first asset delivers in 2008
Vertical Unmanned Aerial Vehicle	• 45 aircraft • cost of $503.3 million or $11.2 million per aircraft • first asset delivers in 2007	• Coast Guard has deferred acquisition of this asset because of challenges in technology maturation • the fiscal year 2009 budget requests funding for continued analysis but the acquisition plan has not yet been determined
C4ISR	• cost $1.9 billion • includes upgrades to cutters and shore installations, as well as development of a common operating picture	• cost $1.4 billion • capability will be introduced in four increments beginning in 2007 and completing in fiscal year 2014

Source: GAO analysis of Coast Guard documents.

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

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

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

Table 3.—Performance Results by Mission-Program from Fiscal Year 2003 through Fiscal Year 2007

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

Source: GAO analysis of Coast Guard data.

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

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

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

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

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Senator CANTWELL. Thank you very much, Mr. Caldwell, for your testimony.

I'm going to ask the Chairman of the full Committee if he would like to start with a round of questions.

Senator INOUYE. Thank you very much. Madam Chair, I have a whole batch of questions that I'd like to submit for the record.

But, I have one I'd like to ask the Admiral.

The LORAN–C, coming from the Pacific, I know that it is very essential there—it is the backup for the GPS. It gives you navigational position and timing capabilities to our fishermen. Can you tell me what benefits you will obtain by transferring this budget authority to the National Protection and Programs Directorate?

Admiral ALLEN. Yes, sir. Several issues associated with LORAN–C. One, as you know, we—for many years, we've been trying to recapitalize the current LORAN infrastructure, to move from vacuum-tube technology to solid-state technology. And we still have some stations to be converted in Alaska. At the same time, the operating base for the LORAN system has been within the Coast Guard's operating base since it was started.

An interagency look at the future of LORAN–C, in conjunction with the evaluation of whether or not there needed to be a backup to GPS for precision timing and so forth, was concluded, and a joint recommendation was made, by DOT and DHS, that we transition from LORAN–C to eLORAN, which will be the next generation, to ensure that there was a backup for position navigation and timing. Where we are is in a transition mode right now, and it was decided that with—given that GPS is a national critical infrastructure, that this program would be best managed at the departmental level within Homeland Security as a part of the critical infrastructure of this country.

The budget proposal just proposes a base of funding shift up to the Department. We will continue to be the executive agent for operating LORAN–C, so there shouldn't be any change to Coast Guard operations. What will change in the future will be a decision, on a national level, to recapitalize the LORAN–C system to eLORAN, and there'll have to be an interim decision made on a bridging strategy to upgrade the vacuum-tube stations in Alaska to solid-state. But, the shift of funding and responsibility actually creates more stability for us, because, in the past, annual appropriations to upgrade the LORAN system came in various packages—some through FAA or Federal rails in DOT—and this adds stability to the program, sir.

Senator INOUYE. My concern is that you will have a similar financial arrangement with the icebreakers and the National Science Foundation, and you're having some difficulty getting some maintenance costs reimbursed. You don't think this will happen?

Admiral ALLEN. There is no comparison in the two relationships, sir. This is in our own department. This has a strong policy lead. They were decisions made up front, with interagency vetting of

what the position should be in the way forward. There's clear communication of what the expectations are, and adequate funding exists in the base right now to support operations, sir.

Senator INOUYE. I thank you very much, sir.

Senator CANTWELL. Thank you, Admiral Allen. I don't know if I agree with that last statement. I think what Chairman Inouye is trying to point out is that, when there are assets and responsibilities of the Coast Guard, with the resources in another agency, we become frustrated by the oversight and implementation. As it relates to the LORAN–C, we think that a technology upgrade is definitely needed, but outsourcing that to another agency, we're worried that, instead of getting the technology upgrade that is deserved, we'll end up focusing on the fact of conflict between two agencies.

Admiral ALLEN. Yes, ma'am. And I can see, given the past track record with the NSF funding, where you would think that. And I can tell you, having lived with the National Science Foundation funding scheme for the last 3 years, if I thought we were going to duplicate that in any way, shape, or form, I would fall on my sword not to have that LORAN money moved.

Senator CANTWELL. Thank you.

Let me turn, Admiral Allen, if I can, to the Deepwater Program, and focus some of my questions on that.

We are seeing the National Security Cutter, the first one completed in the trials, which are, basically, machinery trials and builder trials. And, in that trial process, there were 987 certification standards for the ship that were supposed to be met, and the contractor was to submit documentation on 892 of those for review. I'm saying they have submitted, I guess it is, the 987, and there's—there are 987, 892 of which have been submitted. And almost—the challenge is that the Coast Guard has identified issues with the C4ISR, the cross-platform communications integration, the hull, mechanical and electrical risks, and there are—eight of which have to be moderated to high risk if some problems continue to happen. So, the Coast Guard and Navy personnel have had this open process, but my question is, with this new National Security Cutter that's being proposed in the budget, and these outstanding issues, if we don't meet all those requirements, how will the contractor be held accountable?

Admiral ALLEN. Well, first of all, we expect to meet the requirements. What we're going through is an iterative process, in acceptance of the vessel, to mitigate risk. And we identified 15 areas of risk, back in the fall, and briefed committee staff on those areas of risk that we'll be watching.

We started by doing early tests, much earlier than we normally would, on the acceptance of a ship, to be able to identify them, so they could be attacked before the formal acceptance trials, which will be in April. Through machinery trials and builder trials, we generate what are called trial cards, and those are, basically, discrepancy cards that are noted, based on the testing of equipment, whether it's electronics or hull and machinery. Those trial cards then become the checklist or the punchlist, if you will, of items to be completed before the ship is satisfactorily ready to operate.

As we move toward our acceptance trials—again, which will be in April—we have—we've had several iterations that have produced more of these trial cards. The goal was to start this process early, identify those checklist items, and deal with them, as many of them in advance, before we went to acceptance trials, because, following acceptance trials by the Coast Guard, we will then have to make a decision of what constitutes the ship as delivered and what work will be conducted, post-delivery.

We are satisfied with the progress right now, but we do feel there is risk associated with the information assurance. We have made that known to the contractors, for several months now, and we are tracking it very closely.

Senator CANTWELL. Mr. Caldwell, how can we judge, particularly when it's a first-in-class vessel, whether these are worrisome problems or they're normal? And how—do you see that there are red flags, here, in the machinery and builder trials? And do you have deeper concerns?

Mr. CALDWELL. We do not currently have audit work involving these specific issues on the NSC. But problems with first-in-class vessels, or of any major asset like this, are relatively common.

Senator CANTWELL. So, what is—either of you—who bears the cost? Would the Coast Guard get any money back if the ship doesn't meet performance? I mean, we're already over-budget, obviously, in the whole National Security Cutter area, so I'm asking, given the huge problems that we've already seen with this ship, now what are our protections, moving forward?

Admiral ALLEN. Well, the contractual vehicle for this vessel is a cost-plus contract, so whatever the—whatever it takes to get the ship out is what we will pay. That's what we are trying to manage, in looking at these trial cards—the delivery date. And, at some point, we'll have to make a decision on when the ship actually moves from the shipyard, because just having the ship in the shipyard itself incurs about a $12- to $14-million-a-month cost, and our goal is to balance the cost of having the ship remain in the shipyard, complete the work that needs to be done before it's put in operation, and what constitutes an acceptance of the vessel.

Senator CANTWELL. Would the Coast Guard get any money back if the ship doesn't meet its performance requirements?

Admiral ALLEN. It would depend on the particular performance requirement that wasn't met and what was in the contract, and there are literally thousands of line items that you're dealing with in the delivery of a ship.

Senator CANTWELL. And so, has that happened before, where the Coast Guard has gotten money back from a contractor for not meeting performance requirements?

Admiral ALLEN. It usually happens under a fixed-price contract, which we will shift to later on in this production line. Right now, we're operating under a cost-plus contract with this vessel.

Senator CANTWELL. Mr. Caldwell, are you concerned about that, given the past performance that—as we move toward, I guess, the at-sea trials—is that what——

Admiral ALLEN. Acceptance trials, ma'am.

Senator CANTWELL.—acceptance trials—that we have a form and process in place, given, already, the problems we have had with this system integration in the Deepwater Program?

Mr. CALDWELL. Based on some of the problems we've had we'd rather have a go-slow approach with the so-called punchlist—and get those problems worked out, when we have a first-in-class vessel like this. As Admiral Allen said, it's cost-plus, so the government will be absorbing the additional costs, but then there can be a shift to a fixed-price contract, which then will reduce the price to the government. Hopefully, all the technical and operational problems from the first-in-class vessel are resolved at that point.

Senator CANTWELL. Well, unfortunately, we have a vote in progress, so what I'm going to do, instead of going to more questions, is recess the hearing to allow Senator Inouye and I to go vote. And hopefully we will be back very shortly to reconvene the hearing.

[Recess.]

Senator CANTWELL. We'll reconvene the Senate Committee on Commerce, Science, and Transportation, Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard.

We're having a hearing this morning on the Coast Guard budget, and we appreciate Admiral Allen being here, as well as Steve Caldwell, Director of Homeland Security and Justice Issues under GAO.

I'd like to go back to the National Security Cutter question. And, sorry for the interruption of a vote, but that obviously happens around here.

Obviously, some of the problems that we have seen with the National Security Cutter have been around this weight margin issue. The ship's design typically includes a margin for additional weight to accommodate service enhancements during the ship's life, and, according to the Coast Guard officials, most of the available weight margin has already been consumed during construction, not including the fatigue-life structure enhancements. The officials further note that subsequent changes to the ship will cost more than they would have otherwise, due to additional redesign and engineering, and that it may be necessary to offset the additional weight.

So, I have a concern. Are these problems—are there any problems with the National Security weight margins? And—but, having said that, I'm concerned that the ship may not have any room to grow, as it is, right now, currently designed. So, Admiral Allen, could you address that?

Admiral ALLEN. Yes, ma'am. In the consolidated contracting action that took place last year, we established a technical baseline for the National Security Cutters, and that was connected with the award of the contract for the third National Security Cutter, which is the new technical baseline, includes the structural changes needed to achieve the fatigue-life. There was some additional weight added to make sure that the ship would meet the fatigue-life standards.

A couple of things that we are doing to manage the weight associated with the ship. Once the BERTHOLF is underway, we are going to instrument it and get some empirical data regarding the

fatigue of the ship and the implications of the weight that was added.

One of the things that's happened with the discussion on the first National Security Cutter fatigue standards was whether or not the design basis by Northrop Grumman or issues raised by our technical authority and naval experts were competing with each other on, really, what needed to be done to this ship. And that was all based on theoretical data and computer modeling, not empirical evidence. So, we were actually going to test the first National Security Cutter. There may be an opportunity, at a later date, to actually remove weight as we move forward, but we need to get the cutter out and actually instrument it and test, and then we'll have empirical data to operate from.

Senator CANTWELL. What impact will this have on the life of the ship? I mean, depending on what——

Admiral ALLEN. The original issue with the first National Security Cutter was whether or not it would achieve a 30-year fatigue life with the number of days it was supposed to operate at sea. The issue was whether or not the design offered by Northrop Grumman did that. Our technical authorities thought it might not. In other words, at a, maybe, 22-, 25-year period, we might start to see fatigue cracks. That was the discussion on all three of the ships, and making sure that it would achieve the fatigue life. Those changes were ordered in the first and second National Security Cutter, and are included in the design of the third National Security Cutter. We will validate the direction that the Coast Guard gave the contractor through instrumenting the first ship and empirically determining that that was the right fix; and we have room to adjust that, moving forward.

Senator CANTWELL. How do you have room to adjust it?

Admiral ALLEN. Well, once we get the empirical data, as I said, there may be an opportunity to remove weight from the ship. In other words, we may have overbuilt the ship for a 30-year fatigue life. Because we are—both Northrop Grumman and the Coast Guard were working on theoretical models of how long the ship would last; we've never really tested it in the ocean. And, by instrumenting the ship and actually testing it, we will perform a technical baseline by which to determine the fatigue life and then the weight implications.

Senator CANTWELL. Mr. Caldwell, aren't these weight margin issues simply deferring the costs from an originally flawed NSC cutter design to a later year?

Mr. CALDWELL. I'll have to defer on some of the specific questions on the NSC. DHS IG has taken a very detailed look at the NSC. The GAO work has been at the higher level looking at how the contract is being managed.

One of the things I would like to add, is that the Coast Guard is seeking larger input from external parties, including ABS or naval experts in ship design. I don't have anything to add on the weight issue, related to the design of the NSC.

Senator CANTWELL. Admiral Allen, are we moving forward with a flawed NSC design that we're going to see costs from later? And that points to my question I asked earlier, about getting any kind

of refund back from the ship designer if, in fact, we run into these problems.

Admiral ALLEN. I don't believe we're moving forward with a flawed design. The technical baseline established in the award of the third National Security Cutter addresses all the fatigue-life issues. Those were directed changes by the government, and were paid for, and now are included in the estimate for completing the construction of the class of ships, ma'am.

Senator CANTWELL. But, we're still moving forward, and we haven't done the final test yet.

Admiral ALLEN. We are moving forward, based on a—technical requirements were developed by the Coast Guard's technical authority. These were the people that, early on, asserted that there might be structural issues with the Cutter itself. In other words, we failed to take that into account, early on; we have, now; that's been validated by an external third party, the—through the U.S. Navy. We have come up with a technical design that will ensure the fatigue life on the ship. That was incorporated in the technical baseline for the third National Security Cutter when the contract was awarded, and it serves as a baseline to go back and retrofit the first and second NSC, ma'am.

Senator CANTWELL. So, does the contract have anything in it that considers this in the negotiations, about problems that could still occur with the Cutter and recouping costs? Is there anything in the contract that is specific on that point?

Admiral ALLEN. Not to my knowledge right now. The consolidated contracting action resolved all outstanding issues as of the date of the settlement. If new information were to arrive, then it might be the basis for an action, but we certainly were—consider that.

Senator CANTWELL. Let me ask you about the Offshore Patrol Cutter. Now, this still exists on paper, correct?

Admiral ALLEN. We are looking at operational requirements right now. We took a pause to take a look at where we're going with that Cutter, and there is money to start requirements development, leading to a preliminary design in the next 2 years.

Senator CANTWELL. The Alternatives Analysis thinks that you should move forward. In fact, they think you should move forward and consider using some of these Offshore Patrol Cutters in replacement of doing all the National Security Cutters.

Admiral ALLEN. Yes, one of the—one of the—one of the variations in the Alternatives Analysis indicated that you might, at—before—after the sixth NSC was awarded, to take a look, at that point, whether or not OPCs could substitute for it. I think that militates toward us walking down the requirements of the OPC and moving to a design on that to see whether or not the sea-keeping, the endurance, and so forth, in the OPC could handle the NSC missions. And we will do that, moving forward, ma'am.

Senator CANTWELL. So, have you decided whether that's going to be an off-the-shelf design or something that's already in production or a new ship design?

Admiral ALLEN. It will be openly competed. We have to finish what's called an operational requirements document, and have that approved, and then that'll be the basis for moving forward with

where we'll proceed. But, I will tell you this, it will be a Coast Guard-controlled, openly competed design.

Senator CANTWELL. I'm glad you brought that up. Let me ask you about open competition for future acquisitions. The Offshore Patrol Cutter, the Fast Response Cutter-A, the Unmanned Aerial Vehicles, the C4ISR, the Long-Range Interceptor boats, Short-Range Prosecutor boats, are they all going to be open competition?

Admiral ALLEN. Yes.

Senator CANTWELL. All those are going to be open competition.

Admiral ALLEN. Yes.

Senator CANTWELL. OK.

Well, Admiral, I still have questions about the Deepwater Program, but I have some other questions I'd like to ask, as well, from the budget.

One of the issues that we have had a previous hearing on is oil-spill response. And one of the issues that we asked you about on our December 18 oil hearing was in regards to Vessel Response Plans. And at the hearing, I think that you responded by saying, "In order to make a port of call in the U.S., all non-tank vessels must have a Vessel Response Plan." And since then, you—since that hearing, you sent me a letter saying that was a mistake in your testimony, and that there are instances where U.S. and foreign flagged non-tank vessels have entered and operated in the U.S. without a Coast Guard-reviewed Vessel Response Plan. I think those are called NTVRPs. So, I want to make sure where we are, to date, because I want to understand, since the COSCO BUSAN was a pretty big incident, how many non-tank vessels have submitted Vessel Response Plans to the Coast Guard, and how many non-tank vessels, required by law, have not done so.

Admiral ALLEN. Yes, ma'am. The number changes, depending on what plans are submitted for review, but right now it's approximately 14,000 vessels that are covered by Non-Tank Vessel Response Plans that have been reviewed by the Coast Guard. One of the issues that came up—and if I could just elaborate on the testimony and the correction that I sent you—all vessels under IMO MARPO Annex I are required to have Spilled Oil Response Plans. So, any vessel coming into the country that's signatory to IMO would have that. Our response plans are a higher level of care, in—aligned with our National Contingency Plan and our Area Contingency Plans. When the legislation was passed, we put out voluntary guidelines for a non-tank vessel response that would pretty much mirror where we're going with the rulemaking process. What has happened is, we need to figure out how many vessels above the 14,000 that—are calling under the international plans rather than the higher-level plans that we require. And I've developed a way forward related to that, and I can articulate that further, if you would like.

Senator CANTWELL. Yes, please.

Admiral ALLEN. We had a very detailed discussion in December, and I walked away from that, quite frankly, not satisfied with what I said and where were at in this whole process. And a lot of that had to do with the time that it takes to make a rule to implement the legislation, from 2004 and 2006. I since have got together with my staff, and we have provided guidance to the Coast Guard. It is

my intention to go ahead and implement the basic tenets of that legislation without a rule, under our authority in Title 33. What this will mean is, in advance of a regulation, we will require ships coming into this country to, basically, conform to the legislation, as it was passed, even in the—advance of a rule, so we can make sure there is compliance with the statutes. Failure to do that, we will be able to put a control or deny entry to the vessel if they do not have a Non-Tank Vessel Response Plan.

In other words, we intend to enforce this without a regulation, which is a striking difference from past practice for the Coast Guard, but I feel, given the events, that this is the proper way to proceed.

Senator CANTWELL. Well, but you are asking, in a budget request, for additional $2.6 million to fund and support rulemaking backlog. And one of the key issues on the rulemaking backlog is the oil-spill issue, related rulemaking to prevent that. So——

Admiral ALLEN. Yes, ma'am. We will proceed with the rulemaking, but I intend to enforce the statute, in advance of the rule, consistent with the legislation that was passed, ma'am. This is a break in past action. Usually we would not enforce a statute that was intended to be implemented through a rule; but, given the delay in getting the regulations out, and wanting to give effect to the statute, we are prepared to give direct orders to our field commanders to start enforcing the statute, as written. We have voluntary guidelines out there that give enough information for these folks to be able to comply, and we will expect them to do that.

Senator CANTWELL. In asking for this additional revenue, asking you about the rulemaking, particularly for salvage and firefighting, and for the Vessel Response Plan, will both of those be completed, given this budget request, by FY09?

Admiral ALLEN. We expect the firefighting, salvage, and the additional oil-spill requirements rules to be completed within the next 6 to 12 months. Immediately following that, we will queue up the Non-Tank Vessel Response Plan, ma'am.

I would look at Notice of Proposed Rulemaking for the Non-Tank Vessel Response Plan to be out in 2009, but, given the review requirements, it could be to 2010. But, the firefighting, salvage, and additional removal capability will be out within the next year, ma'am.

Senator CANTWELL. Will the vessel—you're saying the Coast Guard would have a plan out, and would be in negotiation or getting public input in 2009? And then——

Admiral ALLEN. Yes.

Senator CANTWELL.—the——

Admiral ALLEN. We've put out a Notice of Proposed Rulemaking so the public could comment on it, ma'am, yes.

Senator CANTWELL.—the final rule would then be complete by what time?

Admiral ALLEN. By 2010. In the meantime, we will enforce compliance with the statute, per my previous comments. We will make mandatory the Non-Vessel Tank Response Plan that complies with the statutes, and we will do it in advance of the rulemaking. The rulemaking will just codify it.

Senator CANTWELL. You can understand our concern, right, Admiral? I mean, these are things that——

Admiral ALLEN. Yes, absolutely.

Senator CANTWELL.—that were promulgated in the 1990s, rules that should have been in policy and implementation and carried out, and we've continued to see, obviously, challenges. I'm not saying that overall numbers—but, obviously, size of ships and spills, and continuation of this challenge in our last hearing. And so, now we're seeing a budget request of—saying, "Give us more money." And I'm glad to hear that you're going to take enforcement action before receiving those dollars, but we're going to hold you accountable to those commitments on these two rules, because we think they're critically important. In fact, I would prefer to see them done by 2009, but we can—at this point, I take you at your 2010 commitment, and we can have a conversation about that in more detail.

Admiral ALLEN. Madam Chair, if I just—the Non-Tank Vessel Response rule is 2010; the firefighting, salvage, and removal will be before then.

Senator CANTWELL. I understand.

Admiral ALLEN. OK.

Senator CANTWELL. I understand.

Senator Inouye, did you have follow up questions?

Senator INOUYE. May I ask a local question?

There's a place called Barbers Point?

Admiral ALLEN. Yes, sir.

Senator INOUYE. That's in Hawaii.

Admiral ALLEN. Yes, sir.

Senator INOUYE. There's a hangar there, and I hope that we can anticipate some funding for the project next year?

Admiral ALLEN. Yes, sir. As you know, if you fly over Barbers Point you will see a C–130 with half of it sticking out. Only the front part of the plane fits in the hangar. In fact, I flew over it, myself, just a month or so ago. We are in the process of putting together final cost estimates on that proposal, sir, and we'll be glad to get some information to you as soon as we're done. We know it is a priority for you, and I know it is a priority for the local commander out there.

[The information previously referred to follows:]

The Coast Guard engineering office is developing a Planning Proposal (PP), including a rough order of magnitude cost estimate, as the first step in project development for Air Station Barbers Point aircraft hangar construction. We expect completion of the PP within 3 months; however, further project refinement and cost estimation will be completed through the next step called a Project Proposal Report (PPR). This phase, not yet planned, will develop budget ready cost figures and typically requires 18 months for completion. We can provide updates on our progress if helpful.

Please note: As background, the Air Station Barbers Point hangar construction proposal and cost analysis (per Section 216 of the CG Maritime Transportation Act of 2006) in February 2007 was a planning level feasibility report. The report contained estimates for two options: (1) $98.8M—hangar facility to house 100 percent of fixed and rotary aircraft; and (2) $67.4M—hangar facility to house 50 percent of fixed wing aircraft and 100 percent of rotary wing aircraft. These figures will be refined through the planning process aforementioned.

Senator INOUYE. Thank you very much.

I'm just submitting the rest of my questions, if I may.

Senator CANTWELL. Thank you.

Senator INOUYE. May I say a——

Senator CANTWELL. Yes. Please.

Senator INOUYE.—make a statement?

Senator CANTWELL. Yes.

Senator INOUYE. The absence of Members on this Committee does not indicate the level of interest in your activity. At this moment, as you may know, there are five committees ongoing, and two of them have interests in commerce. In fact, the Appropriations Committee on Commerce budget is now proceeding ahead. So, I didn't want you to feel that this is all the interest. But, you've got the Chairwoman, you've got the Chairman, here. So——

[Laughter.]

Admiral ALLEN. Sir, we really understand multitasking in the Coast Guard.

[Laughter.]

Senator INOUYE. All you need is the two of us here.

[Laughter.]

Senator CANTWELL. Thank you, Senator Inouye.

Admiral my staff received information in December that only 2,351 of the 13,244 Non-Tank Vessel Response Plans have been approved. So—I think you gave me a number of roughly 14,000.

Admiral ALLEN. Yes, ma'am. There are—I can explain this to you, and I'll make sure it's right, for the record.

[The information previously referred to follows:]

Non-Tank Vessel Response Plans meeting the provisions of 33 U.S.C. 1321(j)(5), as amended by the Coast Guard & Maritime Acts of 2004 and 2006, are issued Interim Operating Authorizations for a period of 2 years per 33 U.S.C. 1321(j)(5)(G). Since August 2005, the Coast Guard has issued 1,880 Interim Operating Authorizations for reviewed Non-Tank Vessel Response Plans. Many of these plans cover more than one vessel in an owner/operator's fleet. To date, 10,791 vessels have obtained an Interim Operating Authorization status with the U.S. Coast Guard.

