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Homeland Security

United States
Coast Guard



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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

REAR ADMIRAL GARY T. BLORE

AND

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ON

DEEPWATER: CHARTING A COURSE FOR SAFER WATERS

BEFORE THE

COMMITTEE ON HOMELAND SECURITY

U. S. HOUSE OF REPRESENTATIVES

**SUBCOMMITTEES ON
MANAGEMENT, INVESTIGATIONS, AND OVERSIGHT**

AND

BORDER, MARITIME AND GLOBAL COUNTERTERRORISM

MAY 17, 2007

Introduction

Good afternoon, Chairpersons Carney and Sanchez, and distinguished members of the Subcommittees. It is an honor to be here today to discuss the state of the Integrated Deepwater System, its recent milestones and challenges, and provide you with the Coast Guard's proposed way forward.

It is my goal this morning to provide you the facts related to this program and reassure you of the Coast Guard's absolute commitment to sound stewardship, robust oversight and to review the corrective actions the Coast Guard's is taking to ensure this critical recapitalization program is able to effectively re-outfit our fleet to meet 21st-Century threats and requirements.

Our ability to save lives, prevent and respond to terrorist attacks, interdict drugs and alien smugglers, and protect ports, waterways and natural resources depends on our successful accomplishment of that goal. We have to get this right: the Coast Guard's future readiness depends on it. America depends on it. I echo the commitment of our Commandant, Admiral Allen, to do just that.

Past as Prologue

Before I discuss the current state of Deepwater and the program's way ahead, I ask you to bear with me briefly to consider how we got here. By the mid 1990s, most of our ships and aircraft were approaching the end of their service lives. Our cutter fleet was then, and remains, one of the oldest among the world's naval fleets. Some of our cutters are old enough to be eligible for Social Security! In light of a looming aviation and surface fleet block obsolescence, it wasn't sensible to attempt piecemeal, one-for-one replacement of each class of assets. We also didn't have the capacity in the late 1990's to manage that many projects in parallel.

Because of these anticipated challenges, we knew an innovative approach was required. And because maritime threats were evolving in the post-Cold War environment in which Deepwater was conceived, we knew expectations for maritime security were changing as well, so our asset mix would need to support these dynamic requirements. We determined, therefore, that it would be most cost effective and efficient to acquire a wholly-integrated system of ships, aircraft, sensors and communications systems, or, as it is commonly called, a "system of systems". The idea is based on the concept that the whole is greater than the sum of its parts; all elements combine to generate greater capabilities across the entire system. Given that, our goal is not to replace ships, aircraft, and sensors with more ships, aircraft, and sensors, but to provide the Coast Guard with the *functional capabilities* required to safely achieve mission success.

This wholly-integrated acquisition strategy called for *progressive* modernization, conversion and recapitalization using a mix of new and legacy assets, replacing those that are obsolete, while upgrading existing ones until a new fleet is acquired. This complex strategy, and the fact that the Coast Guard had not built a ship the size of the National Security Cutter for more than three decades, drove our decision to engage the services of a commercial systems

integrator with proven technical expertise in the acquisition of large systems. Following a rigorous, multiple year selection process, the result was our contract with Integrated Coast Guard Systems (ICGS), a joint venture of Lockheed Martin and Northrop Grumman.

Adding to the program's complexity was adoption of an innovative performance-based acquisition strategy. Compared to more traditional methods, performance-based acquisition is designed to promote innovation and spread risk more evenly between government and industry.

Following nearly ten years of planning, beginning in 1993, the Coast Guard moved toward contract award believing that we had addressed many of the concerns likely to arise from this transformational acquisition strategy. However, like most Americans, we never expected the larger challenge that lay ahead for the Coast Guard and the nation in the wake of the terrorist attacks of September 11, 2001. Following the Service's transfer to the Department of Homeland Security in March 2003, we conducted a Performance Gap Analysis, drafted a new Mission Needs Statement, and developed a revised, post-September 11th Implementation Plan to ensure Deepwater capabilities would support new mission sets assigned to the Coast Guard. All of these steps were carried out in full consultation with the Administration and Congress. As Deepwater requirements were expanded in the post-September 11th environment, the program's timeline expanded and its overall projected cost increased from \$17 to \$24 billion.

