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DEPARTMENT OF HOMELAND SECURITY

U. S. COAST GUARD

STATEMENT OF

ADMIRAL THAD W. ALLEN
COMMANDANT

ON THE

INTEGRATED DEEPWATER SYSTEM

BEFORE THE

SUBCOMMITTEE ON COAST GUARD & MARITIME TRANSPORTATION

COMMITTEE ON TRANSPORTATION & INFRASTRUCTURE

U. S. HOUSE OF REPRESENTATIVES

JANUARY 30, 2007

Introduction

Good morning, Mr. Chairman, and distinguished members of the Subcommittee. 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 a look at the way ahead.

Our ability to save lives, interdict drug and alien smugglers, and protect ports, waterways and natural resources depends on our having the best-trained people operating a modern, state-of-the-art fleet. The Deepwater Program has and will continue to provide America with more capable, interoperable assets that will close today's operational gaps and enable the Coast Guard to perform its demanding missions more effectively, efficiently and safely. Deepwater remains my capital priority and I greatly appreciate all that this Subcommittee has done to move the program forward.

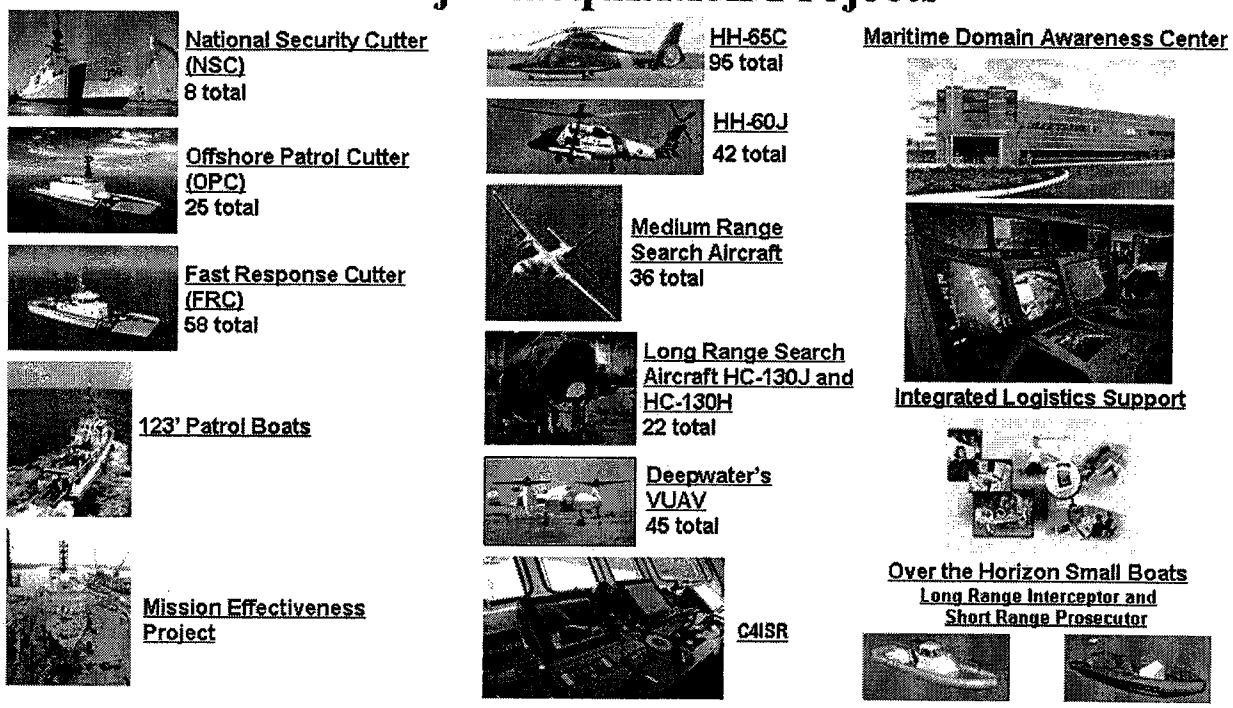
I am also grateful for the opportunity to discuss in detail Deepwater issues recently covered in the national media. Some of the stories spoke factually to program challenges that genuinely merit further attention. It is my goal this morning to provide you the facts and reassure you of my absolute commitment to sound stewardship, robust oversight and the corrective actions I've taken to outfit our fleet to meet 21st-century threats and requirements. We have to get this right: the Coast Guard's future readiness depends on it. America depends on it.

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 block fleet obsolescence, it wasn't sensible to attempt piecemeal, one-for-one replacement of each class of assets. We also didn't have the capacity to manage that many projects in parallel.

Because of anticipated these 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.