The Coast Guard is tracking 1,701 Non-Tank Vessel Response Plans that have been issued Interim Operating Authorizations for vessels that are known to continue to trade in the United States. The difference between these two numbers is attributed to plans that have been deactivated due to either noncompliance or owner request. When the Non-Tank Vessel Response Plan regulations are implemented into Subchapter O of Title 33 Code of Federal Regulations, the Coast Guard will then "approve" Non-Tank Vessel Response Plans for a period of 5 years.

The Coast Guard estimates approximately 12,000 vessels will be required to meet the Non-Tank Vessel Response Plan regulations in the first year of implementation. The non-tank vessel population is an estimate because it is unknown how many foreign flag vessels will need to comply until they actually arrive at a U.S. port. There are thousands of additional non-tank vessels in the world fleet that could potentially submit Non-Tank Vessel Response Plans to the USCG. Until they call on the U.S., the plan is not required.

The current level of compliance is good. Larger, ocean going non-tank vessels have been able to adopt, for the most part, the straightforward Non-Tank Vessel Response Plan development guidance contained in Navigation, Vessel and Inspection Circular 01–05 CH–1. A number of owner/operators of smaller non-tank vessels with fuel capacities less than that of large ocean going non-tank vessels that are unsure or disagree on the level of required contracted oil spill response resources. The Coast Guard will address these vessels and their requirements in the upcoming Notice of Proposed Rulemaking.

Admiral ALLEN. But, there are companies that have eight or ten vessels of the same design, that have a base plan that applies to all the vessels, so you could have a fewer number of plans that apply to a larger number of vessels.

Senator CANTWELL. And so, you're saying that these are subsets of the same vessels for different——

Admiral ALLEN. If you have—if you have vessels that are the same design—let's say you have five vessels of the same design; a plan written for one plan—for one vessel is applicable for all five vessels, because they're the same configuration and layout. The number of plans reviewed will be less than the total number of vessels that are covered.

Senator CANTWELL. Well, in—I don't want to take up any more time on that issue, but let's make sure that we're in sync about how many outstanding——

Admiral ALLEN. Yes.

Senator CANTWELL.—plans there are, and the criteria by which we're measuring them, so that the Committee and the Coast Guard can be on the same framework, at least for measurement, and then we can decide whether things are at——

Admiral ALLEN. Yes, ma'am.

Senator CANTWELL.—full capacity for approval, or we're still outstanding.

I wanted to ask—you've obviously been given new responsibilities, and some of that is reflected in the budget. On February 6th, the Minerals Management Service auctioned off part of the Arctic Ocean, the size of Pennsylvania, for oil and gas drilling. And, despite a 33- to 51-percent chance of major oil spills in that region, where the oil-spill cleanup is virtually impossible most of the time, I'm curious as to how the Coast Guard plans to operate, with its current assets, in the Arctic environment.

Admiral ALLEN. Madam Chair, that's an excellent question. Starting last year, when, you know, we had a recession of summer ice farther than it ever had been before, we developed a plan, for this next summer, to deploy Coast Guard resources up to the North Slope, including moving a buoy tender through the Bering Straits to—looking at navigational and communications issues. We're looking at moving small boats and helicopters and shore forces up there, and we want to test their ability to operate in a higher-latitude harsh environment. We, traditionally, have not operated up there, because there was not open ocean. Given the offshore oil and gas exploration that's going to be going on there, increased cruise ships, increased vessel traffic, in general, and the potential to have even fish stocks move north through the Bering Sea, we're moving as fast as we can to identify how well our equipment operates up there, any capability shortfalls. And I would hope, by this time next year, to be able to tell you that, based on the requirements for us to operate in open water up there, these are the gaps that we see. But, we need to get our equipment up there and test it, because we have not, traditionally, operated up there.

Senator CANTWELL. What kind of grade would you give the Coast Guard's assets, meeting that challenge and responsibility? Would you say, currently, you're at a——

Admiral ALLEN. Madam Chair, it's almost a situation of, "You don't know what you don't know." If there—our ability to stage equipment up there for an oil-spill response, our ability to operate against a threat, such as a cruise ship that—happened off of South America recently, where it hit an iceberg and sunk—it's a matter

of moving capability up there, and being able to operate up there. We flew a C–130 to the North Pole, last October, and found out there were significant challenges with navigation, communications, and, plus, that we don't have heaters in our fuel tanks, and there's a problem; when it gets real cold, the fuel systems don't operate the way they need to.

I would give us an "unknown." If you had to force me to some kind of a grade scale, I would say, "results are not demonstrated, and we need to find out exactly what the gap is."

Senator CANTWELL. Was the Coast Guard consulted before this leasing?

Admiral ALLEN. No, ma'am.

Senator CANTWELL. And were they consulted on what it would take to provide adequate resource and response plans?

Admiral ALLEN. I'm not aware of it, but I will check, but I'm not—I don't believe so, ma'am.

[The information previously referred to follows:]

The Coast Guard Office of Incident Management and Preparedness (CG–533) does not have a record of consultation by the Minerals Management Service before part of the Arctic Ocean was auctioned off for oil and gas drilling in the Arctic Ocean.

Senator CANTWELL. So, where does this budget request for $200,000 for an Arctic assessment come from?

Admiral ALLEN. To address exactly what we've been discussing, ma'am, and that's to fund the requirements analysis up there, based on our experience there, this coming summer, and to move forward with a way ahead, and how we need to operate in the Arctic.

I will tell you, though, that there are some significant policy issues to be decided up there, on what constitutes a needed presence for the sovereignty of the United States. There are national security issues associated with operating up there. That is all being discussed within the Administration right now, in anticipation of a—potentially, a policy decision on where we need to go with the Arctic.

Senator CANTWELL. Well, I think that it's a very important question, if we're going to have a race to the Arctic; and part of the race to the Arctic is allowing U.S. more drilling and focus of resource acquisition, then a very important component of the United States making that decision would be a response plan, given the fragile sensitivity of that area, and the difficulty in reaching it, wouldn't you agree?

Admiral ALLEN. I would agree.

Senator CANTWELL. Perhaps we should have a larger hearing on this subject, to discuss exactly the best way for us to make sure that, as the United States moves forward, we actually have that kind of plan, since you weren't consulted on the first round.

Admiral ALLEN. I would not dispute the need for that hearing, ma'am.

Senator CANTWELL. Thank you.

I'd like to go back to, if I could——

Senator Inouye, do you have more questions?

Senator INOUYE. I'm just listening.

Senator CANTWELL. Thank you.

I'd like to go back to the Deepwater Program, if I could, and the—I want to understand the—where the Coast Guard thinks it should go in regards to the Unmanned Aerial Vehicle program. How are you viewing what we now have back from the Alternatives Analysis on where that technology should go forward, given that it was a component of the Deepwater Program?

Admiral ALLEN. Well, first of all, based on requirements, there was an assumption that our cutters, both the OPC and the NSC, would deploy with vertical launch UAV capability. That is part of the mission package on which our requirements are based, and the efficiency of the model is based. And we have to come to grips with aviation surveillance related to that. We took a—what I thought was a justified pause in the development of the vertical launch UAV program within the last year, and, based on the analysis—the Alternatives Analysis, we need to look at new ways, going forward.

One of the things we are doing right now is looking at the development of the Fire Scout UAV, which is being contemplated for the Littoral Combat Ship. We have talked with our Navy counterparts and Northrop Grumman. One of the concerns we had about that vertical launch UAV is, it didn't have a marine radar that would be suitable for us. They are now taking that on as a program of record.

We are not going to leave anything off the table, in regard to aviation surveillance associated with Deepwater, but I want to make sure, as we move forward, that we're not on the cutting edge of R&D, that we have demonstrable first-article performance before we move into this. And I think we also need to take a look at the implications for high-altitude UAVs and how they might be employed.

We have recently agreed with the Customs and Border Protection to stand up a joint program office within Homeland Security to take a look at programs like the Predator. And this month, we will do a prototype deployment of a Predator in the maritime environment.

We have also been engaged with discussions, not only with the Coast Guard and CBP, but the United States Air Force, as well, potentially about how we might become involved in some of their high-altitude UAV operations.

But, we're in a period, in what I would call a pause and a consolidation and moving forward, carefully informed, not only by the analysis—the Alternatives Analysis that was done, but making sure that we've got a technology that works when we bring it forward. And that remains the task before us, ma'am.

Senator CANTWELL. The Alternatives Analysis seemed to indicate that the current baseline plan for Deepwater is the wrong path. So, are you saying you're going to revert to an open competition and come back on what should be the specs for that UAV program?

Admiral ALLEN. I think we need to take a look at the surveillance requirements associated with the NSC and the OPC operating offshore, and we need to leave everything on the table. Whether it's an open competition for a VUAV or greater reliance on a high-altitude UAV, like a Predator. I think all of that needs to be considered, and I think that's consistent with the analysis.

Senator CANTWELL. Thank you.

I noticed, Admiral, in the Alternatives Analysis, that—we have had this conversation about the costs of aircraft, and my concern about the fact that we're—since the cost of that product, *versus* other costs—you had—it has been a challenge, Admiral, to keep up with all of the elements of the Deepwater Program and the original flawed approach. And so, as we have tried to correct course in saying that a systems integrator in charge of determining what was right or wrong, and its contract was the wrong way to go, and move forward, we've now had a little more time to drill down on some of the individual assets. And so, we've had many conversations about that. And one of the conversations has been about the CASA aircraft and its cost, juxtaposed to other equipment choices, and the fact that the CASA—I was assuming that the Alternatives Analysis would shed some light on the requirement that the Coast Guard is asking for, as it relates to a rear-door requirement. So, my office has had many conversations with your team about this, but I see, in the AOA—or, the Alternatives Analysis did nothing to—nothing to address that issue and whether the Coast Guard really needs that as a particular aspect of the aircraft, but, instead, the performance requirements were already outlined in the Alternatives Analysis, so they had nothing but to comply with that as the aircraft of choice.

So, I'm asking you, what was your understanding and your belief as it related to the CASA? And how can we give taxpayers some certainty that, in fact, the Coast Guard—this really is the asset that the Coast Guard needs?

Admiral ALLEN. Well, I think what the Alternatives Analysis indicated—and, our understanding, as well, based on the requirements for a maritime patrol aircraft as part of a system, which—at the higher level, you have C–130, a much longer-range aircraft—and, based on the Coast Guard requirements, that there was nothing else out there in the market that would satisfy those requirements, and that was the basis for the analysis to indicate that the CASA was currently meeting the requirements of the Coast Guard.

Senator CANTWELL. That's my point. I think the Committee, given all the problems with Deepwater, with all the problems we still intend to think that have not been seen yet, because we haven't seen all the assets and the resources, we are now trying to—now that we have at least got Congress moving on a trajectory of saying this kind of systems integrator approach, where the contractor self-certifies, was the wrong approach—we've now said we want to make sure that all the assets that the Coast Guard is seeking have had the proper amount of oversight and attention, so that we don't run into the same problems with these assets as we have with the National Security Cutters.

So, the CASA aircraft is an example, where we—given the cost of that product, *versus* what else is out there on the marketplace, we want to understand what the Coast Guard's needs and assessments are that led it to the choice of the CASA aircraft, and we want some validation that the taxpayers ought to be paying that additional expense. Now, the Alternatives Analysis didn't get us there, so I don't know if you have other suggestions about how we might do that.

But, just like this C4ISR and other things, all of these assets are going to continue to get the attention of this Committee, because we are seeing, either through GAO or through the IG or through the Alternatives Analysis, various questions raised, and we can't afford to make any more mistakes. So, I think all of the assets deserve a complete, you know, scrubbing to make sure that we are acquiring the right assets.

Admiral ALLEN. Well, regarding the CASA, we'd be glad to provide more information for the record, because the picture on that is, kind of, changing almost daily for us.

[The information previously referred to follows:]

In 1996, the original Mission Need Statement (MNS) for Deepwater discussed cutter and aircraft replacement in general terms. During concept exploration, the Deepwater program employed a system approach for operational requirements. At the system level, these requirements were approved as the Deepwater System Performance Specification (SPS). This specification was released on March 16, 1998, for full and open competition to develop a Deepwater System Plan. The SPS required proposed solutions to use surface and aviation assets, along with a C4ISR network to modernize and replace the Coast Guard's aging ships and aircraft.

As a result of the full and open competition to design Deepwater, contracts were awarded on August 20, 1998, to three industry teams to begin initial concept development based on the SPS. During Phase I of the Deepwater Program in March 1999, Team Deepwater, which later became Integrated Coast Guard Systems (ICGS), evaluated 16 candidate aircraft to fulfill the Medium Range Surveillance (MRS) Maritime Patrol Aircraft (MPA) requirements. Both turboprop and jet aircraft were considered. New fixed wing aircraft alternatives were investigated, all with the potential to complement or replace legacy aviation assets. Candidate alternatives were evaluated to reduce operating costs, improve mission performance, and expand upon legacy fixed wing multi-mission capabilities. The evaluation included three separate CASA airframes. The contractor recommended the EADS CASA CN–235–300M ER. The CN–235–300M ER was a new design based on the production version CN–235–300M, but with a longer range and increased on-scene endurance to meet performance specifications unique to Coast Guard missions.

On June 25, 2002, the Deepwater contract was awarded to ICGS. As part of this Phase II Final Proposal, the Coast Guard accepted the contractor's plan, which included the CASA CN–325–300M ER. All three industry teams competing for the Deepwater contract submitted proposals recommending a version of the CASA commercial CN–235–300M aircraft as the sole solution for a new Coast Guard MPA.

Coast Guard aviation officials articulated concerns about the capabilities of the proposed MPA, specifically the aircraft's weight growth margin, because the proposed aircraft included airframe modifications but no power plant modification. The ability of the CN–235–300M ER to safely carry a full fuel load while operating in hot weather locations was the primary concern. Accordingly, the Coast Guard requested ICGS conduct another MPA Analysis of Alternatives.

This analysis, focusing on aircraft performance, total ownership cost, and capability to perform the assigned missions, resulted in a recommendation to change from the CN–235–300M ER to the CN–235–300M for the Coast Guard MPA. This recommendation was approved in March 2003. A delivery order for the development and demonstration of the first two CN–235–300Ms (military designation HC–144A) was signed in May 2003.

A subsequent business case analysis requested by the Coast Guard was completed by ICGS in December 2004. This analysis again compared the CN–235–300M and CN–235–300M ER, as well as the C–27J. The analysis assessed the operational effectiveness and total ownership costs of switching to the CN–235–300M from the CN–235–300M ER. It confirmed the CN–235–300M was capable of performing the Coast Guard's 11 statutory missions and exhibited better weight growth margin and climb performance characteristics.

Admiral ALLEN. We are just finishing up a developmental test and evaluation, and finish certifying the C4ISR package on the CASA 235. We anticipate we will accept that aircraft—final acceptance of the lead aircraft and the mission pallet system—some time in the next 2 weeks, and that is held up against the standards re-

garding information assurance and everything else. We have successfully transmitted, in both an unsecure and secure mode, from that aircraft, and we'd be happy to forward the developmental test and evaluation reports to you.

The next step will be to do operational tests and evaluation with the aircraft in an environment, to see how it does against the mission set, not just the specifications that it was built to. And that's what I referred to earlier, when we had one of the airplanes flying south of Mobile, it was involved in a very successful search-and-rescue case, just a week or so ago. But, we'd be happy to provide you the results of the developmental test and evaluation, which will be ended within the next day or two, ma'am.

[The information previously referred to follows:]

Developmental Test & Evaluation (DT&E) on the CASA (CG designation for HC–144A) was completed on December 1, 2006 for the base aircraft and March 10, 2008 for the Mission System Pallet (MSP). In total, there were 650 performance specification requirements (for both the base aircraft and MSP) tested during the DT&E process. Only two items, High Frequency (HF) position reporting and the solid-state (non-rotating) hard drives for server back-ups have not met the acceptance criteria of the government. The server was accepted with rotational hard drives as an interim measure. Both items were listed as exceptions on the Material Inspection and Receiving Report (DD–250). The contractor has developed solutions for both of these components to meet acceptance criteria and the Coast Guard expects to retest these solutions by the end of July 2008, prior to the beginning of the Operational Assessment (OA) period.

Senator CANTWELL. I'm more interested——

Mr. Caldwell, do you have any ideas on the mission capabilities of this particular product, and how we could get some third-party assessment of this, given, again, the complete challenges that we've had with the Deepwater Program?

Mr. CALDWELL. Again, the DHS IG is doing more of the asset-specific work including work on the CASA. So I don't have any additional information on the CASA aircraft.

Senator CANTWELL. So, we should look to the Inspector General for that.

Mr. CALDWELL. That would be appropriate.

Senator CANTWELL. OK, thank you.

As you can see, Admiral, we're going to continue to focus on the Deepwater Program, so I don't think this will be the last of the hearings on it, but we certainly appreciate your attention this morning, from a budget perspective, given the National Security Cutter funding that you're seeking in this budget, to move forward.

I'd like to turn to the polar icebreaker issue that we talked about earlier, when Senator Inouye mentioned the LORAN–C system. And it's my understanding that the National Science Foundation had received permission from the Administration to stop funding the $3 million to require and maintain the POLAR STAR in caretaker status. This money, however, is not included in the Coast Guard's budget, either, for 2009. So, who's going to pay for this ship?

Admiral ALLEN. We were advised, at the end of the budget submission process, that the money to maintain the POLAR STAR was not contained in the National Science Foundation budget. I do not have any visibility into how that process works or how that decision was arrived at. But, quite frankly, unless it is resolved, there

will not be money to keep the POLAR STAR in its "Commission Special" status, which means money to keep a crew on there, to keep the machinery turned over—so, it's not up and operating, but it's capable of being brought into operation in a year or so period of time, should the vessel be put back into service or be needed.

Senator CANTWELL. What does that mean, economically, do you think? What does that mean, to U.S. commerce, when we don't——

Admiral ALLEN. If we——

Senator CANTWELL.—if we don't fund——

Admiral ALLEN. If we move into——

Senator CANTWELL.—the polar icebreakers?

Admiral ALLEN. If we move into Fiscal Year 2009, and we don't have the money to keep the POLAR STAR in a "Commission Special" status, it will further degrade our capability to put the boat back into service, and increase the length of time it would take to use that vessel, should it be needed, ma'am.

Senator CANTWELL. And do you have a number in—do you know a number of what that cost is? I know I've seen that number before. Maybe my staff has it. But, we are talking about great commercial significance of not being able to move cargo and traffic, and get people and product to where they need to be. And, obviously, the polar icebreakers are a key component of that transportation passage system, isn't that correct?

Admiral ALLEN. Yes, it is, ma'am. And all I can say is that the money is not contained within our budget, and if it's not there in 2009, we are going to—we are going to accrue significant additional risk.

Senator CANTWELL. So, isn't this just another year of a continuing saga between NSF and the Coast Guard, as it relates to who is financing and paying for the polar icebreakers?

Admiral ALLEN. It is a exacerbation of a bad problem that already existed, yes, ma'am.

Senator CANTWELL. OK. All right.

Senator Inouye, do you have any other questions?

Senator INOUYE. No.

Senator CANTWELL. If not, I thank you, gentlemen, for your testimony and your availability in answering these questions.

We will keep the record open for an additional, I think, 10 days or so, so if—colleagues who weren't able to attend, can get their questions submitted. And we appreciate your answering them. I know that I will have a variety of additional questions for you, as well.

Mr. Caldwell, thank you. Admiral Allen, thank you very much.

This Committee meeting is adjourned.

[Whereupon, at 12:01 p.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

As many of you have heard me say before, Alaska has nearly half the coastline of the United States and the missions of the U.S. Coast Guard in Alaska are critical to the safety and security of our Nation.

This past year the Coast Guard celebrated its one millionth life saved, and I was honored to have a chance to meet with one of your rescue swimmers—Kodiak based petty officer Will Milam last month. I believe his courage and dedication personifies the core values of our Coast Guard.

As the missions and responsibilities of the Coast Guard grow, the size of the service has remained basically unchanged and your fleet has been pushed well beyond its service life. I was pleased to see your budget requested funding to keep the deepwater program on track, but I also believe that we must find the means for the Coast Guard to maintain its operational capabilities until those new vessels and aircraft are on line. I realize that keeping some of your older vessels operating is difficult, but the operational gap created by taking them out of service is simply too large.

I am also concerned about the state of our polar icebreaker fleet. We are entering an age where a Federal presence in the Arctic is crucial to protecting our interests and supporting scientific research. I am not convinced that the funding mechanism we have established between the National Science Foundation and the Coast Guard adequately addresses our needs. The fact that there is nothing in your budget to address the condition of our polar icebreaker supports this concern.

I look forward to discussing these concerns with you today and thank you for your outstanding service to our Nation.

PREPARED STATEMENT OF THE FLEET RESERVE ASSOCIATION

The FRA

The Fleet Reserve Association (FRA) is the oldest and largest enlisted organization serving active duty, Reserves, retired and veterans of the Navy, Marine Corps, and Coast Guard. It is Congressionally Chartered, recognized by the Department of Veterans Affairs (VA) as an accrediting Veteran Service Organization (VSO) for claim representation and entrusted to serve all veterans who seek its help. In 2007, FRA was selected for full membership on the National Veterans' Day Committee.

FRA was established in 1924 and its name is derived from the Navy's program for personnel transferring to the Fleet Reserve or Fleet Marine Corps Reserve after 20 or more years of active duty, but less than 30 years for retirement purposes. During the required period of service in the Fleet Reserve, assigned personnel earn retainer pay and are subject to recall by the Secretary of the Navy.

FRA's mission is to act as the premier "watch dog" organization in maintaining and improving the quality of life for Sea Service personnel, their families and survivors. In addition to serving as a leading advocate on enlisted personnel and quality of life programs on Capitol Hill the Association also sponsors a National Americanism Essay program, awards over $90,000 in scholarships annually and provides disaster and/or relief to shipmates and others in distress.

The Association is also a founding member of The Military Coalition (TMC), a 35-member consortium of military and veterans organizations. FRA hosts most TMC meetings and members of its staff serve in a number of TMC leadership roles.

FRA celebrated 83 years of service in November 2007. For over eight decades, dedication to its members has resulted in legislation enhancing quality of life programs for Sea Services personnel, other members of the Uniformed Services plus their families and survivors, while protecting their rights and privileges. CHAMPUS, now TRICARE, was an initiative of FRA, as was the Uniformed Services Survivor Benefit Plan (USSBP). More recently, FRA led the way in reforming the REDUX Retirement Plan, obtaining targeted pay increases for mid-level enlisted

personnel, sea pay for junior enlisted sailors and hazardous duty incentive pay for U.S. Coast Guard boarding teams. FRA also played a leading role in advocating recently enacted predatory lending protections for service members and their dependents.

FRA's motto is: "Loyalty, Protection, and Service."

Certification of Non-receipt of Federal Funds

Pursuant to the requirements of House Rule XI, the Fleet Reserve Association has not received any Federal grant or contract during the current fiscal year or either of the two previous fiscal years.

Introduction

Madame Chairwoman and distinguished Members of the Subcommittee, the Fleet Reserve Association (FRA) appreciates the opportunity to present its recommendations on the United States Coast Guard's FY 2009 Budget.

Prior to addressing these issues, FRA wishes to thank the Senate for the generous pay, health care and benefit enhancements enacted in recent years. Improved wounded warrior transition and support services are very important as are other benefit improvements which are essential to maintaining the all-volunteer force and military readiness.

Coast Guard parity with DOD personnel programs remains a high priority for FRA, and the Association notes continuing challenges within the Coast Guard to adequately fund previously authorized active and reserve people programs.

U.S. Coast Guard Authorization

FRA strongly recommends that Congress pass the FY 2008 U.S. Coast Guard Authorization (H.R. 2830 and S. 1892). Authorization legislation is fundamental to Congressional budgeting and effective oversight of Federal agencies.