Where we are Today in Deepwater

Last month, I completed my first year at the helm of the largest acquisition program in Coast Guard history. Five years into this 25 year acquisition we've achieved many successes, but also faced daunting challenges – and indeed learned some lessons the hard way – but I assure you that education has not been wasted. As a result of those lessons learned and with the full support of the Commandant and the Department of Homeland Security (DHS), we are taking aggressive action every day to strengthen program management and execution and to ensure past mistakes will not be repeated.

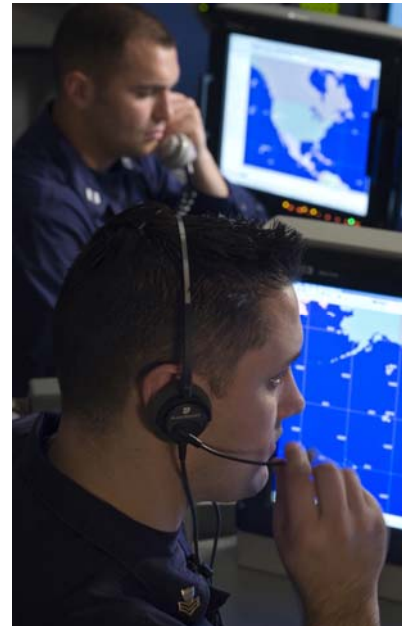
While acknowledging that we need to learn from past mistakes, we also need to leverage off the positive experience of significant recent accomplishments. Deepwater assets are in the fleet today, contributing to the successful execution of an array of Coast Guard missions.

Phase 1 of our three-phase conversion of our workhorse helicopter, the HH65, is on schedule. As of the end of March, all air stations with HH-65 Dolphin helicopters are now flying the "C" model with new Turbomeca Arriel 2C2 engines and upgraded gearboxes, installed as part of our legacy asset modernization program. With a 40 percent power increase and greater reliability, the HH-65C has re-established itself as the deployable mainstay of our helicopter fleet and played an invaluable part during the Coast Guard's response to Hurricane Katrina. And, just last July, a hiker in the Olympic National Forest fell down the



side of a mountain and owes his life to a daring rescue by a well-trained Coast Guard aircrew, flying a newly delivered HH-65C helicopter—recently re-engined as part of the Deepwater program. That rescue would not have been possible without Deepwater.

We have also recently marked crucial shore-based facility milestones. During a ribbon cutting ceremony on March 14, a new Deepwater training facility was dedicated at the Coast Guard's training center in Petaluma, CA. The facility houses high-tech shipboard operation simulators and state-of-the-art radar and electronics systems and will provide critical command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) training for Coast Guard and U.S. Navy crews. And, the Coast Guard Communications Area Master Station Atlantic (CAMSLANT) in Chesapeake, VA is being remodeled and upgraded to support Deepwater's interoperable systems. Specifically, the 22-year old building is being outfitted with High Frequency Automatic Link Establishment (HF-ALE) systems, Automatic Identification Systems (AIS), and a Global Positioning System/Differential Global Positioning System (GPS/DGPS). This new Deepwater-funded equipment will allow CAMSLANT to execute its core mission to maintain and deploy contingency communications and provide command and control support for disaster recovery, special operations, and other emergencies.



Also in late March, the crew of CGC SHERMAN made use of Deepwater-enhanced command and control capabilities while seizing more than 42,000 tons of cocaine from the Motor Vessel GATUN off the coast of Panama. SHERMAN's commanding officer noted that this largest bust in Coast Guard history would not have been possible before the service's high- and medium-endurance cutters were equipped with Deepwater-provided upgraded tracking capabilities and the ability to communicate securely over great distances, which was provided by Deepwater.