Integrated Deepwater System
15 Major Acquisition Projects



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 over three decades, drove our decision to engage the services of a system 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. However, it is still a relatively new discipline, with an accompanying learning curve, that continues to invite appropriate scrutiny from our overseers, including Congress, the Government Accountability Office (GAO) and the Department of Homeland Security Office of Inspector General (OIG).

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 strategy. We understood there would be challenges, but 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-9/11 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 9/11 environment, the program's timeline expanded and its overall projected cost grew from $17 to $24 billion.

Where we are Today in Deepwater

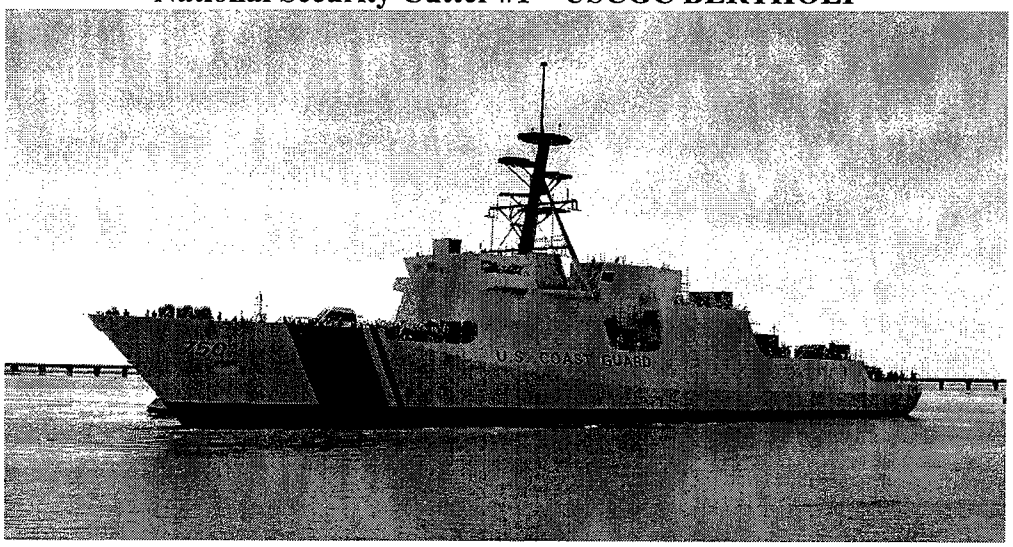
It is important to remember that we are in the early stages of a 25-year acquisition. As is typical, much of the early years of contract execution was focused on design and development work, and we have obligated only about 15 percent of what we project to be the total program cost. However, our Fiscal Year 2007 appropriation of $1.06 billion supports the program's ongoing progress, and I thank you for your continued investment in these critically needed assets that are beginning to make a difference today.

CASA (HC-144A)
Maritime Patrol Aircraft

Recent media coverage has overlooked significant Deepwater accomplishments, including:

- command, control and sensor (C4ISR) upgrades to all 39 medium and high endurance cutters and at Communications Area Master Station Atlantic (CAMSLANT);
- the December 2006 arrival of our first new HC-144A Maritime Patrol Aircraft, currently undergoing installation of mission pallets in Elizabeth City, NC, to be followed shortly by delivery and missionization of the second and third airframes;
- commencement of our HC-130J missionization program, with scheduled first delivery in 2007;
- upcoming ribbon cutting ceremonies for new Deepwater shore facilities, including a surface ship training center in Petaluma, California, and a hangar to house HC-144As in Mobile, Alabama; and
- continuation of the Mission Effectiveness Program for 110' patrol boats, a project funded by Deepwater and managed by the Coast Guard Acquisition Directorate.

National Security Cutter #1 – USCGC BERTHOLF



Additional milestones include the launch and christening last fall of the first of eight planned National Security Cutters, along with the keel authentication ceremony for the second, which fittingly took place on September 11, 2006. These particular achievements in shipbuilding are especially noteworthy in light of the impacts of the 2005 hurricane season when Hurricanes Katrina and Rita came ashore along the Gulf Coast, upending lives, severely damaging shipbuilding facilities, and further challenging the program. Construction of the NSCs continues and we appreciate the efforts of shipyard workers and Coast Guard men and women in keeping production of these important vessels moving forward. I firmly believe the NSC will provide a great contribution to the Coast Guard and the nation.