The legislation addresses several important personnel related issues. These include emergency leave retention authority whereby service members would be allowed to retain leave they would otherwise forfeit due to support of major disasters or other emergencies declared by the President; legal assistance authority for Coast Guard Reservists that establishes parity among all similarly situated Reservists who have served on active duty for more than 30 days under mobilization authority and makes them eligible for legal assistance upon release from active duty; and authority for reimbursement for certain medical-related travel expenses when a service member is stationed on an INCONUS island and his/her family member is referred to a specialty care provider off-island that is less than 100 miles from the primary care provider.

In addition, both bills authorize end strength of 45,500, and make Coast Guard retirees eligible for the Armed Forces Retirement Home (AFRH). The Senate bill includes a policy change authorizing recreational facilities to be included in the public/private venture (PPV) program similar to service housing projects. The Senate bill also changes the Vice Commandant position from a 3-star position to a 4-star position, which will better align the Coast Guard with the other armed forces.

End Strength

According to the 2008 U.S. Coast Guard Posture Statement, the Coast Guard end strength is currently at 41,873 active duty and 8,100 Reservists and has been at that level for several years even though the Coast Guard has been tasked with additional responsibilities in recent years. The Coast Guard took over the National Capitol Region Air Defense (NCRAD) mission in September 2006, and there have been increased demands with the passage of "The Coast Guard and Maritime Transportation Act of 2006." Even modest increased active duty end strength in FY 2009 would immediately translate to a higher level of mission effectiveness. FRA supports adequate end strength to meet growing operational Coast Guard requirements and notes there are annual limits to increasing Coast Guard end strength due to recruiting and training limitations. According to Admiral Thad Allen in his recent State of the Coast Guard Address, "There has been no material change in the Coast Guard's end strength in the past 50 years despite more demands and the current era of persistent challenges."

Pay

Congress has for the past few years improved compensation that, in turn, enhanced the recruitment and retention of quality personnel in an all-volunteer environment. Adequate and targeted pay increases for middle grade and senior petty and noncommissioned officers have contributed to improved retention, morale and readiness. With a uniformed community that is more than 50 percent married, sat-

isfactory compensation helps relieve much of the tension brought on by demanding operational tempos.

For FY 2009, the Administration recommended a 3.4 percent across the board basic military pay increase which is equal to the Employment Cost Index (ECI). FRA strongly supports pay increases that are at least 0.5 percent above the ECI (3.9 percent in FY 2009) to close the 3.4 percent gap between civilian and uniform services pay. Previous annual 0.5 percent higher than ECI raises reduced the pay gap with the private sector from 13.5 percent in FY 1999 to 3.4 percent today.

Assuming authorization by the Armed Services Committee, FRA urges the Subcommittee to authorize annual active duty pay increases that are at least 0.5 percent above the ECI, to help close the pay gap between active duty and private sector pay and ensure adequate appropriations to fund these increases in the Coast Guard's budget.

Health Care

The Department of Defense is proposing a significant increase in fees paid by retired uniformed services beneficiaries, including doubling or tripling enrollment fees for TRICARE Prime, a new TRICARE Standard enrollment fee and tripling or quadrupling other TRICARE Standard fees. The Task Force on the Future of Military Health Care in its recently released final report urged Congress to shift higher health care costs to retirees, including TRICARE-for-Life (TFL) beneficiaries, through higher fees, deductibles and pharmacy co-pays that would be adjusted regularly to cover the cost of health care inflation. The initial TFL annual enrollment fee proposed is $120. The FRA believes strongly that these proposed increases are disproportional, inequitable, inappropriate and unwise.

Eroding benefits for career service can only undermine long-term retention/readiness. The men and women serving in the Coast Guard today are very conscious of actions by Congress affecting those who preceded them in service. One reason Congress enacted TRICARE-for-Life in 2001 is that the Joint Chiefs of Staff at that time said that inadequate retiree health care was affecting attitudes among active duty troops. The FRA believes strongly that the Defense Department has not sufficiently investigated and implemented other options to make TRICARE more cost-efficient without shifting costs to beneficiaries, and strongly supports Senator Frank Lautenberg's and Senator Chuck Hagel's legislation, "The Military Health Care Protection Act" (S. 604.)

Due in large part to the unique range of geographic locations to which they are assigned, Coast Guard personnel and their families often struggle to find medical providers who accept TRICARE beneficiaries. While implementation of TRICARE Prime Remote alleviated many of these problems, costs associated with the standard benefit and low reimbursement rates can make finding a health care provider a daunting task in many areas. And, Coast Guard personnel who choose to receive care at DOD Military Treatment Facilities (MTFs), may have to travel long distances for care. FRA is concerned that low reimbursement rates will continue to make health care access a significant challenge for Coast Guard personnel stationed in remote locations.

The FRA urges the Subcommittee to authorize health care benefits to ensure access for all beneficiaries, and support "The Military Health Care Protection Act" (S. 604).

Reserve Health Care—FRA is grateful to Congress for allowing Reservists to purchase TRICARE Reserve Select (TRS) coverage per the FY 2007 National Defense Authorization Act. However, a recent (Sept. 2007) GAO report indicates that TRS beneficiaries are paying too much for coverage ($81/month for an individual and $253/month for family coverage) and was incorrectly based upon the basic Blue Cross/Blue Shield option for FEHBP. GAO found that DOD estimates were 72 percent higher than the average actual single member cost, and 45 percent higher than average family cost. The annual individual premium should have been $48/month instead of $81/month and the corresponding family premium would have been $175/month instead of $253/month.

GAO recommended that DoD stop basing TRS premiums on Blue Cross/Blue Shield adjustments and use the actual costs of providing the benefit. DoD concurred with the recommendations and says, "it remains committed to improving the accuracy of TRS premium projections." However, GAO observed that DoD has made no commitment to any timetable for change.

The Association believes our obligation to restrain health cost increases for Selected Reserve members who are increasingly being asked to serve their country is important, and these members deserve better than having their health premiums raised arbitrarily by a formula that has no relationship to actual costs. FRA strongly recommends support for reducing TRS premiums immediately to $48/month (sin-

gle) and $175/month (family), with retroactive refunds to those who were overcharged in the past.

Permanent Change of Station (PCS) Allowances

The Association urges this Subcommittee to be aware of the need to upgrade permanent change-of-station (PCS) allowances to better reflect the expenses Coast Guard members are forced to incur in complying with government-directed relocations, including shipment of a second vehicle at government expense to overseas accompanied assignments. And if enhancements are authorized by the Armed Services Committee, FRA urges authorization for the Coast Guard to provide these enhancements.

Shipment of POVs—Expanding the number of privately owned vehicles (POV) a military family can ship during a PCS from one vehicle to two for duty assignments in Alaska, Hawaii and U.S. Territories is another FRA supported initiative. This is an issue of particular concern to Coast Guard personnel stationed in these locations since many married personnel have spouses who also work.

Weight Allowances—FRA also recommends modifying PCS household goods weight allowance tables for personnel in pay grades E–7, E–8 and E–9 to coincide with allowances for officers in grades 0–4, 0–5, and 0–6, respectively. These allowances are needed for Coast Guard personnel to more accurately reflect the normal accumulation of household goods over the course of a career.

Dislocation Allowance—Moving household goods on government orders can be costly. Active duty personnel endure a number of permanent changes-of-station (PCS) during a career in uniform. Each move requires additional expenses for relocating and establishing a new home.

Currently retiring personnel are not entitled to a dislocation allowance despite the fact that his or her orders can be construed as a permanent change-of-station reflecting a management decision to order the member's retirement or transfer. Providing the member is moving to a new location, the retiring Coast Guardsman will face the same expenses as if transferring to a new duty station.

FRA believes a dislocation allowance should be authorized for personnel retiring from active duty. After serving 20 or more arduous years of service, retiring personnel moving their household locations in excess of 50 miles from their final duty station, should be entitled to a dislocation allowance equal to at least 1 month of basic pay.

Housing

FRA urges reform of housing standards that inequitably depress Base Allowance for Housing (BAH) rates for mid-to-senior enlisted members. The vast majority of Coast Guard personnel and their families use private housing and collect BAH and FRA believes that there is an urgent need to update the standards used to establish housing allowance rates. Only married E–9s now qualify for BAH based on local single family home costs. As a minimum, the BAH standard (single-family detached house) should be extended over several years to qualifying service members beginning in grade E–8 and subsequently to grade E–7 and below as resources allow. If authorized by the Armed Services Committee, FRA strongly urges commensurate authorization for the Coast Guard.

FRA strongly supports the scheduled FY 2009 improvements to Coast Guard housing at Cordova, Alaska and Montauk, New York as well as improvements at the USCG Academy barracks (Chase Hall) already included in the Coast Guard Authorization Bill.

Child Care

The availability and accessibility of affordable child care is a very important quality of life issue for Coast Guard personnel and their families. Coast Guard child care centers operate under the same standards for care as similar DoD facilities.

High cost child care can often be attributed to the fact that most of the unit locations preclude access to DoD and Coast Guard child development centers. FRA understands that the Coast Guard had to limit access to child care in September 2007 due to a lack of funding, and stresses the importance of adequately funding this important program.

The Coast Guard continues to explore ways to assist with child care costs to members in remote, high cost areas. FRA welcomes the July 2007 Coast Guard partnership with the General Services Administration (GSA) in order to assist the Coast Guard in locating state licensed, center-based or home-based child care facilities to help address this important issue.

Education Benefits

President Bush called for transferability of MGIB benefits for certain military personnel in the 2008 State of the Union Address. FRA supports enhancements to the Tuition Assistance Program which enables the Coast Guard to maintain parity with DoD. Tuition Assistance is a high priority for the active and Reserve forces and is a key element associated with successful recruiting initiatives. Enhancements to this program and the Montgomery GI Bill (MGIB) have significantly impacted recruiting and retention efforts.

FRA continues to advocate for the creation of a benchmark for the MGIB so benefits will keep pace with the cost of an average four-year college education.

Coast Guard senior enlisted personnel are among the thousands of service members who came on active duty during the Veterans Education Assistance Program (VEAP) era (1977–1985) and do not qualify for the MGIB. FRA urges authorization of an open enrollment period giving certain enlisted leaders the opportunity to sign up for increased educational benefits provided by the GI Bill, as envisioned in "The Montgomery GI Bill Enhancement Act" (H.R. 4130) sponsored by Rep. Tim Walberg.

Too often the MGIB is characterized exclusively as a form of compensation or as a "recruiting tool." However, FRA would argue that it is also an investment in our Nation's future. Military personnel can use the MGIB on active duty to aid in their professional development, giving them the tools to become better leaders, mentors and representatives of their respective services. Many veterans who opted to leave the military and use the GI Bill to further their education have gone on to become highly productive members of our society paying more taxes, returning more revenue to the U.S. Treasury than what they might have been able to without a degree, and easily more than what was spent paying for their education.

Our Nation has a responsibility to ensure the MGIB investment remains a relevant supplement to completing one's education, as it continues to reap the benefits. The military has a well-deserved reputation for taking young Americans and transforming them into better citizens. Giving them the tools to excel in the academic environment has, and will continue to result in building upon that transformation.

MGIB–SR—The Selected Reserve MGIB has failed to maintain a creditable rate of benefits with those authorized in Title 38, Chapter 30. In 1985 MGIB rates were established at 47 percent of active duty benefits. The rates have fallen below 29 percent of the active duty benefits. While the allowance has increased they failed to keep pace with the cost of college.

FRA stands four-square in support of our Nation's Reservists. To provide an incentive for young citizens to enlist and remain in the Reserves, FRA recommends that Congress enhance the MGIB–SR rates to the intended level for those who choose to participate in the program.

Academic Protection for Reservists—There are cases where Reservists, attending higher institutions of learning, called to active duty in the defense of the Nation and its citizens, lose credits or pre-paid tuition costs because they did not complete the course of instruction. FRA believes Congress should adopt legislation requiring colleges and universities to retain and reactivate the credits and prepaid costs for the Reservists upon demobilization.

Reserve Early Retirement

FRA is disappointed that the effective date of a key provision in the FY 2008 NDAA, the Reserve retirement age provision that is reduced by 3 months for each cumulative 90-days ordered to active duty is effective upon the enactment of the legislation and *not* retroactive to 7 October 2001 as addressed in the floor amendment to the Senate version of the bill. Consistent with The Military Coalition, FRA strongly endorses "The National Guardsmen and Reservists Parity for Patriots Act" (H.R. 4930), sponsored Rep. Joe Wilson (S.C.), and if enacted commensurate support and funding for this in the U.S. Coast Guard.

Mandate Travel Cost Reimbursement

FRA appreciates the FY 2008 NDAA provision (Section 631) that permits travel reimbursement for weekend drills, not to exceed $300, if the commute is outside the normal commuting distance. The Association supports making this a mandatory provision. This is a priority issue with many enlisted Reservists who are forced to travel lengthy distances to participate in weekend drill without any reimbursement for travel costs. Providing travel reimbursement for drill weekends would assist with retention and recruitment for the Reserves—something particularly important to the increased reliance on these personnel in order to sustain our war and other operational commitments. If authorized for DoD, this enhancement should also be authorized for the Coast Guard's budget.

Family Readiness

It is often said that the military recruits the service member, but retains the family. As our Nation asks more from its all-volunteer force, at least 50 percent of who are married, family support has never more important.

As stated by Master Chief Petty Officer of the Coast Guard Skip Bowen in a recent FRA article, "Family readiness in the Coast Guard is unique to the other services. For the other branches of the military, family readiness is more geared toward a deployment. While the Coast Guard does have units that deploy in the same manner that DoD services deploy, the main difference is that the Coast Guard is deployed 100 percent of the time."

He also referenced the Coast Guard Ombudsman program which is directly related to families. Volunteers provide much needed support and our military spouses can benefit from their services if they are at their home duty station and their loved one is on a ship that goes out. While some may think of the Coast Guard as a "home-based operation," many Coast Guardsmen deploy from where they live and spend significant time away from home—anywhere from 185 to 230 days out of the year. The Ombudsmen are there to provide information for the spouses, and the spouses need to understand how the program works. FRA strongly supports continued authorization of this important program.

FRA also supports enhanced awareness initiatives and the President's call for hiring preferences for military spouses. Frequent Permanent Change-of-Station moves often prevent the establishment of roots in the local community necessary to obtaining good jobs. A Federal Government hiring preference would help alleviate that predicament.

Exchange/MWR Programs

The Coast Guard relies heavily on vital non-pay compensation programs to provide for the health and well-being of its personnel and their dependents, and to ensure good morale as well as mission readiness.

The Coast Guard's Morale, Welfare, and Recreation (MWR) program and the Coast Guard Exchange System (CGES) provide important services to members and their families. Proceeds from CGES sales generate funds for MWR programs including retail stores, fitness centers, gymnasiums, libraries and child development centers. All indirectly support the Coast Guard's mission while helping ease the challenges and rigors of often demanding duty assignments.

FRA asks that Congress provide continued authorization of the CGES and MWR programs to ensure the well-being and morale of all Coast Guard personnel and their families.

Conclusion

Madame Chairwoman, the FRA appreciates the opportunity to submit its views for the record on pay, health care and other programs important to Coast Guard personnel. The Association salutes you and members of your distinguished Subcommittee for effective oversight of our Nation's all-important fifth Armed Force, and for your untiring commitment to the men and women serving so proudly in our United States Coast Guard.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUYE TO ADMIRAL THAD W. ALLEN

Question 1. Admiral Allen, how does the Coast Guard intend to satisfy the Congressional mandate required by the SAFE Port Act, to establish Interagency Operation Command Centers for the maritime domain by Fiscal Year 2009 when the Administration has requested no funding to do so?

Answer. The SAFE Port Act requires the Secretary of Homeland Security to establish interagency operational centers at high-priority ports. To satisfy this requirement, the Act provides the Secretary the authority to utilize, as appropriate, the compositional and operational characteristics of existing centers. The Coast Guard will continue to make progress on Interagency Operations Centers through the Command 21 project. The Command 21 project coordinates the information management, sensor and facility upgrades projected for Interagency Operations Centers at Sector Command Centers. All three of these components contribute to establishing the information sharing and interagency coordination necessary to ensure we meet the intent of the SAFE Port Act requirement.

Included in the Coast Guard budget request for FY 2009 is $1 million for Command 21. Under the Capital Investment Plan, we estimate an additional investment of $39 million through FY 2013. As with any major acquisition project, extensive

planning, engineering studies, and a thorough review process must be completed to ensure the project is successfully executed. The $60 million appropriated for this project in FY 2008 will be used to start this process. The $1 million requested for FY 2009 will allow us to continue development of the Interagency Operation Center IT.

Field Commanders are reaching out aggressively to their port partners all over the country to ensure the project is coordinated with state and local agencies. These efforts will facilitate not only the technical means to share information and maintain interagency situational awareness, but also the business practices that will enable tactical coordination in response to all-hazards events.

A major IT activity for Command 21 is to develop and deploy the "WatchKeeper" information management tool to all high priority ports and eventually all 35 Sector Command Centers. WatchKeeper will tie-in directly with our port partners and will facilitate information fusion and sharing as well as provide a tactical situational awareness tool for operational coordination. In addition, the Coast Guard will continue to use the collaboration and integration provided through the Area Maritime Security Committees to maximize outreach and coordination efforts.

Question 2. Admiral Allen, the DHS IG has reported that you have been using maintenance funds to augment shore acquisition, construction, and improvement, or AC&I activities, causing increasing deferments in the maintenance program. How do you justify these actions which not only impact the integrity of your budget but ultimately affect the operational capability of the Coast Guard?

Answer. The Coast Guard's policy to fund minor unspecified shore construction with Operating Expenses (OE) budget authority is based on certain dollar thresholds, derived from and consistent with those used by the Department of Defense (DoD) for unspecified minor construction. The referenced DHS Office of the Inspector General report found the Coast Guard's use of OE funding in this manner was not supported fully in legislation. The Coast Guard immediately issued interim guidance to ensure future obligations of the OE appropriation were in full compliance with statutory authority and engaged both Authorization and Appropriation Committees to ensure legislative authority existed to maintain parity with DoD. Specific legislative authority was included in the Consolidated Appropriations Act, 2008, which made the OE appropriation available for "minor shore construction projects not exceeding $1,000,000 in total cost at any location."

The Coast Guard considers this flexibility an operational imperative. We depend on the nimbleness of OE to perform disaster recovery and to execute homeland security and national defense missions. If a hurricane destroyed a radio tower and the Coast Guard did not have this authority, we would be unable to restore life saving communications until supplemental AC&I funding was available. This would severely hamper rescue and recovery operations. The Coast Guard also would be unable to conduct minor shore construction to answer dynamic and emerging anti-terrorism/force protection requirements quickly, unless specific appropriations became available to do so.

Question 3. How do you respond to reports that you have been funding the shore AC&I account below the current standard, which is 2 percent of the total plant replacement value? How do you envision making up the lost costs associated with underfunding the shore AC&I account that has occurred over the last several fiscal years?

Answer. The Coast Guard is committed to appropriately funding recapitalization of its shore facilities as reflected in the FY 2009 President's Budget. The Coast Guard requested an increase of $9 million (+22 percent) over 2008 appropriations.

The Coast Guard uses the recapitalization standard provided by the Federal Facilities Council (FFC) and International Facility Management Association (IFMA) that sets a benchmark of 2.5 percent of PRV per year for a well-maintained facility. The Coast Guard's shore assets have an aggregate replacement value of $7.4 billion.

The Coast Guard is developing a consolidated AC&I shore investment plan that includes recapitalization of existing facilities and building new facilities to support emerging missions and new asset acquisitions. The shore infrastructure resources required to meet the Coast Guard's PRV benchmark and our new mission and asset acquisitions are reflected in the Coast Guard's Five Year Capital Investment Plan under AC&I.

Question 4. The regulations promulgated by the Transportation Security Administration (TSA) and the Coast Guard regarding the implementation of the Transportation Worker Identification Credential (TWIC) program indicate that the Coast Guard will begin enforcement in September of this year. We understand the launch of the TWIC program was delayed due to transition difficulties between the Bearing Point and the Lockheed Martin contractors and additional testing requirements by

the TSA. Does the Coast Guard intend to modify its enforcement to better align with actual TSA enrollment schedules since these delays occurred and were unanticipated when the final rule was promulgated? When do you plan to announce your enforcement regime to the maritime community?

Answer. The current National Transportation Worker Identification Credential (TWIC) compliance date of September 25, 2008, has not changed. However, TSA and the Coast Guard (CG) continue to closely evaluate enrollment, issuance, and throughput metrics along with system capacity trends to determine if a new national compliance date is necessary and if so, when it should take effect. We understand if a new date is needed, it should be published as soon as possible. Working with TSA, our goal is to make a determination if the national compliance date needs to be changed in the coming weeks based on projected metrics, feedback from CG field units, maritime industry representatives, and input from the TSA.

Question 5. Hawaiya Technologies, a Hawaii based homeland security engineering company, is developing several low cost Unmanned Aerial Vehicles (UAV) for use in maritime surveillance as well as disaster response through a port security grant. The use of various types of sensors aboard UAV's, including multi-sensor payloads for continuous day/night operations has the great potential for saving lives at sea and ashore during catastrophic events like Katrina. Is the United States Coast Guard actively pursuing UAV sensor development that can enhance their all-hazard search and surveillance capability? How are you integrating the lessons learned from these types of port security grant projects into your overall UAV development and planning?

Answer. The Coast Guard will employ various maritime surveillance technologies to improve maritime domain awareness. Long endurance, shore-based and tactical shipboard Unmanned Aircraft Systems (UAS) with appropriate sensors may provide efficient and economical surveillance capability for the Coast Guard. The technology for these systems is rapidly evolving and various approaches are being explored for both shipboard and long endurance, shore-based UAS solutions.

The Coast Guard is in the UAS pre-acquisition phase for maritime surveillance and is collaborating with DoD and DHS to determine the most effective UAS and sensors alternatives to meet common maritime operational requirements. Additionally, the Coast Guard Research and Development Center recently initiated research on UASs to operate from the Coast Guard's National Security Cutter (NSC). This study will include market research and analysis of various UAS sensors for cutter-based maritime surveillance.

At this time the Coast Guard is not considering the use of UASs to perform port security missions due to national airspace operating constraints resulting from UAS safety of flight technological limitations (*e.g.,* system airworthiness, collision avoidance, and control link electromagnetic interference). The Coast Guard continues to monitor UAS flight safety technology and the Federal Aviation Administration's (FAA) UAS policies. The Coast Guard will consider UAS operations in support of port security missions when UAS flight safety technology matures to the point that FAA considers UAS operations over populated areas and harbors as being appropriate relative to public safety.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO ADMIRAL THAD W. ALLEN

Question 1. I notice that in your operating expenses budget there is a $68 million "Management Efficiencies" charge. What "management efficiencies" are created by this charge? How, specifically, is this charge being paid for? Will this charge, in its entirety, actually result from decreased expenses due to increased efficiency, or will the charge impact Coast Guard operational funding? If the Coast Guard cannot find "efficiencies" to cover the entire charge, will the remainder be distributed across Coast Guard programs, hurting these programs' bottom line?

Answer. The $68M in Management of Technology Efficiencies is effectively an "on budget reprogramming" to ensure policy and resource affirmation of critical service issues such as increasing maintenance funding for our legacy cutter and inland river ATON fleets, establishing critical intelligence and awareness programs of record, and evaluating future operational requirements in the Arctic. It also supports on the critical need for non-pay inflation given our capital asset-intensive operations, and the necessity and reality of annualizing emergency funding heavy on FTP.

The Coast Guard's $68.177M Management and Technology Efficiencies in the FY 2009 Budget are comprised of three segments:

- $34.079M—Represents anticipated efficiencies across Operating Expenses (OE) PPA's I, II (non-pay accounts only), III, IV, V, and VI. These efficiencies offset our non-pay inflation line-item request of $34.079M to the same PPAs impacted above.
- $24.098M—Represents an anticipated 2.4 percent reduction from efficiencies across OE PPA IV (operating funds and unit level maintenance, exclusively AFC–30).
- $10.000M—Represents a surplus identified within PPA I.

Question 2. In your State of the Coast Guard Address, you said that "there is a limit to what any organization can accomplish when the overall end strength has not changed materially in 50 years." If you had the funding and authority to increase the size of the Coast Guard by 10,000 personnel, how would you use these new personnel and what would it enable the Coast Guard to accomplish? What mission areas would the Coast Guard focus on with the additional personnel?