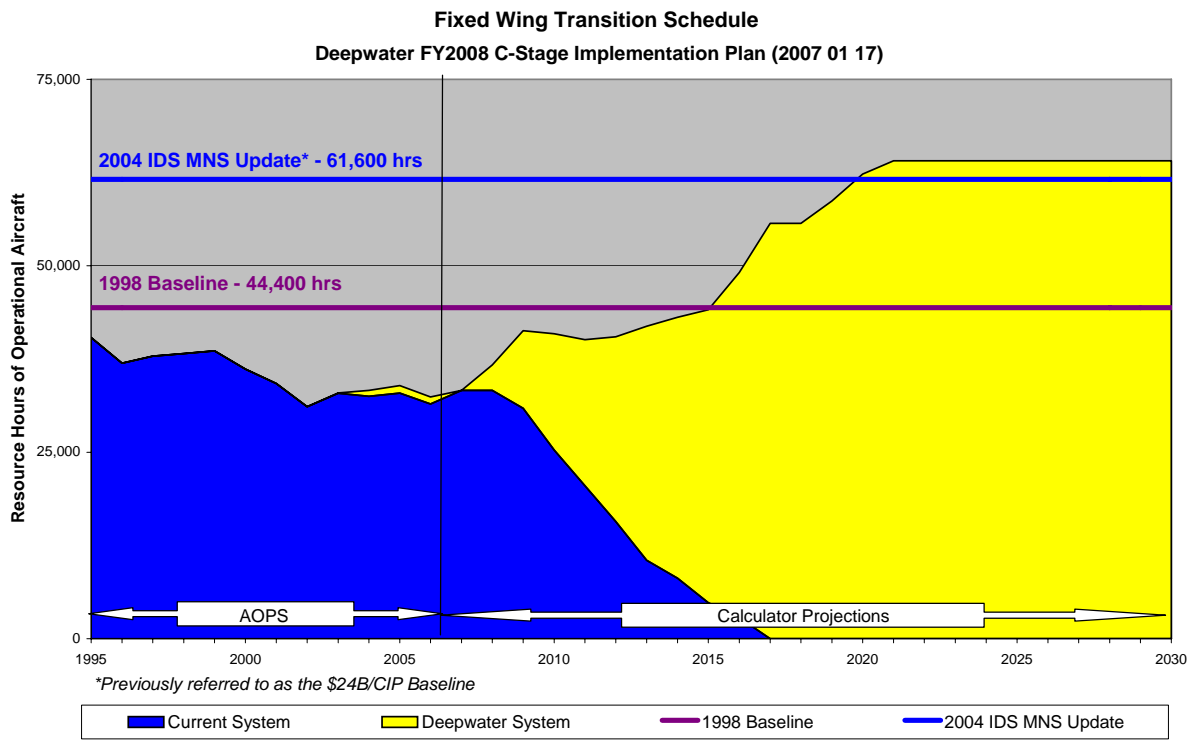
On April 26, 2007, the first 110-foot Island Class patrol boat to enter the Deepwater-funded Mission Effectiveness Project (MEP) – CGC TYBEE – was returned to the fleet following a very successful year-long MEP process. This project includes refurbishing and replacing aging and obsolete equipment on the ships and is improving operational effectiveness across the fleet. The goal of the MEP is to maintain effective missions for legacy cutters and patrol boats until those vessels can be replaced by new and more capable Deepwater assets such as the Offshore Patrol Cutter (OPC) and the Fast Response Cutter (FRC).

This is an exciting time, with two National Security Cutters (NSC) under construction in Mississippi and HC-144A maritime patrol aircraft Nos. 1 and 2—the first new aviation assets acquired under Deepwater—being missionized at the Aviation Repair & Supply Center in North Carolina. Aircraft No. 3 is



expected to be delivered for missionization later this year and Nos. 4 and 5 are already in production. Aircraft Nos. 4 and 5 were contracted for in January 2007 at a cost of approx. \$34.89 million per aircraft. Earlier this month, we put aircraft Nos. 6 thru 8 on contract, at a price of approx. \$33.99 million per aircraft. This is a cost reduction of almost \$900,000 per aircraft between Nos. 4 and 5 and Nos. 6 thru 8. These are but a few examples of the program's progress and results.