Many individuals have expressed concerns about the Coast Guard's ability to keep up with many of its traditional missions like marine safety—areas you are taking steps to begin addressing in the FY09 budget. Have the overall levels of personnel you spoke about in your State of the Coast Guard Address caused or contributed to these areas of weaker performance?

Answer. My statement refers to our observation that demand for Federal services is increasing in several aspects of maritime activity:

- Growth in the Maritime Transportation System (MTS).
- Increase demand for Liquefied Natural Gas (LNG).
- Threat of transnational terrorists and criminals.
- Coastal Development.
- Certain Dangerous Cargo (CDC) vessel security requirements.
- Interagency Operations and Information Sharing.

How much of this demand is the responsibility of the Federal Government, and the Coast Guard in particular, is a critical discussion to undertake before deciding the level and type of growth needed within the Coast Guard workforce. The new positions in the FY09 budget request are important for Coast Guard to maintain pace with current demand.

Question 3. Through the years, Congress has dramatically increased the Coast Guard's missions and responsibilities. Beginning with port, waterway, and coastal security in 1790, the Coast Guard took on search and rescue in 1848, marine safety in 1939, Aids to Navigation, living marine resources, and ice operations in 1949, marine environmental protection in 1961, drug interdiction in 1980, and new anti-terrorism homeland security missions since 2001. Have the levels of Coast Guard personnel through the years increased concurrently with the Coast Guard's steady increase in missions and responsibilities?

Answer. The recent increase in personnel since 2003 corresponds with CG's post-9/11 increase in mission.

Question 3a. Through the years and decades, has the size of the Coast Guard in terms of personnel, assets, and funding all increased to the extent needed for the Coast Guard to fully meet all new missions and responsibilities?

Answer. Throughout its history, Coast Guard has effectively prioritized its missions and utilized its allocated resources to apply personnel and assets accordingly.

Question 4. Please discuss some unfunded mandates and how you plan to address them in the FY09 and out-year budgets.

Answer. The President's Budget provides funding for all USCG missions mandated by statute.

Question 5. I notice that when we look at the out-year projections from this year and compare these numbers to out-year projections from past budget requests, the numbers constantly change. It doesn't seem that the out-year budget numbers are useful at all for planning or assessing the Coast Guard's plans for future years.

Please explain these discrepancies. Why do they arise? Is this a result of the Coast Guard's budget processes? Does it reflect poor or inconsistent budget planning by the Coast Guard? Or do these constantly-changing projections indicate top-line pressures that prevent consistent budget planning?

Answer. The Department of Homeland Security (DHS) Future Years Homeland Security Program (FYHSP), a requirement of Section 874 of the Homeland Security Act of 2002, was only recently implemented as planning guidance for components when formulating their budgets. FYHSP projection tools are still undergoing refine-

ment, however, any out-year budget forecast may change based on the following factors:

- Inflation factors and economic assumptions, which are updated each year by OMB, result in changes to the five-year FYHSP projections (out-years).
- Projections may change in accordance with departmental goals and priorities.
- External Events—Unanticipated natural or terrorist-related disasters (*e.g.,* Hurricane Katrina) and/or higher national priorities may alter Department-wide and component priorities.
- Internal Factors—Emergency needs (*e.g.,* maintenance of legacy assets) and/or Strategic Priorities (*e.g.,* Asset and Shore Recapitalization, Marine Safety Enhancements, Improving Command and Control, Establishing Comprehensive Intelligence and Awareness Regimes).
- AC&I Projects—Changes in a specific project's Acquisition Program Baseline (APB) result in out-year funding profile adjustments.

Using FYHSP projections for out-year budget planning is challenging because of these factors.

Question 6. Please outline the current status of the National Security Cutter BERTHOLF stern launch and recovery ramp.

Answer. The National Security Cutter's (NSC) Stern Launch and Recovery system was successfully demonstrated during Boat Handling Trials in late March and again for INSURV during Acceptance Trials (AT) April 7–10, 2008.

Question 6a. Have all issues been resolved for the launch and recovery of the Short Range Prosecutor? What are the difficulties being encountered for the launch and recovery of the Long Range Interceptor?

Answer. Some issues remain to perfect the launch and recovery system, including operating it in higher sea states. As the crew gains experience operating the system, it is expected that additional improvements will be required. During the Boat Handling Trials, the Long Range Interceptor (LRI), Short Range Prosecutor (SRP), and NSC stern ramps were instrumented to gather data about accelerations/decelerations, landings and boat entry positions into the notch of the stern ramp. The Coast Guard's technical authority (CG–4) is evaluating the data for possible improvements to the system. The most significant issues with the stern launch and recover system were related to the physical interface between the LRI and the NSC; the LRI is a much larger boat than the SRP. The most significant issues have been corrected and the LRI was successfully launched and recovered on various headings and speeds on 26–27 March 2008.

Question 7. To what extent can we even resolve issues for launch and recovery of the Long Range Interceptor since the Coast Guard has not yet acquired a fleet of these boats?

Answer. Most of the issues for launch and recovery were related to designing a system that can capture a large boat the size and weight of the Long Range Interceptor (LRI), as well as a smaller boat such as the SRP. The system has been designed and tested for both the LRI and the SRP. Future LRI and SRP design work will have to incorporate the functionality of the NSC's launch and recovery system. During the Boat Handling Trials, the LRI, SRP and NSC stern ramps were instrumented to gather data about accelerations/decelerations, landings and boat entry positions into the notch of the stern ramp. The Coast Guard's technical authority (CG–4) is evaluating the data for possible improvements to the system, and for future LRI/SRP design work.

Question 7a. Will the boat have to be designed and manufactured to meet the needs of the NSC stern launch and recovery ramp?

Answer. Yes, the boat must be designed to properly interface with the NSC stern ramp, and launch and recovery mechanism.

Question 7b. Will this impact the design, cost, schedule, and risk for the LRI?

Answer. Any boats used in a stern ramp system must be designed to interface with the system. The Coast Guard anticipates that the U.S. boat market is robust and competitive enough to produce a boat that will work with the NSC stern launch and recovery system.

Question 7c. Is it possible that the LRI will not be able to be used on the NSC?

Answer. No, launch and recovery of the LRI was demonstrated through robust, comprehensive tests conducted during Boat Handling Trials and Acceptance Trials.

Question 7d. Do you anticipate there will be limitations on the sea states in which the stern ramp can be used for recovery and deployment of SRPs and LRIs?

Answer. The NSC's launch and recovery system was designed to operate up to sea state 5.

Question 7e. If the LRI cannot be used on the NSC, what impact will this have on NSC capabilities? Wouldn't it be a major blow to NSC mission capabilities?

Answer. There is no expectation that the LRI will not be capable of operating with the NSC.

Question 8. Is it likely that the stern ramp will not be completed and fully operational at the time of delivery of the NSC?

Answer. The Coast Guard anticipates that the stern ramp will be fully operational at delivery.

Question 8a. If this occurs, will the stern ramp continue to be built and modified by a different contractor in a different shipyard? Will it be done by Coast Guard personnel?

Answer. The only significant planned work after delivery is the change out of the stern doors to an improved design. While currently functional, the change proposed to improve the door design was approved and will be performed at the NSC's homeport.

Question 8b. Since the stern ramp is one of the major operational requirements of the NSC, how will ICGS be held accountable if the ship is delivered without a fully operational stern ramp?

Answer. The Coast Guard anticipates that the stern ramp will be fully operational at delivery.

Question 8c. Is ICGS simply off the hook? Are there any financial penalties for not delivering the ship with that requirement completed?

Answer. The requirement is anticipated to be completed by acceptance. Yes, there is a financial penalty in that the contractor will not receive any additional profit for additional work even though the direct cost will be paid.

Question 8d. How will the stern ramp issues be treated in the NSCs beyond the BERTHOLF?

Answer. All future NSCs are anticipated to have essentially the same stern ramp system as BERTHOLF, and will meet the contract requirements.

Question 9. The National Security Cutter's Operational Assessment Analysis (OAA) stated that LRI operations were one of the NSC's most significant areas of risk: "the potential inability of the LRI to achieve an operating envelope compatible with the stated Key Performance Parameter 5 of SS 5 up to 85 nm from the cutter will severely limit employment strategy of WMSL during Drug Interdiction (DRUG) and Over-the-Horizon (OTH) surveillance operations." What is the timeline for addressing this particular point/question?

Answer. The LRI is anticipated to be able to operate in accordance with the Concept of Operations and performance specifications, meeting the requirement for both sea state and range. The Coast Guard will test this performance specification during BERTHOLF post delivery operations evaluation (OPEVAL).

Question 9a. Don't LRI operations depend not only on the successful acquisition of mission-capable LRI boats, but also the ability to launch and recover the LRI using the NSC stern launch and recovery ramp in conditions up to sea state 5?

Answer. Yes.

Question 10. Please specify the expected weight margin for NSC 1. How does this weight margin compare with other similar first-in-class vessels? Please provide examples. According to GAO, Coast Guard engineers have expressed concerns about the NSC's weight margins. What, specifically, are these concerns? Please provide documentation (memos, *etc.*) detailing the NSC weight margin concerns expressed by Coast Guard Engineering Logistics Center officials.

Answer. 1. As a result of post 9-11 changes implemented during design and construction, the Service Life Margin (SLM) has been reduced. Based on preliminary results of the recent inclining experiment, most of the weight margin appears to have been consumed. The expected SLM at delivery is being evaluated by the Coast Guard's Technical Authority.

Planned Engineering Change Proposal (ECP) modifications to the NSC would increase the limiting displacement to 4,700 LT and restore as much of the original service life margin as possible. For NSC 1, this change will be implemented during the Post Shakedown Availability (PSA).

2. The actual service life weight margins at delivery of similar first-in-class vessels are shown in the table below.

	1 NSC (LT)	378 WHEC (LT)	270 WMEC (LT)	210 WMEC (LT)
Actual Service Life Weight Margin at Delivery	TBD	543	25	158

3. The Coast Guard has expressed concerns over the NSC weight margins but has taken appropriate actions to regain some of the service life margin back. As previously delivered to Government Accountability Office (GAO), the attached memos detail issues with weight margin and the steps the Coast Guard will take to regain some of that service margin back.

U.S. Department of Homeland Security
United States Coast Guard

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9100
29 Nov 2007

MEMORANDUM

From: D. G. GABEL, RADM
COMDT (CG-4)

Reply to Attn of: CG-4b
CAPT Nagle
(202) 475-5651

To: G. T. BLORE, RADM
COMDT (CG-9)

Subj: RECOMMENDED NATIONAL SECURITY CUTTER 1 AND 2 STRUCTURAL DESIGN IMPROVEMENTS

Ref: (a) G-DPM-4 memo 9000 of 29 May 07
(b) Design Data Sheet 079-1, Stability and Buoyancy of U.S. Naval Surface Ships
(c) NSC Quarterly Weight Report Revision R of 27 Sept 07

1. As requested by reference (a), CG-4 has developed a recommended fatigue life enhancement methodology for implementation on National Security Cutters (NSCs) 1 and 2. In view of the technical challenges associated with designing and implementing structural modifications to an already built vessel, I considered it essential to review the broadest scope of potential solutions. To accomplish this, CG-4 assembled a top notch team of ship fatigue and ship structure experts from the following organizations: Naval Surface Warfare Center - Carderock Division (NSWC-CD), American Bureau of Shipping (ABS), and Det Norske Veritas (DNV). A listing of the team members is attached as enclosure (1). Curriculum Vitae are available upon request.

2. The first meeting of this team was held on 30 May 2007. The Coast Guard's technical experts shared all of the relevant technical data related to the NSC structural design. Each organization then independently developed multiple potential solutions. Over the ensuing five months, bi-weekly meetings were held to evaluate and consider all of the potential solutions. As a result of this collaborative effort, a technical alternative with the greatest likelihood of success has been determined.

3. On 5 November 2007, I reviewed the details of the numerous technical alternatives considered by this team. These details included trade-offs between fatigue life improvements, stability impacts (e.g. added weight and increase in vertical center of gravity) and cost and effort to implement. I have determined that "Option C" is the best technical solution for the given requirement. A general overview of this option is attached as enclosure (2). This option is the combination of Re-entrant Option 5 and Bottom Structure Option 3, along with numerous individual detail enhancements. This was the only solution that attains a 30-year fatigue service life while not exceeding the limiting displacement and vertical center of gravity of the NSC.

a. Estimated Cost. A rough order of magnitude cost for this solution is between $12M and $15M. As my staff further refines the details of this solution, I will provide a more detailed cost estimate.

b. Estimated Duration of Modifications. I recommend Option C be executed in its entirety during the post-shakedown availability. The estimated duration to complete the shipyard modifications is between 6 and 7 months, working double shifts, 7 days per week.

c. High Speed Turn Heel Angle: The maximum acceptable angle of steady heel, from a personnel comfort standpoint, is 15 degrees as defined by reference (b). Between Full Load and Minimum Operating Conditions, the NSC as delivered will heel between approximately 14.8 and 17.3 degrees to the outside of the turn. With the structural improvements, this heel angle will increase to a range of approximately 15.3 to 18.0 degrees. This stability criterion is not a critical one because all factors involved are under direct control of the operator. As long as this angle of heel is taken into consideration during high speed operations, the turning maneuver can still be safely executed. This heel angle will be reevaluated upon receipt of the inclining experiment results when the database will be adjusted for actual light ship weight and center of gravity of the NSC.

d. Limiting Displacement and Weight Margin: The current limiting displacement for NSCs 1 and 2 is 4500 LT. Per reference (c), NGSS is predicting the "Full Load Displacement Departure (at delivery)" as 4434LT. The proposed structural modifications will bring the displacement of the NSC very close to the limiting displacement of the vessel. To regain an acceptable service life weight margin, as well as bring hulls 1-2 in alignment with hulls 3-8, I recommend you undertake an engineering change which incorporates the necessary ventilation, piping, and access modifications to increase the limiting displacement to 4700 LT. This will be critical in allowing incorporation of any other modifications to the vessel during the PSA. I also recommend that the work be done in conjunction with structural modifications at PSA and an inclining test then be included as a contract line item during the Post Shakedown Availability to determine the actual vertical center of gravity of the vessel after the numerous modifications are completed.

4. To support the remaining tasks requested by reference (a), an ABS inspection of NSC1's structure should be arranged. ELC (023) can coordinate this visit through the PMRO. The scope of this inspection will be to determine the fatigue categories of the as-built structure of NSC 1. Upon completion of this inspection, the remaining analysis and deliverables will be provided in accordance with enclosure (3).

#

Enclosures: (1) NSCs 1&2 Structural Modifications Team
(2) Fatigue Improvement Summary
(3) Plan of Action and Milestones for NSCs 1&2 Structural Improvements

Copy: CG 93, MLCPAC(v) w/ Enclosures
CG-01, CG-094, CG-ACO, CG-2, CG-7, CG-8, CG-45, CG ELC w/o Enclosures

NSCs 1&2 Structural Modifications Team

ABS Participants

Derek Novak
Honghua Qian

DNV Participants

Dag McGeorge

ELC Participants

Paul A. Hirsimacki
Timothy A. Mcallister
Peter VanBuren Minnick
Ryszard Piskorski
Karl A. Stambaugh
Alfred Tunik

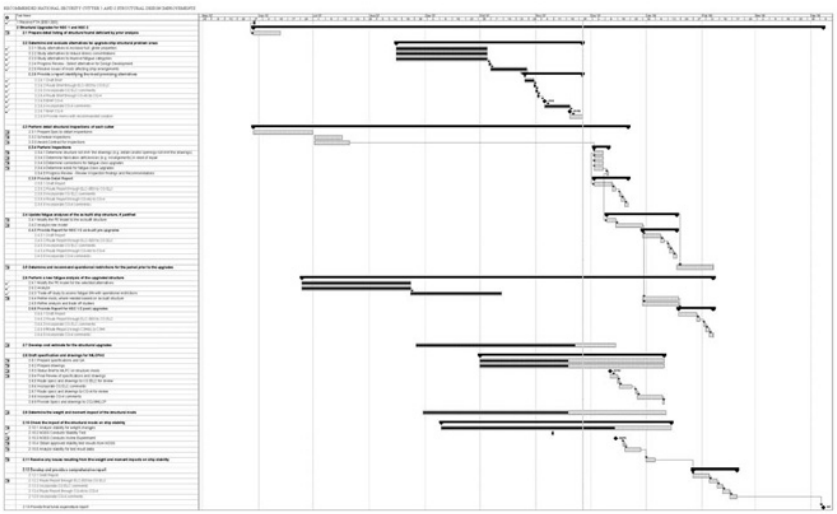
NSWC-CD Participants

David P. Kihl

Combinations Considered
A – 02 Level Widening (R1) / Bottom Plating (B3)
B – 01 Level Sponsons (R3) / Bottom Plating (B3)
C – 01 Level Plate Replacement (R5) / Bottom Plating (B3)
D – 01 Level Strapping (R6) / Bottom Strapping & Aft Girder (B2)

Re-entrant Area Options Analyzed	Bottom Plating Options Analyzed
R1 – 02 Level Widening	B1 – Internal Longitudinal Girders (in tanks forward and aft of machinery spaces)
R2 – 03 Level Connection	B2 – Strapping (ABS input) with added Longitudinal Girder Aft
R3 – 01 Level Sponson with 02 Deckhouse Cut	B3 – Replace Plating Panels
R3a – 01 Level Box Girder / Short Sponson with 02 Deckhouse Cut	B4 – Fins / Blisters
R4 – 02 Level Sponson without Deckhouse Cut	B5 – Double Hull
R5 – 01 Level Plating Replacement with 02 Deckhouse Cut	B6 –Wall Sided Hull (effectively 01 sponson and waterline blister)
R6 – 01 Level Strapping with 02 Deckhouse Cut (along with 01 level sheer and stringer)	B7 –Composite Structure Application (DNV input)

Encl: (2)

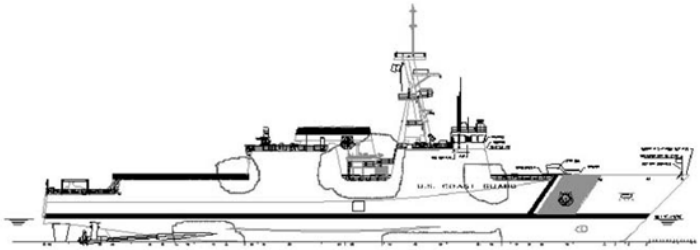


RECOMMEND NATIONAL SECURITY CUTTER (NSC) 1 AND 2 STRUCTURAL DESIGN IMPROVEMENTS

Option C: Detail Enhancements / Bottom Plating Replacement (B3) / 01 Level Plating Replacement (R5)

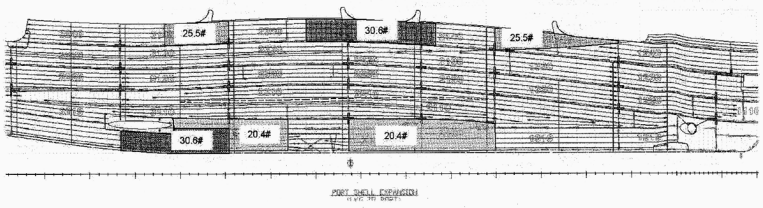
Detail Enhancements

- Foredeck Knuckle
- Mission Module Hatch
- Fashion Plates
- Reentrant Opening Details
- Vent Trunk Relocation Out of Stringer Strake
- Bottom Longitudinal Girder Continuity

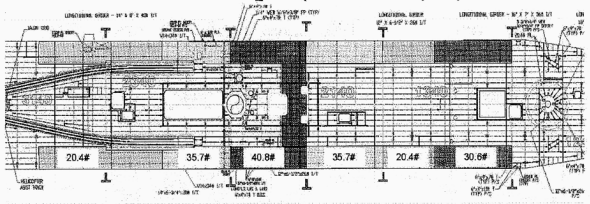


RECOMMEND NATIONAL SECURITY CUTTER (NSC) 1 AND 2 STRUCTURAL DESIGN IMPROVEMENTS

Bottom Plating (B3) and Sheer Strake Replacements (R5)



01 Level Plating Replacement (R5)



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9100
DEC 14 2007

MEMORANDUM

From: G. T. Blore, RADM
COMDT (CG-9)

Reply to Attn of: Ms. Giao Phan
COMDT (CG-93d)
(202) 475-3100

To: D. G. Gabel, RADM
COMDT (CG-4)

Subj: RECOMMENDED NSC # 1 AND #2 STRUCTURAL DESIGN IMPROVEMENTS

Ref: (a) Your memo 9100 of 29 Nov 07

1. I appreciate the dedication of your staff in preparing the recommendations as outlined in reference (a). This was a huge effort and a testimony to not only our superb Coast Guard workforce and Navy partnerships, but the appropriate role of the Coast Guard technical authority.

2. With regard to the options as outlined in paragraph 3 of reference (a), I acknowledge parts (a) and (c). I look forward to the additional information on the detailed cost estimate when it becomes available. I concur with the recommendations in part (d) and will work with your staff to develop the engineering change proposal to increase the limiting displacement to 4700LT; and will ensure this work is included as part of the package of work to be completed during Post Shakedown Availability (PSA).

3. As per part (b) of paragraph 3, I concur that Option C is the preferred option and acknowledge the preference to conduct all of the work during PSA. However, I may recommend a schedule that divides the modifications into separate availabilities in order to give the sponsor options for execution. Accordingly, I will seek your analysis and recommendations for those scenarios as well.

4. Finally, I agree that an ABS inspection of NSC1's structure should be coordinated and concur that ELC (023) can coordinate directly with the PMRO on that inspection. I look forward to receiving the remaining deliverables as outlined in the PO&AM for NSCs 1 & 2 Structural Improvements.

Question 11. The National Security Cutter's OAA states that the NSC's lack of accessibility to mission critical equipment is an area of risk, in that it increases the time required to make repairs and may contribute to mission failures. What is the Coast Guard's position on this issue? Do you believe that the NSC does have a lack of accessibility to mission-critical equipment?

Answer. The potential risks identified by the OAA are accurate, but the issue is a matter of degree. When designing a cutter as capable as the NSC, design trade-offs are often necessary. While the accessibility of mission critical equipment is not optimal, the NSC is anticipated to meet requirements regarding accessibility and is expected to achieve full operational capability.

Question 11a. Isn't this problem a fundamental flaw in the NSC's design? Is it even possible to address this issue without redesigning and/or reconfiguring the NSC?

Answer. No, this does not represent a fundamental flaw in NSC design. The magnitude of effort required to improve equipment accessibility depends upon the equipment and its proximity to other equipment and structure. There are no plans at this time to improve equipment accessibility, although the Coast Guard may consider changes in the future. During the initial equipment testing and some warranty repairs, work was performed on the combining gear, line shaft bearings, both main engines, the main gas turbine and generators without significant issues. Addition-

ally, CG–4 as the technical authority, is conducting a logistics readiness review that is examining lifecycle support for the NSC.

Question 12. The OAA states that "several automated systems were either not delivered or delivered at a reduced capability that impacts workload reduction (*e.g.,* ASIST, Logistics Information Management System, Combat System (GFCS integration and remote operated small arms)), resulting in increased manpower-intensive tasks." Please detail the problems with automated systems identified here, and explain how the Coast Guard is addressing these issues.

Answer. ASIST for the National Security Cutter (NSC) is being provided at full capability.

With regards to the Logistics Information Management System (LIMS), the Coast Guard determined that the major change to the USCG-centric (vs. ICGS-centric) Integrated Logistics Support processes, LIMS as presently configured for Deepwater assets, would not be usable on the NSC. The Coast Guard will use the existing Vessel Logistics System (VLS) software systems to support the NSC. Coast Guard logistics requirements are being updated, reviewed, and validated and "CG–LIMS" will be developed as an USCG enterprise-wide logistics system, building on the effort from the past LIMS development effort.

The OAA predicted that there were an insufficient number of displays for the GFCS (specifically there was not a dedicated display for the Commanding Officer and Executive Officer). When the OAA projected this shortcoming, the tactical doctrine was not yet developed. Additionally, during Builders Trials, both the MK110 Gun and the Phalanx MK 15 CIWS (Close In Weapons System) were successfully fired using the NSC's fire control system. The Coast Guard will monitor this issue after the cutter is delivered and make prudent adjustments if they are appropriate.