These milestones and successes just begin to illustrate the tremendous need for Deepwater. As Deepwater's system of assets continue to be delivered, we'll meet or exceed not just capability requirements, but patrol and response capacity needs as well.



Note 1: Hours reflect contribution of the covert, multi-sensor, surveillance aircraft (MCSA) as part of the Deepwater System. The MCSA is not part of the Deepwater acquisition, but its potential contribution to maritime domain awareness is reflected in this graph.

Room for Reflection

As I indicated earlier, we are committed to benefiting from lessons learned. Obviously, one area where we are very disappointed is the 123-foot patrol boats. Based on initial budget constraints, the conversion of these cutters was planned as a bridging strategy until we could deliver the more capable Fast Response Cutter (FRC). The decision to proceed with these conversions was based on consideration of limited resources, a growing gap in patrol boat hours, and identified risk associated with the conversion design. At the time, the conversion was seen as the lowest risk option given available resources and operational requirements.

But, early hull deformation led the Coast Guard to re-examine the plan for the 123-foot patrol boats and halt conversions in May 2005 at just eight hulls, instead of 46 as originally planned. When repeated efforts to repair the hulls proved unsuccessful and even more significant structural problems surfaced, last November Admiral Allen suspended operation

of the cutters until a comprehensive engineering solution was identified. When a feasible solution couldn't be found, the Commandant announced his decision last month that these eight cutters will be permanently decommissioned. As the Program Executive Officer for Deepwater, I have worked with the Commandant, DHS OIG, GAO, and this Congress to ensure that adequate managerial and oversight changes have been made in this acquisition program to prevent false starts, such as the 123-foot patrol boat program, from being repeated.

I'd also like to take just a moment to discuss the National Security Cutter (NSC). The Inspector General reported his findings earlier this year from an audit of the NSC earlier this year. That report highlighted concerns with our approach to potential fatigue structural integrity issues with the NSC hull. The issue here, which we have communicated to the DHS OIG and which we have been actively addressing for several years, is a question of fatigue life over the course of the cutter's 30-year service life.

I want to be very clear that there has never been a question of crew or ship safety related to the ship's structure, nor have we ever anticipated any operational restrictions related to its design. As you are well aware, we drive our ships hard, so service and fatigue life of new cutters is of critical concern to us. An early Coast Guard review of the design of the NSC indicated that the ship might experience fatigue-level stresses sooner than anticipated. Because we want to ensure that all of our ships meet the service and fatigue life requirements our missions demand, we are implementing changes and enhancements to the design of the NSC.

Some have wondered why we didn't suspend construction of the first NSC when we learned of these concerns. The Coast Guard's decision to continue production of the NSC reflects more than simply the naval engineering perspective. It also encompasses considerations of cost, schedule, and performance. After extensive research and deliberation and with all of these considerations in mind, the Coast Guard decided that the need for enhancements to NSC No. 1 could be effectively addressed by later retrofits and did not justify the schedule and cost risk associated with stopping the production line. These kinds of issues are not unusual in production of a first-in-class vessel, and I believe the decision to move forward was prudent. We will fix NSC No. 1 and 2 during post-delivery availabilities and design the fix into future hulls' production. In fact, through ongoing meetings and negotiations between the Coast Guard and CEOs from Northrop Grumman and Lockheed Martin, we've recently reached agreement on the engineering solution to resolve all fatigue concerns with NSCs No. 3-8.

Moving Beyond

As the Deepwater program has evolved, we have reinvigorated our workforce planning process and continue the effort to increase staff to the appropriate level to allow effective government oversight and ability of the government to perform as the system integrator. I appreciate Congress acting to authorize additional billets for this endeavor. As a direct result of these efforts, the Coast Guard will have 52 full-time government personnel at our Gulf Coast PMRO by the end of this fiscal year. The Navy's Supervisor of Shipbuilding Office (SUPSHIP) also assigned 12 people to our PMRO in Pascagoula, Miss., where they are supporting construction of the NSC at Northrop Grumman Ship Systems. During a trip to

Pascagoula last month, I had a chance to visit with many of these acquisition and technical professionals and I am confident their active oversight of contractor performance during NSC construction will pay dividends.

Obtaining more appropriate staffing levels also means the Coast Guard is able to better respond to contractor requests for deviation and waivers. These requests demand intense scrutiny from the government prior to any action being taken; to facilitate this, we've developed a new Class I Engineering Change Proposal (ECP)/Request for Deviation (RFD)/Request for Waiver (RFW) review process, a recommendation of our DHS OIG. This process requires that, prior to implementation; each ECP/RFD/RFW is reviewed in detail by a board of technical experts and contracting officers, based on pre-determined guidelines. It also mandates thorough documentation of each contractor request, the formal review process, and decision of the Coast Guard in regard to each request. This will facilitate timely and consistent handling of each ECP/RFD/RFW.

The Coast Guard will use the American Bureau of Shipping (ABS) to certify Deepwater equipment and vessels according to High Speed Naval Craft (HSNC) and Naval Vessel rules as appropriate. Specifically, the Coast Guard is working with industry to maximize the use of HSNC standards for our patrol boats and smaller surface assets and Naval Vessel rules for the National Security Cutter and Offshore Patrol Cutter. By implementing this certification expectation, we can ensure that equipment and assets meet requirements and that standards are enforced consistently. There is a growing market today for external rules and standards bodies, and we'll use those rules and bodies to assist with certification in the future. But, the government needs to be the final arbiter of those standards.

Leading Change

The lessons we have are being applied across the program. In fact, these lessons are improving acquisition management throughout the Coast Guard.

The role of the Coast Guard's technical authority has been reaffirmed and the dynamic relationship between the technical authority and acquisition programs has been strengthened. This means that for all vessel designs and design changes, the Coast Guard will not proceed with contract award or contract changes without agreement from the technical authority. Fatigue enhancements to the National Security Cutter are an illustration of this constructive relationship. While contractors follow direction from program and contracting officers, those officers don't give direction until first consulting and reaching agreement with the Coast Guard technical authority.

We are also improving the effectiveness of our Integrated Product Teams (IPTs). These teams can serve a useful function by enabling regular oversight of the contractor and by providing an avenue for resolution of non-major technical concerns or, where concerns persist, an avenue for them to be raised to program managers and contracting officers. Our IPTs were previously chaired by Integrated Coast Guard Systems (ICGS) and haven't always functioned as envisioned. That needed to change. So, based on direction to all program managers, each IPT is now led by a government employee and IPT charters are being examined to determine if/where additional changes should be made.

The complexity of the Deepwater program and the diverse missions of planned assets makes design review a crucial element of the successful execution of this program. To ensure that designs and assets will meet Coast Guard needs, we have increased our use of independent, third-party review and analysis for all new starts or substantial design changes. Inherent in this initiative is a renewed commitment to utilize full business case analyses for all new acquisition decisions to instill confidence that we are building and buying the right tools for our Coast Guard men and women and at best value for taxpayers.

Of particular note, we recently contracted with the Defense Acquisition University (DAU) to conduct a “quick-look” review of Deepwater to examine the program’s key management and technical processes, performance-based acquisition strategy, organizational structure and our contract with ICGS. The Coast Guard’s Research and Development Center has also completed a study of the planned Deepwater Vertical-Launch Unmanned Aerial Vehicle; in the study’s second phase, we are re-examining the way ahead for unmanned vehicles based on recommendations from that analysis. And, we’ve initiated an independent review of workload and workforce management issues. Based on findings and recommendations from these and other independent reviews, we will make “course corrections” where needed in order to guarantee successful execution of the Deepwater program.