Remotely-operated small arms are not a requirement for the NSC. The NSC has sufficient manning for the available small arms and no plans exist to make them remotely-operated.

Question 13. The OAA states that "without robust processes and proper tools to track acquisition changes and ECPs, configuration management will be lost. This may make it impossible to maintain accurate configuration status accounting records, manage supply support changes, plan maintenance, keep technical manuals accurate, and ensure training requirements align with delivered/installed equipment." On this particular comment the OAA rated the likelihood of occurrence as "highly probable." Do you agree with this assessment?

Answer. No. A Configuration Control Board (CCB) has been stood up and processes have been implemented to track Engineering Changes Proposals (ECPs).

Question 13a. Is this assessment a sign that the Coast Guard is still significantly behind in the maturity and effectiveness of its acquisition program for the NSC?

Answer. No. The CCB was not in existence when the OAA met which is why this risk was identified.

Question 13b. How is the Coast Guard addressing each of these problems/issues?

Answer. The NSC project office maintains configuration status accounting (CSA) records to ensure changes are recorded and maintained. This is done at the Washington, D.C. Project Management Office (PMO) as well as the Project Manager's Representative's Office (PMRO) at the shipyard. The Assistant Commandant for Engineering and Logistics (CG–4) is a member of the CCB and therefore is continuously aware of changes allowing the Engineering and Logistics Center (ELC) and the Maintenance and Logistics Command (MLC) to respond accordingly. Logistics managers are also members of the CCB which creates both timeliness and ability to manage supply support changes and keep technical manuals accurate. Finally, personnel managers are members of the CCB to ensure training requirements align with delivered/installed equipment. Additionally, the Assistant Commandant for Engineering and Logistics is conducting a comprehensive Logistics Readiness Review to assess and develop life cycle maintenance activities.

Question 14. During the OAA, no plan was presented to describe how software changes are tracked. Isn't this a major weakness in terms of the Coast Guard's ability to successfully acquire, manage, and maintain C4ISR and other complex communications and computer systems?

Answer. The NSC OAA occurred in 2005. The contractor/design agent in 2005 was responsible for managing the configuration of C4ISR software in accordance with the C4ISR Configuration Management Plan. It is not a major weakness because while under development, it is appropriate for the contractor to lead the configuration management. Since that time, there have been major improvements in oversight and to implement the Coast Guard as the lead CM upon asset delivery.

Question 14a. How does the Coast Guard track software changes?

Answer. The current method for tracking software changes is as follows: The contractor maintains the software configuration database in Clear Quest/Clear Case. The USCG actively participates with the contractor in the Problem Review Boards and the Software Change Management Boards since the beginning of the contract. The contractor can only make changes to the system/software to meet a requirement as they are contracted to do. If there is a change to software that is not within the contract scope, there is a formal ECP (engineering change proposal) process and the requirements, system baseline and configuration changes are directed by a contracting officer. The USCG is building on the contractors established external and internal configuration management processes to manage the design and deployment of software.

Question 14b. Does the Coast Guard have a plan for how to track software changes?

Answer. The USCG Acquisition Directorate is establishing three Configuration Control Boards (CCBs), which include Surface, Air and C4ISR. Each CCB will develop its Configuration Management (CM) Plan that will document the configuration change process. Software configuration changes are also tracked in detail by the developer's Configuration Management process. All the proposed C4ISR software changes requested from the contractor/design agent or from the USCG will be analyzed and then approved at the C4ISR CCB. Upon approval, changes will be implemented by the contractor/design agent. Software changes that affect assets, will be forwarded to the asset CCBs for approval for installation. Presently, on the USCG side, software configuration changes of the NSC are tracked in a database called Fleet Logistic System (FLS) managed by the Coast Guard Engineering Logistics Center. MPA's hardware and software configuration changes will be tracked in an Aviation Computerized Maintenance System (ACMS) at the Aircraft Repair and Supply Center. The FLS and ACMS are interim solutions to track software and hardware configuration changes prior to the standup of the CG–LIMS (Logistics Information Management System).

The C4ISR CM plan will manage all the software and changes including Commercial Off the Shelf (COTS)/Non Developmental Items (NDI), Government Off the Shelf (GOTS), software and contractor/design agent developed software. C4ISR CCB membership will include, but is not limited to, the Surface Program, Air Program, Sponsors, and Center of Excellence such as the Command and Control Center. Stakeholders from all the USCG offices are involved in the CCB process. The Coast Guard employs configuration accounting to track the history of configuration items and will employ functional control audits, use and physical configuration audits, and in-process audits.

Question 15. The National Security Cutter's OAA identifies many issues of significant concern. For each of the 25 OAA issue assessments identified as "red," please briefly identify the following: (1) Whether the Coast Guard agrees with that particular issue assessment; (2) the extent to which the Coast Guard believes that issue/requirement is actually relevant and/or needed for the NSC; (3) if the Coast Guard believes the requirement is not needed, a brief justification; and (4) if the requirement is needed, a brief summary of how the Coast Guard is proceeding to address the problems and risks identified by the OAA.

Answer. The question stated there were 25 OOA issues identified as "red"; however, the OAA Final Report dated 14 September 2007 identified only 15 "red" issues which are addressed in the table below.

OAA Issue ID	Description	Does CG Agree with Assessment?	Coast Guard Assessment of Relevance	Justification if Assessment is that Requirement is not Needed	CG POAM if Requirement is Assessed as Needed
E–1 Anti-Terrorism Force Protection (ATFP)	WMSL does not have the capability to employ a "detect-to-engage sequence" to defend itself against swimmers and Swimmer Delivery Vehicle SDVs.	Yes	Issue should be addressed.		Development of cutter ATFP doctrine may resolve this issue. Acquisition of portable anti-swimmer sonar and deployment aboard cutters when the risk is elevated may be the solution. Issue is unresolved.
E–2 Mobility	WMSL sea-keeping capabilities to perform all operations through SS 5 have not been fully tested/demonstrated. This is of particular concern due to the high uncertainty and new procedures associated with the small boat and air asset launch & recovery systems.	No	WMSL is expected to operate in Sea State 5.	Boat launch and recovery trials and WMSL Acceptance Trials have demonstrated boat launch and recovery capability. Flight deck is larger than most CG and Navy ships (except carriers and amphibs). Flight deck has ASIST installed. Cutter will complete flight deck certification and dynamic interface testing post-delivery.	
E–3 Survivability #1	WMSL will not have the organic capability to decontaminate itself or embarked assets in a Chemical Biological Radiological/Nuclear (CBRN) attack.	Yes	Requirement is for a single zone Citadel-like capability and Counter Measure Wash Down (CMWD) which is being provided. It does not include self or embarking asset decontamination.		No additional zone or entire ship coverage has been approved as being required. No further CBRN defense capability is planned.
E–3 Survivability #2	WMSL will not have the capability to prevent internal contamination of the entire ship and crew in a CBRN attack.	Yes	Requirement is for a single zone Citadel-like capability and CMWD which is being provided. This will not protect the entire cutter.		No self-decontamination technology has been developed. No further CBRN defense capability is planned.
E–4 NOC Issue #1	WMSL will not be able to defend itself against low, slow air threats due to limited capability to systematically acquire, track, and engage air targets.	No	Cutter does have the ability to engage air targets.	Cutter has the capability which the Navy/Coast Guard jointly determined as most appropriate for the NSC, including Close In Weapons System (CWIS) 1B which incorporates a Forward Looking Infrared Radar (FLIR) to track low, slow air targets. Mk 46 Optical Sight and Mk 48 Gun Weapons System (GWS) are also capable of engaging slow, low air targets.	
E–4 NOC Issue #2	WMSL will not have the capability to intercept and engage, including compelling compliance of multiple high-speed surface threats, or employ lethal force to achieve mission kills against hostile surface TOIs.	No	Cutter does have the ability to engage multiple high speed surface threats and to employ lethal force.	Cutter has the capability which the Navy/Coast Guard jointly determined as most appropriate for the NSC, including CWIS 1B, Mk 48 GWS and .50 cal. machine guns.	
E–4 NOC Issue #3	WMSL will have limited capability to defend escorted units.	No	Cutter does have the ability to defend escorts.	Cutter speeds in excess of required 28 knots has been demonstrated. All installed weapon systems can be used to defend escorts.	
E–7 C4ISR Issue #1	The WMSL sensor package does not include Chemical Biological Radiological/Nuclear & Explosive (CBRNE) detection, classification, and identification capability.	Yes	Cutter should have improved CBRNE capability.		Next generation systems are being developed by the Navy, but are not yet ready for acquisition or deployment. Coast Guard will follow Navy lead.

E–7 C4ISR Issue #2	IA will be difficult to achieve.	Yes	IA issues must be resolved.		Preliminary visual inspections and instrumented surveys have been conducted. Work lists have been compiled and communicated to the contractor. C4ISR IA scans will be conducted shortly. As C4ISR suite is complete, additional inspections and surveys are underway. It is anticipated all issues will be satisfactorily resolved. No classified material will be introduced to installed systems until an IATO is granted by the CG Designated Accrediting Authority (DAA).
E–7 C4ISR Issue #3	Delays in VUAV development and delivery will drastically reduce the surveillance footprint of the WMSL.	Yes	An Unmanned Aircraft System (UAS) is expected to increase operational effectiveness.		The Coast Guard is investigating more mature UAS designs and conducting alternative analyses for both cutter based and shore based UAS.
S–2 Maintainability	Space and location hinder the ability to access mission critical equipment such as main diesel engines and communications equipment for maintenance.	Partially	While the statement is true, the issue is a matter of degree.		When designing a cutter as capable as the NSC, design trade-offs are necessary to accommodate both mission critical equipment as well as provide for current crew habitability standards. While maintenance accessibility is not optimal, the NSC is anticipated to meet requirements regarding accessibility and is expected to achieve full operational capability.
S–5 Compatibility	The LRI's operating envelope does not match the extent of the WMSL's operating environment.	No	The LRI has its own operational requirement.	It is not unusual that a large cutter will have an operating envelope which far exceeds the envelope for its attached boats. The acquisition process provides capability; Commanding Officers exercise judgment in when and how to use that capability.	
S–8 Human Factors	There is no identification of an appropriate level of automation to reduce workload because expected automation capabilities proposed for the initial design have not been provided.	No	The contract did not specify any particular level of automation.	Reducing operating costs by reducing crew size through the use of automated systems was a design consideration. The final design represents the resulting balance between affordability and automation to meet life cycle cost amounts.	
S–9 Safety	Constrained passageways and spaces will impede critical crew movements during emergency response.	No	Passageways and spaces are of sufficient size.	Potential chokepoint in passageway outside Repair Locker II during General Emergency is mitigated by a large repair locker with walk-in garage door type entrance, permitting minimal interference in the passageway.	
S–11 Manning	Proposed WMSL manning levels present little flexibility to overcome expected sailing shortfalls or respond to surge situations that are typical of a large multi-mission cutter's patrol environment during sustained operations.	No	Cutter manning is sufficient for normal operational and emergency evolutions. The cutter has capacity to carry additional personnel for surge operations.	Extensive manpower requirements analysis has been completed. Manning is sufficient for workload requirements, operational scenarios, including General Defense Operations (augmented crew for deployment) and emergency scenarios. NSC #1 has an assigned crew of 113 with available berthing for 148.	

Question 16. As the Coast Guard moves away from the lead systems integrator approach, how will this impact the development and acquisition of the C4ISR system?

Answer. The period of performance for the current Deepwater contract with ICGS is through January 2011. The USCG is assuming the role of the Lead System Integrator (LSI) making changes in program management, requirements development, contracting actions, and compliance enforcement. Contractually, the Coast Guard is modifying existing and preparing new contracts to get the required documents and data as the Coast Guard assumes the role of lead systems integrator. Much of the systems engineering previously performed by ICGS included architecture development, functional requirements development/traceability, managing multiple contractors, software, hardware and platform integration. The largest impact to development will be that the Coast Guard is assuming a larger management role. The Coast Guard as LSI will integrate the assets and systems that comprise Deepwater into the Coast Guard System.

Question 16a. Will some aspects of C4ISR be competed on an asset-by-asset basis?

Answer. The concept of a common C4ISR functional requirements, capabilities, and common design will still be implemented but managed by the Coast Guard in conjunction with the Technical Authority's enterprise architecture and standards. While commonality and interoperability of C4ISR systems are important elements of any enterprise architecture, there may be opportunities for competition at the equipment level. All major system acquisition procurements will continue to be conducted in accordance with the Federal Acquisition Regulations.

Question 16b. Doesn't this present significant risk for the integration of C4ISR between assets?

Answer. Risks due to changing suppliers, standards, and architecture as well as rapidly changing technology will have to be managed. The Coast Guard will minimize these risks by ensuring the C4ISR acquisition program office works closely with the sponsor and technical authority.

Question 16c. Will we continue to rely on ICGS for some elements of C4ISR merely because they were the ones who started the development of this system?

Answer. No, the Coast Guard will not always be tied to ICGS and has started implementing the activities discussed earlier to become the C4ISR Lead System Integrator.

Question 17. In your testimony, you said that you would be using full and open competition for all future acquisitions of the Deepwater C4ISR systems. Does this mean that you will stop using ICGS for C4ISR?

Answer. In the near term, the Coast Guard will not necessarily stop using ICGS for C4ISR. The current Deepwater Award Term contract is still active and may be used by the Coast Guard if it is in the best interest of the government to do so.

Question 17a. If not, specifically what do you mean, then, by "full and open competition?"

Answer. C4ISR acquisitions continue to be executed in accordance with the Federal Acquisition Regulations (FAR) to acquire C4ISR systems and services that provide the best value to the Coast Guard.

Question 17b. What do you anticipate ICGS's role will be in the acquisition of Deepwater C4ISR moving forward?

Answer. ICGS C4ISR systems are installed on three Deepwater assets and, in the near term, it is likely that modification and improvements will be performed by ICGS.

Question 18. What are the ramifications of acquiring C4ISR on an asset-by-asset basis rather than through a private lead systems integrator?

Answer. The change in shifting from a private Lead System Integrator (LSI) to the Coast Guard being the lead system integrator as related to C4ISR is not the same as acquiring C4ISR on an asset-by-asset basis. Even though the Coast Guard will acquire specific C4ISR systems for specific assets, the overall C4ISR acquisition approach will still be accomplished using a systematic methodology. This methodology will be a consistent C4ISR engineering approach to ensure appropriate commonality, operational performance, and interoperability are considered when C4ISR design decisions are made. The C4ISR Program Manager (CG Acquisition Directorate) will collaborate with the Coast Guard's Technical Authority for Command, Control, Communications and Information Technology (CG C4&IT Directorate) and the sponsor for all C4ISR design decisions. The C4&IT Technical Authority will define the enterprise architecture as the C4ISR systems are acquired.

Another ramification of this change involves the impact on personnel. The type of engineering work to acquire the C4ISR systems remains the same; however, the

management of the work is just shifted from a commercial contractor to the Coast Guard. This change will require an increase in Coast Guard personnel to accomplish. The FY 2009 President's request includes funding for personnel to continue the Coast Guard assuming the lead system integrator role for all acquisitions and to develop lifecycle support plans for newly delivered Deepwater assets.

Question 18a. The integration of complex communications and computer systems was often used as one of the main justifications for using a private lead systems integrator for Deepwater. What are the difficulties, problems, and major risks we will encounter in the C4ISR acquisition by moving away from the private lead systems integrator?

Answer. The major challenge of moving away from a private LSI is the requirement for additional expertise to manage the integration. Some specialized areas of expertise are not currently resident in the Coast Guard and will need to be grown or obtained by contract.

Question 19. It is my understanding that C4ISR is being built with a combination of military and civilian equipment and technologies. What problems or challenges has the Coast Guard encountered with the acquisition and performance of C4ISR because of the military/civilian equipment mix?

Answer. There are inherent risks to acquiring and integrating any complex system. The most significant challenge involving the integration of commercial equipment is ensuring each system meets and complies with DoD Information Assurance (IA) guidance and regulations. The mix of military and civilian equipment requires Certification and Accreditation (C&A) activities that if not fully identified and articulated can create schedule delays and cost growth beyond the program budget. The use of Interface Control Documents and configuration management is critical to the success of any integration. There is significant advantage to leveraging the best of both worlds.

Question 19a. What risks are associated with using a combination of military and civilian technologies and equipment?

Answer. There are several risks that must be managed when mixing successful commercial products with military developed products. One risk of using commercial items is information assurance accreditation and maintenance that must be identified, scheduled, and managed. Additionally, the speed of technology change drives hardware and software obsolescence which requires regular upgrades to the equipment and software to remain current.

Question 19b. Will this combination continue in future acquisitions of C4ISR?

Answer. Yes, using lessons from past procurements to acquire more cost effective C4ISR products/systems for the Coast Guard, the USCG will continue to use a combination of military and civilian technologies and equipment.

Question 20. I am troubled that the Alternatives Analysis seemed to indicate the Coast Guard should move forward with the Offshore Patrol Cutter as conceived by ICGS—particularly since the OPC only exists on paper and would involve designing the ship from scratch, much like what we just went through with the National Security Cutter. I am very worried that going down that path would involve substantial risk for taxpayers. Does the Coast Guard agree with the AA's assessment that you should move forward with the OPC as conceived by ICGS? Why or why not?

Answer. The Coast Guard agrees with the Alternatives Analysis' (AA's) assessment to move forward with the Offshore Patrol Cutter (OPC), but not necessarily as conceived by Integrated Coast Guard Systems (ICGS). The OPC will be acquired through full and open competition meaning that other alternatives (both off-the-shelf and new designs) will be considered as part of the process. While ICGS would be welcome to compete designs during the request for procurement phase, as would Northrop Grumman, it will be as part of a process involving other interested manufacturers.

Question 20a. Is the Coast Guard planning on pursuing the OPC as envisioned by ICGS, or are you examining other alternatives?

Answer. The Coast Guard Capabilities Directorate (CG–7) will generate valid, stable, achievable and affordable OPC requirements and develop an Operational Requirements Document (ORD) for the OPC in compliance with the MSAM. Once complete, an Alternatives Analysis will be conducted to determine the alternative designs available to fulfill the OPC mission. The Coast Guard believes there are a variety of alternatives in the competitive market available for the OPC.

Question 20b. Have you decided whether the OPC will be an off-the-shelf ship design that's already in production, or a new ship design that will be the first in its class? If you have not decided yet, when do you plan on making that decision?

Answer. The OPC could be an off-the-shelf design, a modified off-the-shelf design, or a new design, depending on the requirements established in the ORD. The decision most likely would be made between late FY 2011 and early FY 2012.

Question 21. In your testimony, you said that all future acquisitions—including for the OPC—would be "Coast Guard-controlled." In the past, the Coast Guard has claimed that Deepwater decisions were always ultimately "Coast Guard-controlled." When you said "Coast Guard-controlled" in your testimony, then, what specifically do you mean? Is this really a change from past practices? If so, in what ways?

Answer. The OPC acquisition will not occur via the Indefinite Delivery Indefinite Quantity (IDIQ) Deepwater contract, but will be the result of a competitive process, compliant with the Coast Guard's Major Systems Acquisition Manual. The Coast Guard will also be the "systems integrator" for the OPC. These are the two significant changes that represents a change in the Deepwater acquisition.

Question 21a. Will the Coast Guard be taking a completely fresh look at the Offshore Patrol Cutter's fundamental performance requirements and revamp its requirements from scratch? How would you go about doing this in a way that ensures the results are not prejudiced by the ICGS vision for the OPC?

Answer. The Coast Guard is developing a new Concept of Operations (CONOPS) and a new Operational Requirements Document (ORD) for the OPC without involvement of ICGS.

Question 21b. Can you guarantee me that the OPC's requirements and specifications will be determined exclusively by the Coast Guard and not be based on the original requirements envisioned by ICGS?

Answer. As stated previously, the Coast Guard is developing the OPC's requirements without any involvement of ICGS

Question 22. After its analysis of the Deepwater assets, the Alternatives Analysis concluded that, while the Coast Guard should continue building National Security Cutters, it "should examine whether the OPC, a less expensive vessel than the NSC, will meet NSC DoD mission requirements. If it can, the Coast Guard should consider building six NSCs and two additional OPCs." Currently, however, the Coast Guard is not scheduled to begin developing or building the OPC until at least 2012 or 2013. Given that timetable, it is unlikely the Coast Guard will be able to determine whether this tradeoff can be made. Because the current Deepwater timetable doesn't call for the development of the Offshore Patrol Cutters for several years, is it even possible for the Coast Guard to consider this option?

Answer. The Coast Guard could consider this option once the design of the Offshore Patrol Cutter (OPC) is complete in the time period between FY 2012 and FY 2013, or perhaps earlier if the preliminary design provides sufficient data to support such a decision. Key elements would include increased operating range and endurance of the OPC. Basic engineering constraints make it unlikely that a vessel approximately three quarters the size of the National Security Cutter (NSC) could achieve similar capabilities and still be affordable for a class of 25 vessels.

Question 22a. What would need to happen to enable the Coast Guard to consider such an option?

Answer. The Coast Guard would need to complete the necessary design work of the OPC earlier than currently planned.

Question 22b. Do you believe this is an option that might be worth considering?

Answer. The Coast Guard believes this option is worth considering while recognizing there are additional risks in terms of the maturity of the OPC design at the time the decision must be made. There could be unintended cost implications for the OPC should the design include additional capabilities above the Coast Guard requirements for the OPC needed to satisfy the NSC mission. The cost of the last two NSCs should be relatively fixed given the maturity of the design and production process, whereas the cost of the as-yet built OPC at that same time would be based on estimates and would involve the typical risks experienced with any first-of-class ship. This might even entail building two classes of OPC, one NSC-like and one meeting only OPC requirements, further adding to cost risk.

Until the revised Operational Requirements Document (ORD) for the OPC is complete, the Coast Guard believes the missions of the NSC and the OPC are distinct, the ship designs will be distinct, and the current planned asset mix is the most appropriate for satisfying Coast Guard missions. To determine optimum fleet mix, the Coast Guard needs improved analysis tools including an upgrade to the Deepwater Maritime Operational Effectiveness Simulation (DMOES). The upgrade to DMOES, to be called Coast Guard Maritime Operational Effectiveness Simulation (CGMOES), is currently underway and should be complete by the end of this calendar year. Once this occurs, and the OPC requirements are established, analysis

can be performed to determine whether a more robust OPC (NSC-like) is worth pursuing, in terms of cost, over other alternatives.

Question 23. What is the weight margin for the HC–144A, both with and without the full roll-on missions platforms?

Answer. The weight margin for the HC–144A allows for 2.4 percent growth in the current basic aircraft configuration. This meets the specification listed in the September 17, 2004 Medium Range Surveillance (MRS) Maritime Patrol Aircraft (MPA) performance specification. Operational equipment, such as the mission system pallet, and fuel loads are adjusted to meet specific mission requirements to remain within maximum allowable takeoff, maneuvering and landing weights.

Question 23a. How does this weight margin compare with other similar aircraft? Please provide examples.

Answer. Weight margins were not specifically listed for other aircraft considered in the Deepwater Capability Analysis of Alternatives (March 1999). The Coast Guard does not have specific examples of weight margins for aircraft configured to perform specific Coast Guard missions.

Question 23b. Have Coast Guard engineers expressed concerns about the HC–144A weight margins? If so, what are these concerns?

Answer. No. Any early concerns on weight margins were addressed with the change from the original, IGCS-proposed CN–235–300M–ER aircraft to the CN–235–300M aircraft selected by the Coast Guard.

Question 23c. Are there any problems or concerns with the HC–144A power or electrical systems? If so, please outline the areas of concern.

Answer. There are no current or unsolved concerns with the HC–144A power or electrical systems.

Question 23d. Have Coast Guard engineers or technical authorities expressed any concerns over the HC–144A power or electrical systems?

Answer. An initial concern with one of the power distribution components of the HC–144A was resolved by the Coast Guard technical authority working directly with the component manufacturer.

Question 23e. Has the Coast Guard conducted an operational assessment for the HC–144A aircraft? If not, why not?

Answer. No. The basic HC–144A aircraft, designated the CN–235 by the manufacturer, was already in production and considered a mature aircraft design. Since the CN–235, a commercial/non-developmental aircraft, was in production and little new information would be realized from an operational assessment of the standard aircraft, the Coast Guard plan for acquisition and transition was to complete the operational assessment after delivery of the integrated aircraft, when the results from the developmental test and evaluation (DT&E), as well as any other acceptance criteria would be known. DT&E of the aircraft was completed in December 2006. DT&E of the combined aircraft and mission system pallet (MSP) was completed in March 2008. The Coast Guard intends to conduct an Operational Test Readiness Review (OTRR) in May 2008, followed by the planned Operational Assessment.

Question 23f. Given that the HC–144A was built by EADS CASA, to what extent will the Coast Guard be reliant upon EADS CASA for replacement parts or repairs in the future years and decades?

Answer. The Coast Guard will be reliant on EADS CASA for original equipment manufacturer (OEM) only for the airframe and certain sub-components replacement parts to maintain standardization with flight safety critical aircraft parts. Engines, propellers, avionics, sensors, and the pallet are all made elsewhere, many in the U.S., so other OEMs will be contracted to provide flight safety critical parts as appropriate. Repairs and programmed depot maintenance (PDM) will be managed and completed by the Coast Guard.

Question 24. Does the Coast Guard believe that the planned number of HC–130H and HC–130J aircraft is sufficient to meet the Coast Guard's needs—particularly in long-range mission areas like Alaska, Hawaii, and the Western Pacific? When was the most recent assessment analyzing this question and what were the conclusions? Do you believe those conclusions are still current and accurate?

Answer. The most recent assessment of fixed-wing surveillance needs was conducted in 2004. In the aftermath of 9/11, the Coast Guard documented its revised operational requirements in the Integrated Deepwater System Mission Needs Statement (IDS MNS). This analysis stated that 61,600 flight hours were required for fixed-wing aviation assets to complete their assigned missions. These missions include:

Surveillance: Surveillance of targets of interest up to 1,000 nautical miles offshore for maritime domain awareness (MDA). *This is particularly important in the vast*

expanses of the Pacific Ocean, where Coast Guard presence is critical to maritime safety and security.

Transportation: Coast Guard and DHS demands for transporting people and cargo are increasing. For example, transportation of a MSST, which includes three boats and five vehicles, requires up to three C–130s. In addition to capacity requirements, there are also time targets, such as the need to move a National Strike Force/Strike Team within 6 hours of notification. *The Coast Guard cannot rely exclusively on DOD or commercial air lift support to meet emergent needs to prevent or respond to acts of terrorism.*

International Search and Rescue: Using the current 22 HC–130s in inventory, the Coast Guard can perform search and rescue in 90 percent of the United States' international search and rescue area of responsibility.

Other Missions: International Ice Patrol, JIATF Counter-Drug and Migrant Smuggling support, Response to Events of National Significance, and High Seas Drift Net/Maritime Boundary Line Enforcement missions. These missions have unique surveillance and transportation requirements.

The Coast Guard's entire fixed-wing fleet is operating at full capacity. The IDS MNS anticipates evolving requirements from the Coast Guard's interagency partners to respond to events of national significance and increased narcotic interdiction goals from ONDCP.

The conclusions reached in 2004 are still current and accurate. As always, the Office of Aviation Forces is continually reviewing the mission requirements and future needs of the Coast Guard's Long Range Surveillance aircraft.

Question 25. The Alternatives Analysis identifies the UAV acquisition as high-risk and recommends altering or eliminating the acquisition. Do you believe that the risks of a UAV acquisition are overstated in the AA?

Answer. The Coast Guard assessment of the Alternatives Analysis (AA) is that it understates the Technology Readiness Level (TRL of 8 on a scale of 9, with 9 being the highest risk) and Manufacturing Readiness Level (MRL of 9 on a scale of 10, with 10 being the highest risk) of Fire Scout with respect to missionization for Coast Guard Operations. The Coast Guard also believes the AA similarly overstates the TRL and MRL for the other UAV candidates. The AA approach was to apply the TRL assessment to the basic technologies and not the complete integrated systems. The MRL was a similar assessment of the platform. The Coast Guard has closely watched the progress of the Navy's Fire Scout Vertical Unmanned Aerial Vehicle (VUAV) and is encouraged by that program's progress with this relatively mature asset. Fire Scout has been launched and recovered from a Navy ship, and demonstration tests are planned on the National Security Center (NSC) in FY 2009 as well as deploying on a Navy frigate during the Summer of 2008. The Coast Guard believes integrated radar is essential for Coast Guard Unmanned Aerial Vehicle (UAV) operations and has been informed that the Navy and the manufacturer are moving forward with integrating a radar in FY 2009 and late Summer 2008, respectively.

Question 25a. Is the Coast Guard considering both land-based UAVs as well as UAVs that can be launched from the NSC at sea? What would be the operational implications of only acquiring land-based UAVs and not having ones that launch directly from the NSC?

Answer. The Coast Guard is considering both land-based and ship-launched UAVs. We are working closely with Customs and Border Protection to test and operate Predator and with the Navy on Fire Scout. Both capabilities enhance the search, identify and patrol capabilities required for Coast Guard mission accomplishment. Sea-based UAVs increase these capabilities for the host cutter, increasing its mission performance and effectiveness.

Question 25b. Is a ship-based UAV acquisition significantly more risky than an acquisition of a UAV that would be launched from land? What would be the main risks associated with acquiring ship-based UAVs?

Answer. Ship-based and land-based UAVs both present opportunities and risks. Land-based vehicles generally can surveil more square miles of ocean on one flight, while cutter-based UAVs have the advantage of tactical use in direct and rapid support of cutter operations. System maturity levels for a suitable ship-based UAV (*i.e.,* one that is appropriate for Wide Area Surveillance (WAS) operations) are relatively low but improving rapidly. The Navy's Fire Scout UAV is the most advanced system capable of supporting WAS operations. However, significant development work (such as radar integration) has not been accomplished. A prototype version of the Fire Scout (the RQ–8A) has successfully landed on a Navy LPD class ship in calm seas. The current model of the Fire Scout (Low Rate Production model) has not yet demonstrated this capability, but is scheduled for operational test flights this summer.

Land-based unmanned aerial systems (UASs) present their own risks. The Coast Guard has conducted two maritime demonstrations to date of a General Atomics Predator B platform with limited success. The improvement to Coast Guard operations by use of this platform in maritime conditions and in Coast Guard operational areas is relatively unknown, especially given the number of planned sorties that must me cancelled due to weather (crosswinds and/or cloud cover). Mid-altitude UAVs such as Predator, currently lack any de-icing capability and therefore avoid operations in clouds, making use over water problematic. Fire Scout, on the other hand, has limited light de-icing capability. Both platforms share similar risks for airspace integration as well. FAA policies regarding the use of UAVs will continue to restrict the potential integration of these platforms into full scale operations; however, the VUAV will no doubt be easier to integrate due to its ability to sail with the cutter and launch well offshore.

Question 25c. How does the Coast Guard plan on moving forward with considering its options for UAV acquisition?

Answer. Congress has authorized additional RDT&E funding to the Coast Guard in FY 2008 to determine a suitable UAS to operate from the NSC. The Coast Guard Research and Development Center will conduct analysis and field assessments in order to determine specific UAS capabilities that are necessary to meet NSC mission needs. This study will examine the potential uses and constraints of a cutter-based UAS, then research and test viable UAS candidates. This increased knowledge and experience will help identify risks associated with cutter-based UAS use and develop mitigation strategies to reduce those risks.

The FY 2009 UAS acquisition budget request would fund the pre-acquisition analysis phase for UASs to address the following issues and tasks:

- Coast Guard missions support with UASs.
- Safety-based statistical analysis.
- FAA/International Civil Aviation Organization (ICAO) maritime operational requirements for UASs.
- Air vehicle command and control and related data management approaches.
- Data linkages between on-scene assets, the Coast Guard's common operating picture, and other required linkages.

Question 26. The Alternatives Analysis seemed to indicate that the current baseline plan for Deepwater is the wrong path for the Coast Guard. It demonstrated that alternative plans—particularly ones that pursue different solutions for the Fast Response Cutter and Unmanned Aerial Vehicles—could dramatically reduce the risk of future problems with performance, cost, and schedule. Can you please detail your plan and process for how the Coast Guard will give full consideration to the alternative options and conclusions proposed by the Alternatives Analysis?

Answer. The Alternatives Analysis (AA), commissioned as an independent, third party review of the Coast Guard's Deepwater asset portfolio, strongly concurred with the direction the Deepwater program is headed. Specifically, it identified the National Security Cutter (NSC) and the Maritime Patrol Aircraft (MPA), the major surface and aviation projects within Deepwater, as the correct choices. The AA did offer options for consideration for alternative Unmanned Aerial Systems (UAS) and the Fast Response Cutter (FRC), however.

The Coast Guard has reviewed the options proposed in the AA and developed a Balanced Plan of Action (BPOA) to address the risks inherent in the proposed alternatives. Previous Coast Guard research showed that there are numerous mitigation efforts required to reduce the technical, manufacturing, and maintenance risks associated with a composite hull. The Coast Guard believes the use of a carbon fiber hull for the FRC–A as proposed in the Modified Baseline Alternative understates risks.

The BPOA adopts the best asset mix from both of the recommended alternatives, continuing the NSC, Offshore Patrol Cutter (OPC), MPA procurements as currently planned, considering use of the FRC–B to satisfy the FRC mission, and including the VUAV to increase operational performance when compared to the Modified Baseline and Managed Risk Alternatives identified in the AA. Full and open competition is guiding the current acquisition to determine the best solution for the FRC. As for the VUAV, the Coast Guard RDT&E program's pre-acquisition UAS study, as envisioned by Congress, will evaluate uses and alternatives for the cutter-based UAS. This will include developing concepts of operations and requirements for a cutter-based UAS leading to a full-and-open competition to determine the best solution for operational requirements.

Question 27. During the hearing, there was some confusion over the number of non-tank vessels that have submitted Vessel Response Plans to the Coast Guard. Please clarify the number discrepancies we discussed during your testimony. To date, how many non-tank vessels have submitted Vessel Response Plans to the Coast Guard?

Answer. Since August of 2005, 12,298 distinct non-tank vessels have submitted Non-tank Vessel Response Plans to the Coast Guard for the purpose of obtaining Interim Operating Authorization. Many vessel operators have submitted one plan to cover multiple vessels in their fleet, an option allowed under the law.

Question 27a. To date, how many of those submitted plans have actually been approved by the Coast Guard?

Answer. Non-tank Vessel Response Plans meeting the provisions of 33 U.S.C. 1321(j)(5), as amended by the Coast Guard & Maritime Acts of 2004 & 2006, are issued Interim Operating Authorizations for a period of 2 years per 33 U.S.C. 1321(j)(5)(G). Since August of 2005, the Coast Guard has issued 1,880 Interim Operating Authorizations for reviewed Non-tank Vessel Response Plans. Many of these plans cover more than one vessel in an owner/operator's fleet. To date, 10,791 vessels have obtained an Interim Operating Authorization status with the U.S. Coast Guard.

The Coast Guard is tracking 1,701 Non-tank Vessel Response Plans that have been issued Interim Operating Authorizations for vessels that are known to continue to trade in the United States. The difference between these two numbers is attributed to plans that have been deactivated due to either noncompliance or owner request. When the Non-tank Vessel Response Plan regulations are implemented into Subchapter O of Title 33 Code of Federal Regulations, the Coast Guard will then "approve" Non-tank Vessel Response Plans.

Question 27b. How many non-tank vessels required under law to submit vessel response plans have not yet done so?

Answer. The Coast Guard estimates approximately 12,000 vessels will be required to meet the Non-tank Vessel Response Plan regulations in the first year of implementation. The non-tank vessel population is an estimate because it is unknown how many foreign flag vessels will need to comply until they actually arrive at a U.S. port. There are thousands of additional non-tank vessels in the world fleet that could potentially submit Non-tank Vessel Response Plans to the USCG. Until they call on the U.S., the plan is not required.

Question 27c. What is the current level of compliance with Coast Guard-issued guidance?

Answer. The current level of compliance is good. Larger, ocean going nontank vessels have been able to adopt, for the most part, the straightforward Non-tank Vessel Response Plan development guidance contained in Navigation, Vessel and Inspection Circular 01–05 CH–1. A number of owner/operators of smaller nontank vessels with fuel capacities less than that of large ocean going nontank vessels that are unsure or disagree on the level of required contracted oil spill response resources. The Coast Guard will address these vessels and their requirements in the upcoming Notice to Proposed Rulemaking.

Question 28. In your testimony, you said that the Coast Guard will begin implementing the non-tank vessel response plan requirement before a rulemaking is completed under Title 33 authority. Please describe and explain the exact legal mechanism through which you will be implementing the Non-tank Vessel Response Plan requirement.

Answer. Section 701 of the Coast Guard and Maritime Transportation Act of 2004 (CGMTA) Pub. L. 108–293, amends the Federal Water Pollution Control Act (FWPCA), 33 U.S.C. 1321(J)(5). to add nontank vessels to the list of vessels required to prepare and submit response plans. Subsection (c) of Section 701 provides. "no later than 1 year after the date of enactment [August 8, 2005], the owner or operator of a nontank vessel . . . Shall prepare and submit a vessel response plan for such vessel." The Coast Guard considers this provision to be "self-executing" because it contains a sufficiently clear mandate (*i.e.,* "shall prepare and submit a plan") and therefore does not need implementing regulations to effectuate the mandate. In particular, the FWPCA contains specific requirements regarding information that should be included in the plan (see 33 U.S.C. 1321(j)(5)(d)(i)–(iv)).

Implementing regulations will, of course, fully detail the precise content of the required plans, but because the Coast Guard knew it would take longer than 1 year to promulgate the regulations, we published a guidance document (see Navigation and Vessel Inspection Circular (NVIC) 01–05, change 1) to assist industry in their preparation of the required response plans. We also provided notice that we would exercise enforcement discretion with the new law as final regulations are developed.

More recently, we re-examined our enforcement posture following the M/V COSCO BUSAN oil spill in California on November 7, 2007. To increase compliance, we have decided to begin enforcement as described below.

Following an appropriate public notification in the *Federal Register,* the Coast Guard will enforce self-executing portions of the statute [section 701(c) of the CGMTA of 2004] through Captain of the Port (COTP) orders. These COTP orders are issued under the authority of the implementing regulation of the Ports and Waterways Safety Act (PWSA), 33 CFR 160.111. The PWSA requires that vessels in the navigable waters of the United States be operated "in accordance with all applicable laws, regulations and treaties to which the United States is a party." Under the authority of the PWSA's implementing regulation, the Coast Guard Captain of the Port would restrict operations of vessels subject to the requirement for submission of a Non-tank Vessel Response Plan (NTVRP) to obtain entry into or upon the navigable waters of the United States and entry would be barred if the vessel owner or operator has not prepared and submitted to the Coast Guard a Vessel Response Plan that contains elements (i)–(iv) required by section 311(j)(5)(D) of the FWPCA. Such COTP Orders would be issued on a case-by-case basis.

These COTP Orders are also supported by the fact that absent the effect of a formal rule to implement the NVTRP required by the CGMTA, the fully enforceable requirement of the CGMTA becomes the international standard required under MARPOL, Annex I. Annex I requires that non-tank vessels over 400 Gross Tons have an approved Shipboard Oil Pollution Emergency Plan (SOPEP). The Coast Guard ensures vessels possess valid SOPEPs during Port State Control examinations and domestic inspections. However, the SOPEP standards are not as detailed and rigorous as those required by the CGMTA.

Question 28a. What are the shortfalls of using this legal mechanism compared to a final rulemaking? In what ways is it different from a final rulemaking?

Answer. The shortfalls of the above described mechanism to enforce Non-tank Vessel Response Plans are that the statute (33 U.S.C. 1321(j)(5)) requires regulations to be fully implemented and enforceable according to the civil penalty regime in 33 U.S.C. 1321. Detailed NTVRP requirements cannot be fully enforced until these regulations are finalized. Thus, until the regulations are finalized, vessel owners and operators required to submit NTVRPs must rely on NVIC 01–05 change for guidance as to the content of their plans. The NVIC, however, is not a regulation. NVICs are suggested guidance and do not constitute an enforceable requirement.

Accordingly. the Coast Guard concerns as to the adequacy of the submissions in a plan on each of the several statutory elements in 33 U.S.C. 1321(j)(5)(D)(i)–(iv) would not currently be enforceable. In other words, as long as the plan submitted contains an entry that facially meets the statutory requirements, it could not be the basis for a COTP order for failure to submit a plan resulting from violation of a law or regulation. Such a plan would arguably satisfy the law. Moreover, in order to assess civil penalties for violations under the FWPCA, the regulations must be finalized because the FWPCA authorizes civil penalties only for violation of regulations issued under 33 U.S.C. 1321.

Question 28b. Please provide a timetable on specifically how the non-tank VRP requirement will be implemented.

Answer. The *Federal Register* notice has been drafted and is in final clearance. Once approved, the Coast Guard would begin enforcing the self executing provisions 60 days after publishing this notice, which allows reasonable time for vessel operators to submit their plans for review. This enforcement policy would remain in place until the final Non-Tank Vessel Response Plan regulations are issued and in effect. With regard to implementing regulations, the Coast Guard anticipates that a notice of proposed rulemaking will be published this year and that a final rule would be published in 2010. The Coast Guard is working diligently to issue the final regulations as expeditiously as possible.

Question 28c. Will this requirement under non-traditional means still allow full enforcement authority by the U.S. Coast Guard? Please explain your enforcement authority for the non-tank VRP requirement.

Answer. See answers to *Questions* 28 and 28a above.

Question 29. Luckily, the COSCO BUSAN of the San Francisco oil spill did have a Vessel Response Plan. What would have happened if that vessel hadn't had a plan? How much worse could it have been?

Answer. For a nontank vessel that had not met planning requirements, the Coast Guard predicts the response would be delayed while the vessel master and agent arranged for a contract, made notifications and navigated a largely unfamiliar local Area Contingency Plan, etc.

Question 30. I appreciate your efforts to eliminate the rulemaking backlog. Will the additional funding included in the FY09 budget request eliminate the rulemaking backlog? Will it even make inroads in reducing the backlog, or will it simply allow the Coast Guard to 'tread water' and not lose any additional ground? Exactly how far will this extra money get us in terms of reducing the current rulemaking backlog?

Answer. The Coast Guard expects to see a steadily declining backlog beginning in 2009. Rulemaking is accomplished by teams comprised of technical experts, project managers, attorneys, economists, environmental specialists and technical writers. Contractor support is often used to assist the teams in analysis and technical writing. The FY 2008 funding and FY 2009 requested funding (including contractor support), once fully implemented, would allow us to make significant progress on the current project backlog.

Question 31. On February 6, the Minerals Management Service auctioned off a part of the Arctic Ocean the size of Pennsylvania for oil and gas drilling—despite a 33–51 percent chance of a major oil spill in the region, where oil spill cleanup is virtually impossible much of the time. Does the Coast Guard currently have enough assets in the Chukchi Sea region to respond quickly and effectively to a major spill, a major vessel emergency, or a major search and rescue case in that area? What would be the likely range of possible response times to such incidents in the Chukchi Sea given the current placement of assets and personnel?

Answer. For assets operating in the region, response times would vary dependent on distance, season, environmental conditions, and operational status. Oil and gas operations in the Chukchi Sea will not begin until many technical, financial, and logistical hurdles are overcome.

Question 31a. If oil and gas exploration activities begin in the Chukchi Sea this summer or the near future, do you anticipate the Coast Guard will be required to shift personnel and/or assets to the region?

Answer. The Coast Guard anticipates increased activity in the Chukchi Sea as ice conditions eventually allow for increased navigation and commerce. The Coast Guard will allocate resources to the region based on risk analysis and available resources.

Question 31b. If major development occurs in the Chukchi Sea over the next several years, including oil and gas exploration and development, would the Coast Guard need to move assets and personnel from other areas to meet these emerging needs? Where would these assets and personnel likely come from?

Answer. The Coast Guard is currently preparing a Polar Operations report in response to Congressional direction in the FY 2008 appropriations conference report. The Fiscal Year 2009 President's Budget provides for a Polar High Latitude Study to conduct a broad analysis of future national missions in the high latitude regions. The study will inform the ongoing national Arctic policy review and will provide a Coast Guard perspective on issues of national interest related to defense readiness, homeland security, national sovereignty, the United Nations Convention on the Law of the Sea (UNLCOS) and other international conventions, scientific research, and protection and exploitation of natural resources. The study will build upon analysis previously conducted through the Coast Guard's 2005 Mission Analysis Report and the Coast Guard-sponsored 2006 assessment of the Nation's polar icebreaking needs conducted by the National Research Council.

Question 32. Is the current funding arrangement with the National Science Foundation damaging the Coast Guard's ability to train crews and maintain adequate expertise in Polar Icebreaking?

Answer. Through the planning process outlined in our MOA, Coast Guard and NSF develop the training and O&M regimes that best serve both agencies.

Question 32a. Does the current funding arrangement with NSF allow for adequate maintenance of the Polar Icebreaker fleet?

Answer. The MOA between Coast Guard and NSF ensures adequate maintenance through joint planning and shared accountability.

Question 32b. Are we slowly eliminating U.S. polar icebreaking expertise? In what ways could this be a major problem in the future?

Answer. In conjunction with the ongoing national Arctic policy review, the Administration has undertaken a review of anticipated icebreaking needs to prepare for possible changes in the Arctic's maritime condition and use.

Question 33. As the Arctic opens in the coming years and decades, it seems likely that Coast Guard polar icebreaking missions will become more multi-mission rather than exclusively scientific as in the past. Is funding through NSF, which is entirely

science-based, appropriate given our Nation's likely future needs for a more multi-mission polar icebreaking fleet?

Answer. For the near-term, research continues to be the predominant and highest priority mission for USCG icebreakers. To prepare for the impacts of changing Arctic conditions on multiple agencies and their missions, the Administration has undertaken an Arctic policy review in which Coast Guard actively participates. Once a polar policy is finalized, the appropriate structure for funding will be developed through implementation planning.

Question 33a. Does the current funding arrangement with NSF prevent the Coast Guard from using the polar icebreaker fleet to conduct other, non-science missions in the Arctic?

Answer. While service to the research community remains the highest priority for polar icebreakers, the current Coast Guard-NSF MOA retains with Coast Guard the authority to divert its polar icebreakers to SAR, oil spill and other missions to respond to emergencies and threats to maritime security and safety.

Question 34. It seems to me that decisions about our Polar Icebreaking fleet are currently being made based on budget pressures and not explicit policy choices. Do you agree with this assessment?

Answer. Both policy and resource considerations inform Administration decisions. The current arrangement recognizes that the near-term need for polar icebreaking lies primarily with the Nation's science missions.

Question 35. Your Posture Statement highlights "Polar Presence and Capabilities" as one of your top five Strategic Priorities for FY 2009. With one polar icebreaker not operational and in caretaker status, and the other not having deployed to the ice for almost 2 years now, doesn't that situation and the fact that the Coast Guard does not control the budget to operate any of its three polar-capable icebreakers hamstring your ability to protect U.S. sovereignty in the Arctic?

Answer. Coast Guard has considerable presence along the U.S. Arctic border that contributes to protection of U.S. sovereignty. For example, both surface and air assets are used in performance of our fisheries law enforcement mission. Additionally, the polar icebreaker HEALY deploys annually to the Arctic. POLAR SEA is currently deployed to the Arctic to conduct training and Coast Guard missions.

Question 36. The FY09 budget requests from both the Coast Guard and the National Science Foundation lack any funds for the $3 million required to keep the POLAR STAR in caretaker status. If funding for the POLAR STAR is not appropriated, what would be the implications for the ship?

Answer. As POLAR STAR is no longer a viable option to support the breakout of McMurdo Sound for resupply of the South Pole station, the 2009 Request proposes to remove it from NSF's icebreaking resources. Coast Guard is currently evaluating ship disposition options in anticipation of this change.

Question 36a. What would be the implications for the Nation's polar icebreaking fleet and capabilities?