Our ongoing and positive relationship with the Naval Sea and Air Systems Commands have provided the Coast Guard with valuable third party assessments. It is the preference of the Coast Guard that future third party assessments be kept within the government whenever possible. Specifically, NAVSEA’s Carderock Surface Warfare Center has provided us with valuable design reviews and recommendations. As funding allows, we will continue this exchange to the maximum extent possible.

Our partnerships and cooperative relationships with the U.S. Navy and others extend beyond third party assessments. The Coast Guard is leveraging sound principles of systems engineering and integration to derive high levels of sub-system and component commonality, improve interoperability with the U.S. Navy and other agencies, and achieve significant cost avoidances and savings. This approach conforms with and directly supports the National Fleet Policy.

As the Program Executive Officer of Deepwater, I have a formalized collaborative partnership with my Navy counterparts in order to identify common systems, technologies and processes for improved interoperability. By incorporating common and interoperable Navy systems into Deepwater assets, the Coast Guard has also avoided paying unnecessary costs.

As examples, the National Security Cutter (NSC) and Off-Shore Patrol Cutter (OPC) will use 75 percent of the Navy’s AEGIS Command and Decision System. Deepwater assets also will incorporate Navy Type/Navy Owned systems, including the 57mm deck gun, selected for major Deepwater cutters and the Navy’s Littoral Combat Ship and DD(X) programs. The Operation Center Consoles on the NSC use 70 percent of the design of the Navy’s Display Systems (AN/UYQ-70). And, by using more than 23,000 lines of software code from the Navy’s Antisubmarine Warfare Improvement Program (AIP) in the CASA Maritime Patrol Aircraft’s command and control systems, we are maximizing the use of mission systems that are installed on more than 95 percent of the world’s maritime surveillance aircraft. The

CASA Maritime Patrol Aircraft will utilize more than 50 percent of the functionality of the Navy's P-3 Aircraft Improvement Program system. For example, the U.S. Navy and Coast Guard personnel routinely train side-by-side at the Coast Guard's training facility in Petaluma, California.

A Consolidated Coast Guard Acquisition Directorate

One of the most significant changes we are making in the Coast Guard's acquisition community is bringing together all acquisition-related activities—traditional programs as well as system-of-system, policy, and research and development—under one organization. Consolidating our acquisition efforts will provide immediate benefits, including better allocation of human capital assets (such as contracting officers and acquisition professionals) along with an integrated “product line” approach to our management of acquisitions, thereby allowing projects to be handled by knowledgeable and experienced personnel with the same linkages to the technical authorities.

Defense Acquisition University's (DAU) Quick Look study report of the Deepwater program concluded that our recently developed *Blueprint for Acquisition Reform* plan, which outlines many of the change management efforts related here, “is comprehensive and responsive to the human capital, organization, process and governance related findings and recommendations.”

Along with our analysis to right-size staffing levels, we have reinvigorated our acquisition training and certification process to ensure that technical and support staff, program managers and contracting officers have the requisite skills and education needed to manage complex acquisitions. Our desired end state is to become the model for mid-sized federal agency acquisition and procurement, in full alignment with the Department of Homeland Security acquisition objectives.

Other Insights

Some insights gained over the past year and during the program's first five years, may not be as intuitive as the need to increase staffing or refine oversight processes. In that vein—and this has particular relevance to the 123-foot patrol boats—we must consider the ever-present tension between the trend in government agencies to seek to purchase Commercial Off-the-Shelf (COTS) equipment and the sometimes conflicting requirement to certify that equipment to federal agency standards. Often, these competing desires cannot be reconciled without making trade-offs from one or the other. The fact is, while COTS equipment is often less expensive, easier to buy and more available, it seldom meets the sometimes very long list of federal agency performance requirements. The practical impact is that contracting officers and program managers are left trying to balance affordability, schedule and risk in meeting contract requirements.