Answer. There is no impact on national icebreaking capabilities as the POLAR STAR is in caretaker status and is no longer used for direct service or training. If the POLAR STAR were turned over to MARAD for caretaking in the Ready Reserve fleet, over 30 billets would be freed up for transfer to higher priority missions.

Question 36b. Do you believe that such a move would run counter to the recommendations issued in the 2007 National Academy of Sciences report "Polar Icebreakers in a Changing World: an Assessment of U.S. Needs?"

Answer. The report recommends that POLAR STAR remain available for reactivation until a new polar icebreaker is operational. The Ready Reserve fleet could serve that purpose if this recommendation were accepted.

Question 37. If the U.S. Government decided to eliminate the Coast Guard's polar icebreaking fleet, what would be some of the operational and policy implications for the Coast Guard? What would be some of the operational and policy implications for the Nation?

Answer. Nationally, the loss of the two U.S. polar-class icebreakers, POLAR SEA and POLAR STAR, would mean the loss of a U.S. flagged backup heavy icebreaking capability for the annual McMurdo Sound break-in.

Question 38. How does our polar icebreaker fleet compare to those of other nations throughout the world? In size? In capability? In age?

Answer. Fifty icebreakers in the world fleet have greater than 10,000 horsepower. Russia has the largest fleet (over 20 ships) and Finland, Canada, and Sweden each operate 6–7 icebreakers. The United States has 4 ships, and 6 other countries have 1–3 ships. Russia is the only country to use nuclear propulsion plants (8 ships), and only Russia and the United States operate ships with propulsion of greater than 45,000 horsepower (Heavy Icebreaker). Most icebreakers operate in the Baltic Sea region and often are designed for specific missions or activities; for example, several of those listed below are anchor handling tugs. Russia is known for its emphasis on icebreaker tourism.

Nation	Ship Name	Propulsion	Displacement (Tons)	Continuous Icebreaking Capability	Back and Ram Icebreaking Capability	Year in Service
USA	POLAR STAR	60,000 GT 18,000 DE	13,334	6 ft @ 3 KT	21 ft	1974
USA	POLAR SEA	60,000 GT 18,000 DE	13,334	6 ft @ 3 KT	21 ft	1976
USA	HEALY	30,000 DE	16,165	4.5 ft @ 3 KT	8 ft	1999
USA	NATHANIEL B. PALMER	12,700 D	6,640	3 ft @ 3 KT	5 ft	1992
Russia	ROSSIYA	75,000 N	23,625	6.5 ft @ 3 KT	Not Available	1985
Russia	SOVIETSKIY SOYUZ	75,000 N	23,625	6.5 ft @ 3 KT	Not Available	1990
Russia	50 LET POBEDY	75,000 N	25,800	7.5 ft @ 3 KT	Not Available	2007
Russia	YAMAL	75,000 N	25,800	7.5 ft @ 3 KT	Not Available	1993
Russia	ARKTIKA (Out of Service)	75,000 N	24,170	6.5 ft @ 3 KT	Not Available	1975
Russia	SIBIR (Out of Service)	75,000 N	24,170	6.5 ft @ 3 KT	Not Available	
Russia	TAYMYR	47,600 N	20,000	6 ft @ 3 KT	Not Available	1989
Russia	VAYGACH	47,600 N	20,000	6 ft @ 3 KT	Not Available	1990
Russia	YERMAK	36,000 DE	20,241	Not Available	Not Available	1974
Russia	ADMIRAL MAKAROV	36,000 DE	14,058	6 ft @ 3 KT	Not Available	1976
Russia	KRASIN	36,000 DE	14,058	6 ft @ 3 KT	Not Available	1976
Russia	KAPITAN DRANITSYN	22,000 DE	15,000	5 ft @ 3 KT	Not Available	1980
Russia	KAPITAN SOROKIN	22,000 DE	15,000	Not Available	Not Available	1977
Russia	AKADEMIK FEDOROV	36,000 DE	13,000	6 ft @ 3 KT	Not Available	1987
Russia	KAPITAN KHLEBNIKOV	22,000 DE	15,000	5 ft @ 1 KT	9.8 ft	1981
Russia	KAPITAN NIKOLAYEV	22,000 DE	15,000	Not Available	Not Available	1978
Russia	TALAGY	16,800 D	1,169	Not Available	Not Available	1979
Russia	MUDYUG	12,400 D	5,342	Not Available	Not Available	1982
Russia	MAGADAN	12,800 D	5,342	Not Available	Not Available	1982
Russia	DIKSON	12,400 D	5,342	Not Available	Not Available	1983
Russia	VLADIMIR IGNATYUK	23,200 D	4,234	4 ft @ 7 KT	Not Available	1977
Russia	FESCO SAKHALIN	17,500 DE	6,882	Not Available	Not Available	2005
Russia (Leased from Netherlands)	SMIT SAKHALIN	14,900 D	3,340	Not Available	Not Available	1983
Russia (Leased from Netherlands)	SMIT SIBU	14,900 D	3,340	Not Available	Not Available	1983
Canada	LOUIS ST LAURENT	30,000 DE	11,400	4 ft @ 3 KT	Not Available	1969, 1993
Canada	KIGORIA	16,800 D	7,600	Not Available	Not Available	1978
Canada	TERRY FOX	23,200 D	4,234	4 ft @ 7 KT	Not Available	1983
Canada	HENRY LARSEN	16,000 DE	6,166	Not Available	Not Available	1988

Canada	AMUNDSEN	13,960 DE	5,910	3.8 ft @ 2 KT	Not Available	1982, 2003
Canada	PIERRE RADISSON	13,400 DE	5,910	3.8 ft @ 2 KT	Not Available	1978
Canada	DES GROSSELIERS	13,400 DE	5,910	3.8 ft @ 2 KT	Not Available	1983
Canada	MARY L. BLACK	8,847 DE	3,809	Not Available	Not Available	1986
Canada	GEORGE R. PEARKES	8,847 DE	3,809	Not Available	Not Available	1986
Canada	EDWARD CORNWALLIS	8,847 DE	3,809	Not Available	Not Available	1986
Canada	SIR WILFRED LAURIER	8,847 DE	3,809	Not Available	Not Available	1986
Canada	ANN HARVEY	8,847 DE	3,809	Not Available	Not Available	1987
Canada	SIR WILLIAM ALEXANDER	8,847 DE	3,809	Not Available	Not Available	1987
Finland	FENNICA	20,115 DE	6,370	2.6 ft @ 11 KT	Not Available	1994
Finland	NORDICA	20,115 DE	6,370	2.6 ft @ 11 KT	Not Available	1994
Finland	URHO	21,400 DE	7,525	5 ft @ 2 KT	Not Available	1975
Finland	SISU	21,400 DE	7,525	6 ft @ 2 KT	Not Available	1976
Finland	OTSO	20,400 DE	7,066	Not Available	Not Available	1986
Finland	KONTIO	20,400 DE	7,066	Not Available	Not Available	1987
Finland	BOTNIKA	13,410 DE	6,370	2.0 ft @ 8 KT	Not Available	1998
Finland	VOIMA	17,460 DE	4,159	2.7 ft @ 2 KT	Not Available	1954, 1979
Finland	APU (Dudinka/2006)	12,000 DE	4,890	2.8 ft @ 2 KT	Not Available	1970
Norway	SVALBARD	13,410 DE	6,500	3.3 ft @ 3 KT	Not Available	2002
Sweden	ODEN	23,200 D	13,042	6.2 ft @ 3 KT	Not Available	1989
Sweden	ATLE	22,000 DE	9,500	3.6 ft @ 2 KT	Not Available	1974
Sweden	YMER	22,000 DE	9,500	3.6 ft @ 2 KT	Not Available	1977
Sweden	FREJ	22,000 DE	9,500	3.6 ft @ 2 KT	Not Available	1975
Sweden	TOR VIKING	18,000 DE	4,000	Not Available	Not Available	2001
Sweden	BALDERR VIKING	18,000 DE	4,000	Not Available	Not Available	2001
Sweden	VIDAR VIKING	18,000 DE	4,000	Not Available	Not Available	2001
Denmark	A551 DANJORN	10,500 DE	3,685	3.3 ft @ 2 KT	Not Available	1965
Denmark	A552 ISBJORN	10,500 DE	3,685	3.3 ft @ 2 KT	Not Available	1965
Iceland	none					
Germany	POLARSTERN	20,000 DE	17,300	4.5 ft @ 5 KT	Not available	1982

GT = Gas Turbine.
D = Diesel.
DE = Diesel Electric.
N = Nuclear.

Question 39. In your opinion, will the lack of an appropriate U.S. polar icebreaker fleet weaken our Nation's ability to assert our Nation's sovereignty in the Arctic?

Answer. The Administration is able and committed to maintain our Nation's sovereignty in the Arctic with assets that include, but are not limited to, existing icebreakers.

Question 40. Do you believe our Nation should have a comprehensive policy on the future of our polar icebreaker fleet? Do you think developing such a policy is important for our national interest? Is it important for national security? Is it important for our national sovereignty? Is it important for environmental protection? Would having such a national policy benefit the Coast Guard and enable Coast Guard leadership to improve its decision-making for Arctic and polar icebreaker issues?

Answer. Yes. A national policy outlining the strategic national security, economic and environmental objectives in the Polar Regions and affirming the imperative to maintain the Coast Guard's icebreaking fleet would allow the Coast Guard to fully integrate polar operations into our strategic, operational and budgetary planning process, and while ensuring the fleet is properly maintained, managed and employed to meet these objectives. The Administration is engaged in a comprehensive interagency dialogue and planning effort.

Question 41. Why has the Administration not yet developed a comprehensive national policy for the Arctic or for the polar icebreaker fleet? Has the Administration taken any steps toward developing such a policy? If so, what?

Answer. The United States Policy on the Arctic and Antarctic Regions was promulgated in June 1994 by Presidential Decision Directive/National Security Council 26. Recognizing the effects of climate change in the Arctic and the need to update this policy, in September 2007 the Administration directed the Department of State and the National Security Council to co-lead an interagency effort supported by four work groups. The U.S. Coast Guard is participating in all four work groups.

Question 42. Please explain the scope of the Polar High Latitude Study and how the Coast Guard expects to incorporate its results into Service planning and budgeting. How extensively will the study be able to examine Arctic issues with the proposed budget of $200,000? What else would the study be able to cover if it were budgeted for $500,000; $1 million?

Answer. The purpose of the Polar High Latitude Study is to conduct a broad analysis from the Coast Guard perspective of national mission needs in the high latitude regions. The study is intended to inform the ongoing national Arctic policy review. The study will build upon analysis previously conducted through the Coast Guard's 2005 Mission Analysis Report and the Coast guard sponsored 2006 assessment of the Nation's polar icebreaking needs conducted by the National Research Council.

Question 43. Please explain in more detail the statement contained in the Posture Statement's Executive Summary that "increasing exploration, eco-tourism, and government activities in the Arctic Region are challenging conventional notions of sovereignty, environmental preparedness, and long-range disaster response, and that the Coast Guard is ideally suited to address these and other challenges through its . . . adaptive operational capabilities. . . ."

Wouldn't you be much more capable of responding to those challenges in the Arctic if all three Coast Guard polar-capable icebreakers were fully operational and the Coast Guard had budget authority over the operation of those icebreakers?

Answer. The Coast Guard carries out a wide-range of missions, executing authorities and responsibilities for search and rescue, marine safety, law enforcement, national defense, aids to navigation, and others. Coast Guard units are multi-mission in character and our people are trained to adapt to local operational requirements. Through its surface and air fleets, the Coast Guard can bring these same capabilities to address emerging needs in the Arctic Region, but we must ensure these assets will operate successfully in the harsh Arctic environment. The Coast Guard is reviewing its current Arctic operations to identify requirements specific to this environment.

Question 44. Wouldn't it be in the best interests of our country from both a national security and Arctic Domain Awareness standpoint to have our two polar-class icebreakers restored and retained in full operational condition until new ships come on line to replace them? What would you need to make that happen?

Answer. At present, Polar-class icebreakers are not involved in National Security or Arctic Domain Awareness as these activities, to the extent they are active, are carried out by DHS and DOD using other air, surface and communications assets. Any role for future U.S. flagged icebreakers is under review and Coast Guard will develop its recommendations based on findings from its Polar High Latitude Study, if funded by Congress in 2009.

Question 45. Admiral, what impact will signing onto the Law of the Sea Treaty have on our Nation's sovereignty? Will it erode our sovereignty, or help to secure, expand, and solidify our sovereignty?

Answer. Each of my predecessors as Commandant and I, as well as all of the Joint Chiefs of Staff over the past 15 years and previous Secretaries of State and National Security Advisors, have strongly and consistently argued in favor of U.S. accession to the United Nations Convention on the Law of the Sea (Convention) as an important way to promote the national security, sovereignty, and other vital interests of the United States. Perhaps more so than any international agreement in U.S. history, this Convention secures, expands, and solidifies U.S. sovereignty over millions of square miles, and trillions of dollars in resources, in and under a vast expanse of ocean waters off our coasts. The U.S. has the largest and richest Exclusive Economic Zone (EEZ) and continental shelf in the world. The Convention recognizes and guarantees the exclusive rights of the U.S. to explore, exploit, conserve, and manage the living and non-living resources of this vast expanse of ocean space as we see fit. Moreover, it enables the U.S. to claim exclusive sovereign rights to one of the largest extended continental shelves anywhere in the world. The Convention also guarantees the sovereign immunity of U.S. warships, Coast Guard cutters, and military aircraft wherever they may be in the world. Finally, it advances our sovereign authority to conduct many national security and law-enforcement missions in international waters all over the world.

Claims from opponents that the Convention restricts U.S. sovereignty over our own territorial sea, or restricts our rights to engage in gathering intelligence in the territorial seas of foreign states, are specious and inconsistent. Rather, the Convention effectively balances the contending interests of coastal and maritime states and protects coastal state sovereignty over their territorial waters while ensuring our critical freedom of navigation interests. These include the critical rights of innocent passage through the territorial sea and transit passage through international straits. Moreover, the dispute settlement provisions, which the United States has long sought and which are consistent with hundreds of other agreements the United States has entered into, enable us to resolve disputes under the Convention while preserving our critical military and intelligence-gathering activities from international review.

Question 45a. Are you aware of any examples of international negotiations or other circumstances where not being a signatory to Law of the Sea has clearly damaged our national interests? If possible, please provide examples.

Answer. Yes. As you know, the United States has long been the world leader in a promotion of safety of ocean transportation, protection of the marine environment, and, particularly in the post-9/11 world, promotion of our global maritime security. Not being a Party to the Convention definitely detracts from our strong leadership position. When I participated in the most recent plenary meeting of the International Maritime Organization (IMO) in London late last year, I observed directly how remaining outside of the Convention has reduced our influence and effectiveness at that important forum. The Coast Guard seeks to negotiate bilateral agreements and other understandings to promote our interests in combating trafficking in illicit drugs, protecting our borders against illegal immigration, and dealing effectively with piracy and maritime terrorism as necessary throughout the world. Remaining outside of the Convention undermines our credibility and authority as a global leader in these matters.

Question 45b. What would be some the specific negative impacts our Nation would likely suffer if we continue to not sign onto Law of the Sea?

Answer. If we fail to become Party to the Convention, our leadership role at the IMO and other important multilateral forums would continue to diminish. We would not be able to file a claim with the Continental Shelf Commission for an extended continental shelf in the Arctic, in the Bering Sea, in the Gulf of Mexico, and off the East Coast of the United States, which undermines our ability to control trillions of dollars of resources. We would not be able to take advantage of the dispute settlement provisions of the Convention which the United States worked so hard to set up. Finally, we may see increased interference with our military and intelligence-gathering ships and aircraft in and over foreign waters, such as the April 2001 incident in which a Chinese jet interfered and collided with a U.S. military aircraft gathering intelligence over international waters near Hainan Island. Rather than being a proactive participant in resolving such claims, the United States would be on the outside of the process.

Question 45c. If our Nation continued to not sign onto Law of the Sea, how would this impact our Nation's role in the Arctic?

Answer. The Convention has the potential to play a particularly beneficial role for a wide range of vital U.S. interests in the Arctic. While the United States has uncontested sovereignty to explore and exploit living and non-living resources on, over, and under the Exclusive Economic Zone and continental shelf out to 200-nautical miles from our coasts, the continental shelf in the Bering Sea, Chukchi Sea, and Beaufort Sea extends, in several places, out to 350-nautical miles or more. However, only States Party to the Convention are entitled to file claims for international recognition of title to land beyond 200 nautical miles. Russia, Norway, Denmark, Iceland, and Canada are well on their way to having their claims approved; as the only non-Party Arctic State, the United States is falling farther and farther behind in securing title to those resources.

Question 45d. If our Nation continued to not sign onto Law of the Sea, would there be any negative impacts on the Coast Guard and Coast Guard operations? If so, what?

Answer. The Law of the Sea Convention is critical to many of the missions of the Coast Guard. These include such matters as enforcing U.S. laws and regulations with respect to maritime security, law-enforcement, and pollution control in U.S. territorial and inland waters. The Convention strongly reinforces current U.S. law and policy in our coastal waters, but the Convention is even more important in foreign waters, where its principles ensure freedom of navigation and operational activities to interdict drug traffickers, pirates, maritime terrorists, illegal immigration, slave traders, violators of customs laws, and those who commit other crimes under U.S. and international law. The Convention also protects the sovereign immune status of U.S. warships and military aircraft, including Coast Guard cutters, fixed-wing aircraft, and helicopters, wherever they may be in the world.

Question 46. Recent figures indicate the Coast Guard's Aids to Navigation maintenance backlog is over $14 million. Is the Coast Guard's Aids to Navigation backlog growing or shrinking?

Answer. The current backlog for Aids to Navigation (ATON) maintenance (including new construction and structure maintenance) is shrinking slightly, based on previous years' trends and the following:

- Coast Guard's attempt to take advantage of new technology;
- Some major projects nearing completion;
- Notable reduction in high priority unplanned projects;
- Use of higher strength materials with extended longevity that is better able to withstand the harsh and unpredictable maritime environment; and
- Use of accurate logistical tracking models and property management which allowed local servicing units to execute a more accurate and cost effective maintenance cycle.

Question 46a. Will the funding in the FY09 budget request reduce the ATON backlog? If so, by how much?

Answer. The 2009 budget request, in particular the request for new construction, is anticipated to reduce the current backlog by 15 to 20 percent.

Question 46b. Are we setting ourselves up for disaster here, or is elimination of the backlog achievable over a short time period if funds become available?

Answer. This estimate does not take into consideration any catastrophic incidents—manmade or natural—that could result in multiple failures of ATON structures thus forcing us to invest in unplanned repairs or replacement if not funded by emergency appropriations. The cost of materials and labor is another variable that could either increase or reduce this estimate.

Question 46c. Is the backlog exclusively due to a lack of funding, or is it also because of shortfalls in personnel and/or equipment and assets?

Answer. There are many variables that have led to the current backlog. Major catastrophic events and the rising cost of steel are some of the variables that impact the current backlog.

Question 46d. Is this an area that will be impacted by the $68 million in "management efficiencies" necessary to execute the FY 2009 budget request?

Answer. Management efficiencies will not affect the ATON maintenance backlog.

Question 47. Your staff has informed the Committee that Rescue 21's total cost is $730 million. Can you guarantee me that this program's cost will not increase above this amount?

Answer. On January 24, 2008, the Rescue 21 project forecasted a pending revised cost and schedule estimate above the $730 million via a routine quarterly status brief to Congressional staff. The update to the cost estimate is based on the following factors: full rate production lessons including a better understanding of costs;

a recent third-party Life Cycle Cost Estimate; an Alaska subsystem study and cost estimate; projected out-year funding availability; and externally-driven technology standards and protocol changes from government, industry, and international sources. The project has since submitted a revised Acquisition Program Baseline (APB) to the Department of Homeland Security for review which reflects the project's resulting cost and schedule increase.

Question 47a. How are the reforms to the Coast Guard's acquisition program, triggered by the problems in Deepwater, impacting the Rescue 21 acquisition?

Answer. As part of the implementation of the Coast Guard's Blueprint for Acquisition, non-Deepwater projects like Rescue 21 will be aligned under a single C4ISR Program Manager. This will improve synergies between all USCG C4ISR projects (including Deepwater).

Question 48. There are a number of provisions in the Senate's Coast Guard Authorization Act for Fiscal Year 2008 that you consider important to improve your ability to do your job. Do you believe that the swift enactment of this bill will improve your ability to conduct your missions? By helping the Coast Guard to do its job, will enactment of the Coast Guard bill improve our national security?

Answer. S. 1892, the "Coast Guard Authorization Act for Fiscal Year 2008," includes numerous proposals to enhance the organizational efficiency and operational effectiveness of the Coast Guard. In particular, three provisions—providing for the appointment of the vice commandant and vice admirals of the Coast Guard, the prosecution of maritime alien smuggling, and the protection and fair treatment of seafarers—when enacted would have an immediate, beneficial effect on the Coast Guard's modernization and transformation, its maritime law enforcement mission, and its marine safety and stewardship missions, respectively. Swift enactment would ensure that the Coast Guard is even better prepared to conduct operations across the broad spectrum of threats and hazards.

Enactment of S. 1892 would improve both the maritime safety and security of the United States. Certain provisions of the bill would have a direct, immediate effect on maritime security (*e.g.,* providing for the prosecution of maritime alien smuggling and defining Coast Guard vessels and aircraft); other provisions would improve the maritime security of other nations and, ultimately, the United States (*e.g.,* allowing for assistance to foreign governments and maritime authorities).

Question 49. I've noticed both the Inland River Survey & Design AC&I and the Inland Rivertenders' Emergency Subsystem Sustainment OE line items within your FY09 Budget. These are new line items. What are the Coast Guard responsibilities on the Inland Rivers and how have they changed, if at all, since 9/11?

Answer. We are completing a Western Rivers Mission Analysis Report (MAR) covering these and other issues pertaining to Coast Guard missions on the inland rivers.

While the primary mission of Aids to Navigation on the Western Rivers has not changed since 9/11, additional emphasis has been placed on the homeland security mission such as ports and waterways security.

Question 49a. What is the state of the current assets?

Answer. The average age of a River Tender is 40 years and the current fleet is expected to incur significant declines in operational availability in the coming year. The Coast Guard continues to meet mission requirements with this aged fleet and is modernizing the fleet to address safety, environmental and habitability issues.

WLR (River Tender) Information

Cutter	Homeport	Commissioning Date	Age
River Tender 65 ft			
DOUACHITA 501	Chattanooga, TN	1960	47
CIMMERON 502	Paris Landing, TN	1960	47
OBION 503	Owensboro, KY	1962	45
SCIOTA 504	Keokuk, IA	1962	45
OSAGE 505	Sewickley, PA	1962	45
SANGAMON 506	Peoria, IL	1962	45
River Tender 75 ft			
WEDGE 307	Demopolis, AL	1964	43
GASCONADE 401	Omaha, NE	1964	43
MUSKINGUM 402	Sallisaw, OK	1965	42
WYACONDA 403	Dubuque, IA	1965	42
CHIPPEWA 404	Paris Landing, TN	1965	42
CHEYENNE 405	St Louis, MO	1966	41
KICKAPOO 406	Vicksburg, MS	1969	38
KANAWHA 407	Pine Bluff, AR	1969	38
PATOKA 408	Greenville, MS	1970	37
CHENA 409	Hickman, KY	1970	37
KANKAKEE F 500	Memphis, TN	1990	17
GREENBRIER F 501	Natchez, MS	1990	17

A fleet study conducted by the Coast Guard revealed that the WLR fleet has obsolete equipment, hazardous materials, and substandard crew accommodations. The safety, supportability, environmental compliance, and habitability concerns associated with the River Tenders place Coast Guard personnel at risk; cost more to repair; pose environmental concerns; and generally do not allow for mixed gender crews. Additionally, over the past several years, the WLR fleet has experienced an increase in unscheduled maintenance and a decrease in Aids to Navigation (ATON) hours below programmed underway employment standards.

Question 49b. How do these efforts tie to the Heartland Waterway Vessel line item in your Capital Investment Plan?

Answer. All of the above efforts tie directly into the pre-acquisition planning and documentation that is required to properly initiate the Heartland Waterway Vessel (HWV) Project.

Question 50. Will the 276 FTP for the Marine Inspection Program provide the Coast Guard with sufficient capacity to meet industry growth?