The requirement on the 123-foot patrol boats for low-smoke cabling is one example of this challenge. When this safety-related requirement is pitted against the competing requirement to use COTS equipment in onboard systems, program and contracting officers must consider trade-offs. If COTS equipment contains pre-fabricated circuitry that utilizes non-low smoke cables, the cost to modify that equipment can be very steep— not to mention schedule impacts from such modifications. Often, COTS equipment may even have components that meet

certification standards but that lack manufacturer testing data to the needed level of specificity. Program and contracting officers must thus seek to balance performance, cost, and schedule factors and make decisions based on perceived risk. The federal government needs to balance using COTS equipment and certifying that equipment to all federal agency standards, in order to best serve the public.

We've also learned a great deal about performance-based contracts, especially as they relate to complex acquisitions like a Coast Guard cutter. When Deepwater was developed it was envisioned as a purely performance-based acquisition. The thought was that we'd simply lay out performance requirements of our assets and then allow industry the freedom to design and build assets that met those requirements. What we've found is that this approach doesn't work in our complex system acquisition.

While there may be some elements of performance-based acquisition that we would wish to retain, we have concluded that our Deepwater ship contracts should be much more specification-based. That means the government has a responsibility to establish specifications, including certification requirements, and to not change them mid-stream without good cause. Requirements are dynamic and the need for detailed specification and constant collaboration and oversight from the government is intense. Based on this realization, we're working with industry to redefine future procedures and contract development to ensure more adequate, detailed specification and oversight. In fact, Admiral Allen recently signed a joint letter of strategic intent with the CEOs of Lockheed Martin and Northrop Grumman to encourage further alignment as we move toward the new award term.

This leads me to a final, critical point—one which perhaps seems obvious on the face of it, but which has been brought home to me in more ways over the last 12 months than I can enumerate. *The contract is the key to a successful acquisition.* It's while the contract is being developed and negotiated that the government maintains the greatest influence in the acquisition process. Granted, the government must always be heavily involved in contractor oversight to ensure that assets are designed, constructed and delivered to meet requirements. But, those requirements and specifications must be clearly established within the contract document. In fact, while the contract is the key to a successful acquisition – stable requirements are a key to a successful contract. It is absolutely essential that the contract be precise. Specifications must be clear. Requirements must be documented. Construction parameters must be defined. Expectations must be understood. And swift and appropriate action must be taken to enforce contracts when contractor performance falls short of our expectations.

In Summary

All of the program management changes I have described are positioning the Coast Guard to take on more responsibility as the system integrator for the Deepwater program, and to be sound and effective stewards, regardless of who the integrator is.

In conclusion, I want to assure you we are listening to concerns of the Inspector General, the Government Accountability Office, Congress, and this committee, and are benefiting from their recommendations. We've learned from our past and are making changes to successfully

step out into the future. Open and honest dialogue between the Coast Guard and our stakeholders is essential and we'll continue to advise you of challenges and successes, and to make additional changes where needed.

This is an exciting time for the Coast Guard and for Deepwater. Our past challenges have made us stronger today. All one has to do is look at the operational capabilities already being provided to the fleet to see the tremendous impact Deepwater is making. From the Coast Guard's record drug seizure in March to the enhanced rescue and response capabilities demonstrated in Olympic National Forest and during our response to Hurricane Katrina, Deepwater-upgraded assets are contributing to overall mission success. Deepwater is helping to build a 21st Century Coast Guard. The capabilities and capacity we are delivering will better enable the service to push out and secure our maritime borders and protect Americans all along our shores.

Together, we're going to deliver those capabilities. We are making the changes necessary to propel the program to ultimate success and provide the critical cutters, aircraft and sensors needed to meet our dynamic mission requirements. We are all anxious for positive results. We are on the path to change and I am confident that it is the correct path.

Thank you for the opportunity to testify before you today. I am happy to answer any questions you may have.