Answer. The 276 FTP will provide necessary resources to expand the Coast Guard marine inspection program to include a new inspection regime for approximately 5,200 United States towing vessels as mandated by the Fiscal Year 2004 Authorization Act.

Question 51. Is your funding level adequate for Operation Iraqi Freedom/Operation Enduring Freedom support? Are funds for these efforts included in your FY09 budget request? If not, do you anticipate receiving funding from DoD or from some other source?

Answer. Historical funding provided to support Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) has been adequate to fund operations.

The FY 2009 Coast Guard budget request does not include funding for OIF/OEF. Consistent with previous years, the Coast Guard is working closely with DoD to have its requirements included in the DoD supplemental request.

Question 52. Could you please explain proposal USCG–2006–26202? My understanding is that this proposal would drastically reduce the training requirements for towing vessels. Can a fully-qualified Mate of a Towing Vessel, for use in a 2-watch system, actually be produced in 30 days? When and how did the Coast Guard reach the conclusion that the current training requirements were too burdensome and no longer necessary? I assume that the Coast Guard has consulted extensively with the maritime industry on this issue, but to what extent did you consult with actual mariners such as Captains on whether this reduction in training would be harmful or helpful?

Answer. The Coast Guard has not proposed to cut the training for tugboat pilots from 30 months to 30 days. As proposed in the Notice of Proposed Rulemaking

(NPRM) published on September 17, 2007, the alternate progression candidate for mate (pilot) of towing vessels needs a total of 36 months of service as master of steam or motor vessels not more than (NMT) 200 GRT, in addition to the sea service required to obtain the underlying master NMT 200 GRT license, which is at least 12–36 months, depending on the specific type of NMT 200 GRT master license held.

The alternate progression candidate must also complete a Towing Officer Assessment Record (TOAR) or approved course *in lieu of* TOAR, pass an examination, and complete at least 30 days training and observation on towing vessels in order to obtain a mate (pilot) of towing vessels license.

This NPRM was developed in response to three separate petitions for rulemaking submitted to the Coast Guard in accordance with 33 CFR 1.05–20. It was positively endorsed by the Towing Safety Advisory Committee (TSAC), which strongly supports the alternate progression and recommends that it be implemented as soon as possible. TSAC has working mariner representation on the Committee. We also received a number of positive public comments posted to the docket for the NPRM.

Question 53. Given National Transportation Safety Board (NTSB) and Coast Guard findings on the impact of sleep and fatigue on transportation safety, I am surprised that Coast Guard sleep requirements are vague and non-regulatory in nature. Please outline and explain current Coast Guard sleep requirements.

Answer. Currently there are no regulations in force which prescribe specific sleep requirements for mariners working in the domestic commercial maritime industry. However, the Coast Guard (CG) does prescribe hours of service, hours of rest, and watchkeeping requirements. The specific watchkeeping requirements, work-hour limitations, and manning requirements for mariners working within the various segments of the industry are comprehensively addressed in Title 46 United States Code Part F, Title 46 Code of Federal Regulations Part 15.

Title 46 U.S.C. 8104 generally requires that when the master of a seagoing vessel of more than 100 gross tons establishes watches, the personnel shall be divided, when at sea, into a least three watches. There are a number of exceptions, however. Title 46 U.S.C. 8104(g) and Title 46 CFR 15.705(c)(d), permit licensed individuals and crewmembers of towing vessels, offshore supply vessels, and barges, when engaged on voyages of less than 600 nautical miles, or at sea, to be divided into at least two watches. The Coast Guard interprets to mean that a mariner can be scheduled to work 12 hours in any consecutive 24-hour period, provided the mariner consents to work more than 8 hours in a day. Title 46 U.S.C. 8104(h) establishes that licensed operators of towing vessels subject to Title 46 U.S.C. 8904 are not permitted to work in excess of 12 hours in any consecutive 24 hour period, except in an emergency.

The Oil Pollution Act of 1990 (OPA 90) amended 46 U.S.C. 8104 by adding a new subsection (n) which reads as follows: "On a tanker, a licensed individual or seaman may not be permitted to work more than 15 hours in any 24 hour period, or more than 36 hours in any 72-hour period, except in an emergency or a drill. In this subsection, 'work' includes any administrative duties associated with the vessel whether performed on board the vessel or onshore." Furthermore, the Officer in Charge, Marine Inspection has the discretion to impose manning levels based on a specified reasonable work hour limit taking into account fatigue and other human factors.

The International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), 1978, as amended in 1995 and implemented in 46 CFR 15.1111(a) adds specific rest requirements for vessels operating outside the U.S. boundary line (46 CFR 7). A person assigned duty as officer in charge of a navigational watch or engineering watch, onboard any vessel which operates beyond the Boundary Line, shall receive a minimum of 10 hours of rest in any 24-hour period.

Rest as defined in 46 CFR 15.1101(a)(4) is a period of time during which the person concerned is off duty, is not performing work, (which includes administrative tasks), and is allowed to sleep without being interrupted.

Question 53a. Given the authorities given to the Coast Guard by Congress in 2004, why are maritime sleep requirements not more detailed and thorough, like those of other transportation agencies?

Answer. Authorizations given to the Coast Guard pertain to watch organization, not prescriptive sleep requirements for the maritime industry. In response to Section 409 of the Coast Guard Authorization Act of 2004, the Coast Guard submitted a report on the demonstration project involving the implementation of the Crew Endurance Management System (CEMS) on towing vessels to Members of Congress on March 29, 2006. The report clearly describes the need for 8 hours of uninterrupted sleep and the consequences of sleep deprivation. The report was widely distributed

to the towing industry and made available to the general public on the CEMS website (*http://www.uscg.mil/hq/g-m/cems/index.htm*).

Furthermore, the CG has entered into a significant collaborative effort with the Towing Industry which has already created a fundamental cultural shift from the deck plate to company management circles. These changes specifically include educating mariners and managers on specific operational practices to protect mariners' sleep and to improve safety and performance. The training describes human physiological and sleep needs, brain processes during sleep, and strategies to obtain restorative quality sleep among other topics. Over the past 5 years, more than 2,000 members of the towing industry have attended these courses.

Question 53b. Given that the majority of oil spills are caused by human error, and such human error is often caused by fatigue and a lack of sleep, isn't this gap a major vulnerability in maritime transportation and oil spill prevention?

Answer. The Coast Guard is aware that fatigue and lack of sleep can be contributing factors to human error. Since the EXXON VALDEZ environmental disaster, the USCG has led significant research efforts to support the development of non-regulatory projects aimed at reducing the incidence of shipboard fatigue. From 1998 until 2003, the USCG Headquarters' Human Element and Ship Design Division (CG–5211) sponsored and managed research efforts which produced the development of the Crew Endurance Management System (CEMS), a non-regulatory program designed to usher the Commercial Maritime Industry into adopting shipboard practices which can significantly reduce the incidence of shipboard fatigue. This program provides the means for commercial companies to ensure the crewmembers meet daily physiological sleep requirements.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. THOMAS R. CARPER TO ADMIRAL THAD W. ALLEN

Question 1. As you know, Wilmington, Delaware was the first U.S. port to start taking applications for Transportation Worker Identification Cards (TWIC). The Coast Guard is involved in regulation, implementation, and oversight of the program. How long can a non-TWIC holder be escorted in secure areas before needing a TWIC of his or her own? Is there a time limit or frequency limit with respect to the escort protocol?

Answer. There is no limit regarding the length of time or frequency a specific individual may be escorted in secure areas. The Coast Guard's Navigation and Vessel Inspection Circular (NVIC) 03–07, dated July 2, 2007, provides guidance and options for conducting escorts in both secure and restricted areas. It is the responsibility of the owner/operator to determine how the escorting will be carried out in accordance with the applicable regulations and NVIC 03–07.

Question 2. How is a TWIC-carrying escort expected to effectively supervise up to five (5) employees and work at the same time? Are you at all concerned about the practicality and safety of such activities?

Answer. An escort is expected to observe whether an escorted individual is entering an area where he/she is not authorized and/or engaging in activities other than those for which escorted access was granted. The one-to-five maximum escort ratio for restricted areas established in Coast Guard policy guidance should be reasonably achievable in most situations. However, an owner/operator should not approve escorting arrangements or ratios which are either impracticable or would create a non-secure or hazardous situation.

Question 3. Please provide an update—from the Coast Guard's perspective—on how TWIC registration and implementation is progressing at the Port of Wilmington.

Answer. As of April 7, 2008, 6,025 workers have enrolled at the Port of Wilmington and 2,691 cards have been activated. The Coast Guard characterizes this progress as significant considering the estimated TWIC population for the Port of Wilmington was 5,380. The higher number of workers enrolled could be due to workers from other ports enrolling at the Port of Wilmington or a low original population estimate.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CLAIRE MCCASKILL TO ADMIRAL THAD W. ALLEN

Question 1. Union Pacific Railroad (UP) has expressed its intention to take down the Katy Bridge at Boonville, Missouri, and cites a United States Coast Guard directive to do so. It is my understanding that the United States Coast Guard first requested Union Pacific Railroad (UP) remove the Boonville Bridge in 1991 because it "no longer serves a transportation purpose." As you may be aware, the status of the Bridge has been the subject of litigation in the state courts, and the dispute has been as to whether the Bridge is a part of the Katy Trail, a Rails-to-Trails trail.

Citing the historic nature of the bridge and its potential to be used as an active part of the Katy Trail, the Community of Boonville has expressed significant concern about the removal of the Boonville Bridge. Given this concern, I think it is important that all interested stakeholders understand the processes the Coast Guard requires for bridge removal. Whether or not the Coast Guard considers bridges that have been rail banked as part of the Rails-to-Trails program to serve a transportation purpose. Specifically, I seek the following information:

Answer. Yes, the Coast Guard considers bridges that have been rail banked as part of the Rails-to-Trails program to serve a transportation purpose. It is important to note that the Rails-to-Trails operator is subject to the same statutes as the previous owner for maintaining both the bridge and its required lighting.

Question 1a. Whether or not the Coast Guard requires any permits before this bridge can be dismantled and removed. If yes, please provide the status as it pertains to this bridge.

Answer. No, the Coast Guard does not require any permits before a bridge can be dismantled.

Question 1b. Whether or not the Coast Guard requires any permits in order for a bridge of this nature to be transported down the Missouri River; If yes, please explain the status as it pertains to this bridge.

Answer. No, the Coast Guard does not require any permits in order for a bridge of this nature to be transported down the Missouri River. However, the bridge owner needs to submit a demolition plan to the Coast Guard District Commander for review and approval.

Question 1c. Whether or not the Coast Guard places any restrictions on when and how this bridge can be dismantled.

Answer. Yes, the Coast Guard may place restrictions on when a bridge can be dismantled. The restrictions are addressed at the time of the Coast Guard District Commander's review of the Demolition Plan. The Demolition Plan's proposed schedule and method of removal are reviewed and appropriate recommendations are made by the Coast Guard to minimize interruptions to navigation. As to "how" the bridge is to be dismantled, it is the owner and contractor's full responsibility. The Coast Guard simply examines the plan to ensure that the method employed is safe, navigation is not unreasonably impeded, all environmental safeguards are in place, and that Coast Guard requirements for working over navigable waters are followed.

Question 1d. Whether or not the Coast Guard places any restrictions on when and how a dismantled bridge of this nature can be transported down the Missouri River.

Answer. Yes, the Coast Guard may place restrictions on when and how a dismantled bridge of this nature can be transported down the Missouri River. The Coast Guard's Captain of the Port, working closely with the bridge owner, examines the timing and method of transporting parts of the bridge down the Missouri River to ensure navigation safety, minimize impacts on commerce, ensure there is adequate time to issue advance notice to mariners, and determine the availability of Coast Guard resources to establish safety zones, if required.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO STEPHEN L. CALDWELL

Question 1. In June of 2006, you testified before this Committee that implementation costs of the Rescue 21 program could reach as high as $872 million. The Coast Guard says they are still on schedule for 2011 and a total cost of $730 million. Is it realistic to believe the Coast Guard's estimate of $730.2 million?

Answer. We do believe those Coast Guard figures require revision. In fact, according to a Coast Guard official, a revised cost and schedule estimate was completed for Rescue 21 and is currently being reviewed by the Department of Homeland Security (DHS). As we do yet have a copy of this revision—and do not expect to receive it until DHS approves it—we are unable to provide an updated estimate. Once the revised information is received we will advise your office.

Question 2. In your testimony you discussed the Coast Guard's efforts to develop adequate performance measures. How far along is the Coast Guard in these efforts? Do the current performance measures adequately capture and measure performance in a way that is measurable, effective, and insightful? Where are the major gaps in the need for additional or improved performance measures?

Answer. Although we have not done any recent assessments of its progress in this area, indications are that the Coast Guard is moving in the right direction with regard to the development of adequate performance measures. In 2006, we reported that the primary measures the Coast Guard's six non-homeland security programs were generally sound, and the data used to calculate them was generally reliable.[1] All six measures covered key program activities and were objective, measurable, and quantifiable, but three were not completely clear—that is, they did not consistently provide clear and specific descriptions of the data, events, or geographic areas they include. Of the 23 secondary performance measures we assessed, 9 were found to be generally sound, while the remaining 14 had weaknesses. These weaknesses included: (1) a lack of measurable performance targets, (2) a lack of agency-wide criteria or guidance to ensure objectivity, and (3) unclear descriptions of the measures.

To improve the quality of program performance reporting and to more efficiently and effectively assess progress toward achieving the goals or objectives stated in agency plans, we recommended in 2006 that the Coast Guard: (1) refine certain primary and secondary performance measures, (2) develop and implement a policy to review external data provided by third parties, and (3) report additional information—besides the one primary measure—in appropriate agency documents where doing so would provide greater context or perspective on the relationship between resources expended and program results achieved. The Coast Guard has taken action to address these recommendations through the development of new performance measures that further capture performance for its mission-programs. For example, the Coast Guard is developing a new measure that captures an additional segment under its search and rescue mission-program, called Lives Unaccounted For. Additionally, two new measures are under development to further capture the Coast Guard's risk management efforts and link resources to results under the ports, waterways and coastal security mission-program. However, since these efforts are long-term in nature, it remains too soon to determine how effective they will be. Nonetheless, we will be following up with the Coast Guard concerning the recommendations made in our 2006 report in the coming months.

Question 3. You testified that the Coast Guard met performance goals for 6 of its 11 mission areas. Should we be worried about this? Where is this leaving our Nation vulnerable, particularly in terms of homeland security, maritime safety, and oil spill prevention and response? What will it take to meet all of the Coast Guard's performance goals? Is it a management issue, a resources issue, or both?

Answer. As indicated in our written statement, the Coast Guard expects to meet 6 of 11 performance targets in Fiscal Year 2007, the same overall level of performance achieved in 2006, and overall performance trends for most mission-programs remain steady. Our concern about the Coast Guard's performance is mitigated somewhat by the fact that agency is very close to meeting 2 other performance targets (for its Search and Rescue and Living Marine Resources mission-programs), and that the agency in some cases has changed its targets in recent years to achieve more challenging goals. For example, the Illegal Drug Interdiction performance target was greater than or equal to 26 percent for Fiscal Year 2007, compared to greater than or equal to 22 percent in Fiscal Year 2006.[2] In addition, as we reported in 2006, there are many factors outside of the Coast Guard's control that can influence whether the agency achieves its performance targets or not—such as severe weather conditions and changes in policies—such as changes in fishing regulations. Ideally, a performance measure not only tells decisionmakers what a program is accomplishing, but it also gives them a way to affect these results through resource decisions—for example, by providing additional resources with a degree of confidence that doing so will translate into better results. Even sound performance measures, however, may have limits to how much they can explain the relationship between resources expended and results achieved. For the Coast Guard, these limits involve: (1) the difficulty of fully reflecting an entire program such as ice operations or marine environmental protection in a single performance measure; and (2) the ability

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

[2] The actual performance measure for Illegal Drug Interdiction is the percentage (greater than or equal to 26 for Fiscal Year 2007) of cocaine removed out of total estimated cocaine entering through the United States through maritime means.

to account for the many factors, other than resources, that can affect program results such as those noted above.

Question 4. In your testimony, you mention a number of areas where the Coast Guard is not able to meet demand, such as Hawaii marine area protection, updating port plans, the hazardous cargo security, and dealing with increasing traffic in the Arctic. In your view, what are the main areas where the Coast Guard is least capable to provide services required of it due to a lack of proper resources (including budget, adequate personnel, or adequate assets)?

Answer. Our most recent relevant work has focused on port security issues, which does not allow us to compare resource constraints across different Coast Guard programs/missions; however we do know that resource issues have been a factor for the Coast Guard in conducting its port security activities. Based on recent reviews, we do know that a lack of resources has hampered the Coast Guard's ability to meet its overall security requirements in ports across the country. Some examples of these port security activities include conducting waterborne security patrols, boarding high-interest vessels, escorting vessels into ports, and enforcing fixed security zones. In an effort to meet more of its security requirements, the Coast Guard uses a strategy that includes partnering with other government agencies, adjusting its activity requirements, and acquiring resources. Despite these efforts, Coast Guard units are still having difficulty meeting their security requirements in many ports. Additionally, increases in security responsibilities for Coast Guard units may add to their burden. For example, mandated unannounced facility security inspections and review and re-approval of facility security plans at the sector level could take resources from other tasks unless additional trained personnel are made available to the sectors.

Question 5. It seems to me that decisions about our Polar Icebreaking fleet are currently being made based on budget pressures and not explicit policy choices. Do you agree with this assessment?

Answer. We have not done work that would provide the basis for agreeing or disagreeing with this assessment. However, in 2007, the National Research Council of the National Academies issued a final report on the condition of the U.S. polar icebreaking fleet (*Polar Icebreakers in a Changing World: An Assessment of U.S. Needs*). This report corroborated the Coast Guard's assessment of the increased risks presented by the deteriorating condition of these vessels and recommended that Congress immediately take action to design, plan, and build two polar icebreaking vessels to replace the POLAR SEA and POLAR STAR. Moreover, because these new vessels would not be available for another 8 to 10 years, the report recommended that Congress provide the Coast Guard with a sufficient operation and maintenance budget to address maintenance backlogs on the two operating polar icebreakers—HEALY and POLAR SEA to ensure a minimum level of icebreaking capability during this period. The report also recommended leaving POLAR STAR in a caretaker status until the new vessels enter service. For its part, the Coast Guard has begun initial studies on replacements for the POLAR SEA and POLAR STAR. In the meantime, the Coast Guard plans to continue operating the POLAR SEA and HEALY while keeping the POLAR STAR in a caretaker status as a reserve asset. Regarding its current plan for modernizing its polar icebreaker fleet, the Coast Guard states that it is awaiting the identification and prioritization of U.S. national policy in the Polar Regions in order to identify and develop the appropriate capability to carry out that policy.

Question 6. In your view, is the current polar icebreaker funding arrangement with NSF problematic? What are the main policy and operational downfalls of the current funding arrangement? Is the current arrangement sustainable since, as the Arctic opens up, the polar icebreakers will need to be more multi-mission rather than strictly conducting science research missions?

Answer. We have not done an assessment of the current polar icebreaker funding arrangement between the Coast Guard and the National Science Foundation (NSF) and are therefore unable to comment specifically on its possible deficiencies or continued sustainability. However, as we reported in April of this year, the combination of expanding maritime trade, tourism, exploratory activities and the shrinking Arctic ice cap may increase the demand for Coast Guard resources across a variety of non-homeland security missions. Moreover, multiple polar nations have recognized the value of natural resources in the Arctic region and have therefore sought to define and claim their own Arctic seabed and supply-chain access. However, the increase in Arctic activity has not seen a corresponding increase in Coast Guard capabilities. For example, two of the three Coast Guard polar ice-breakers are more than 30 years old. The continued presence of U.S.-flagged heavy icebreakers capable of keeping supply routes open and safe may be needed to maintain U.S. interests, en-

ergy security, and supply. chain security. These new demands, combined with the traditional Polar mission to assist partner agencies such as the NSF in research while protecting the environment and commercial vessels in U.S. waterways, reflect a need for an updated assessment of current and projected capabilities. Given this need, it is not surprising that in the explanatory statement accompanying DHS Fiscal Year 2008 appropriations, the Committees on Appropriations of the House of Representatives and Senate directed the Coast Guard to submit a report that assesses the Coast Guard's Arctic mission capability and an analysis of the effect a changing environment may have on the current and projected polar operations, including any additional resources in the form of personnel, equipment, and vessels. In specific, the Committees have directed the Commandant of the Coast Guard to submit a comprehensive polar operations report to them that, among other things, includes an appraisal of the sustainability of the current operations and maintenance cost-sharing arrangement between the Coast Guard and the NSF to support both current and projected polar icebreaker operations.[3]

Question 7. Your testimony states that the Coast Guard continues to face challenges in balancing homeland security missions with non-security missions. Are the mission balance "challenges" a result of improper resource allocation by the Coast Guard, or is it more reflective of an overall lack of the resources needed to properly fulfill all of the Coast Guard's missions?

Answer. While we have not done the work to make a definitive judgment as to the cause of mission balance challenges, the evidence we have suggests that an overall lack of resources is a major contributor. We have observed through our port security work the Coast Guard's use of risk-based decisionmaking to guide its efforts. Also, in the two fiscal years the Coast Guard has reported meetings its own mission standards in only half, or close to half, of its mission programs. Meeting its mission goals, however, does not necessarily mean that the Coast Guard is meeting its own internal standards. For example, our work on Coast Guard's port security mission has shown that it is not meeting its own port security requirements. The Coast Guard's operations order, Operation Neptune Shield, specifies the level of security activities to be conducted for Coast Guard security missions at each maritime security level. The ability of the Coast Guard to meet Operation Neptune Shield activities is captured through monthly field unit reports that indicate how many security activities that field unit was able to perform. Our review of these field unit reports indicates that Coast Guard units operating in many ports are having difficulty meeting their port security responsibilities, with resource constraints being cited as a major factor. In addition, while we have not identified improper resource allocation in our recent work, we have recognized the need for and recommended that the Coast Guard conduct additional workforce planning to help it manage its mission programs in a resource-constrained environment.

Question 8. The extremely Deepwater-heavy acquisition budget does not seem sustainable in the long-run. Are we setting ourselves up for failure by deferring large blocks of non-Deepwater acquisitions until later years? Year from now will we find ourselves in a block obsolescence situation with non-Deepwater assets in the same way that block obsolescence originally triggered formation of the Deepwater program?

Answer. While non-Deepwater Coast Guard assets, such as Aid-to-Navigation and domestic icebreaking assets, have still largely been able to carry out their missions and not yet necessarily reached a point of block obsolescence, some of these assets such as older inland Aid-to-Navigation assets are reaching the end of their designed service lives and will likely present the Coast Guard with greater challenges to keeping them operable as they continue to age. The Coast Guard's inland ATON assets such as inland buoy, river, and construction tenders are among some of the oldest assets in the Coast Guard's fleet with the oldest asset having been commissioned in 1944. As we reported in September 2006, many of these assets are reaching or have exceeded their designed service lives, raising concerns within the Coast Guard as to how well and for how much longer they will be able to carry out their missions. During our review, we found that some ATON assets, such as the inland construction tenders, had difficulty in meeting the Coast Guard's established standard for the asset's condition. In an analysis issued in 2002, Coast Guard concluded that some of these assets were affected in varying degrees with respect to safety, supportability, environmental compliance, and habitability, and addressing these issues would require replacing or rehabilitating the assets, a need that had been identified as early as 1993. The Coast Guard has considered options for systemati-

[3] House Committee on Appropriations, 110th Cong., Legislative Text and Explanatory Statement 1057 (Committee Print 2008).

cally rehabilitating or replacing these vessels. However, these assets must compete with the Deepwater program for capital spending resources and because Deepwater is currently such a significant portion of the agency's total AC&I request—representing 82 percent of its Fiscal Year 2009 request—relatively little funding is left over for non-Deepwater assets. Since such demands for funds by the Coast Guard's Deepwater asset replacement program are likely to continue for some time, significant demands for funds for the rehabilitation or replacement of non-Deepwater assets will also likely remain constrained. As time passes without progress toward rehabilitating or replacing these assets, the risk for obsolescence will increase.

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