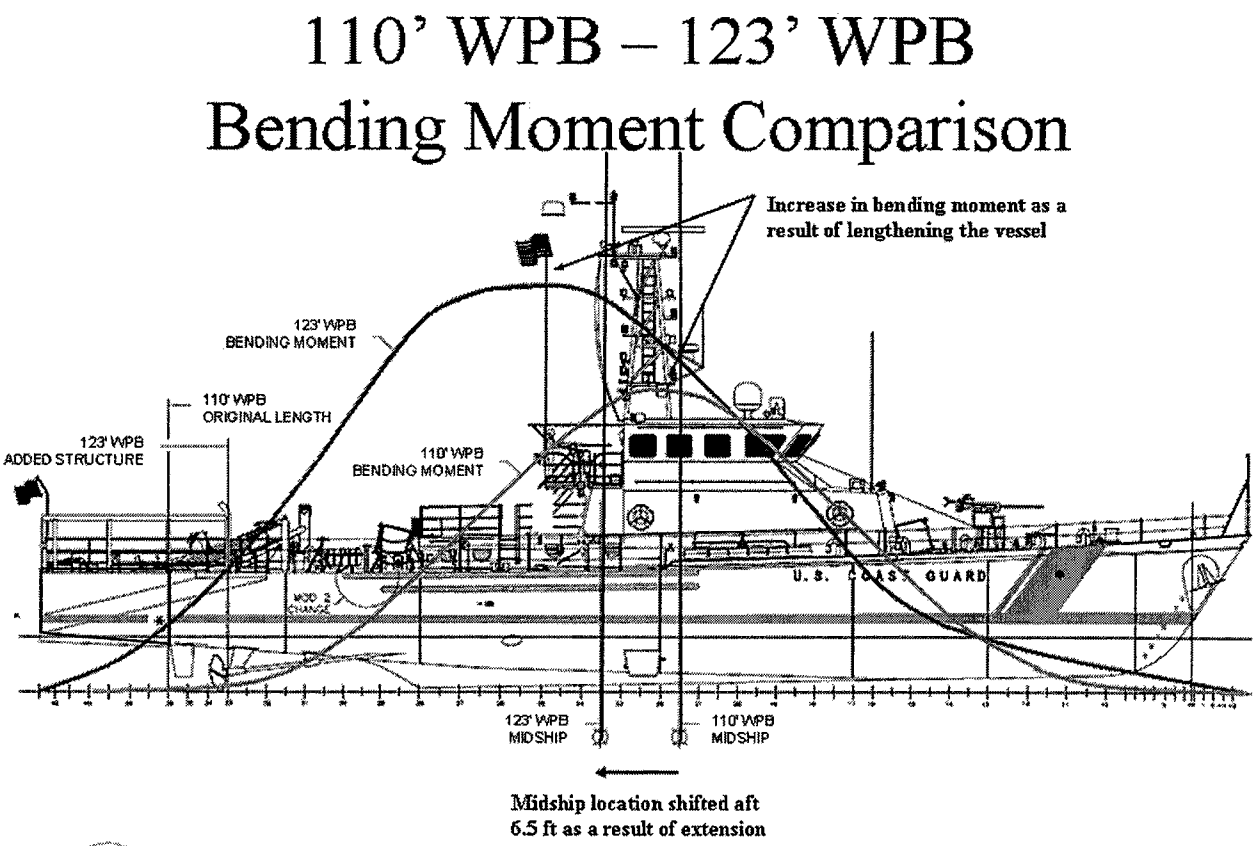
Reengined HH-65C Helicopters

Eighty-four of 95 HH-65 helicopters will have been re-engined and converted to Charlie models by June 2007, enabling operators to routinely perform missions they could not have attempted before, including remaining aloft for longer periods and having the ability to carry greater loads as was demonstrated during Hurricane Katrina rescues. We continue to work with the Navy to achieve synergies between the Navy and Deepwater assets to enhance interoperability, as you have encouraged us to do. The 57mm gun and radar on the National Security Cutter and shared training facilities in Petaluma are examples of cooperation and integration under the National Fleet Policy signed by the Chief of Naval Operations and my predecessor.

Challenges in Program Execution

The innovative Deepwater program is large and complex and I would be remiss if I didn't acknowledge the challenges we have faced in the areas of program management and contract execution. Our performance-based acquisition strategy has created unique contracting and management challenges for the Coast Guard and our industry partners. In my view, some of these come from the need for an integrated Coast Guard, that unifies our technical authority, requirements owner, and our acquirers in a way that allows early and efficient adjudication of problems and ensures transparency so that Coast Guard would be capable of working successfully with ICGS on a simultaneous and complex acquisition of this size. We knew early on that this acquisition would be transformational for our Service, but we have to actively manage that transformation and not allow this acquisition to manage us. We are aggressively tackling and correcting these problems.

And clearly, we have experienced some failures in the Deepwater Program. The planned conversion of 110-foot patrol boats to 123 feet as a bridging strategy until new assets came online to fill the patrol gap has failed. Early on, we experienced hull problems with the first eight patrol boats that had been converted and halted the project in May 2005. Technical problems continued in spite of multiple attempts at repair.



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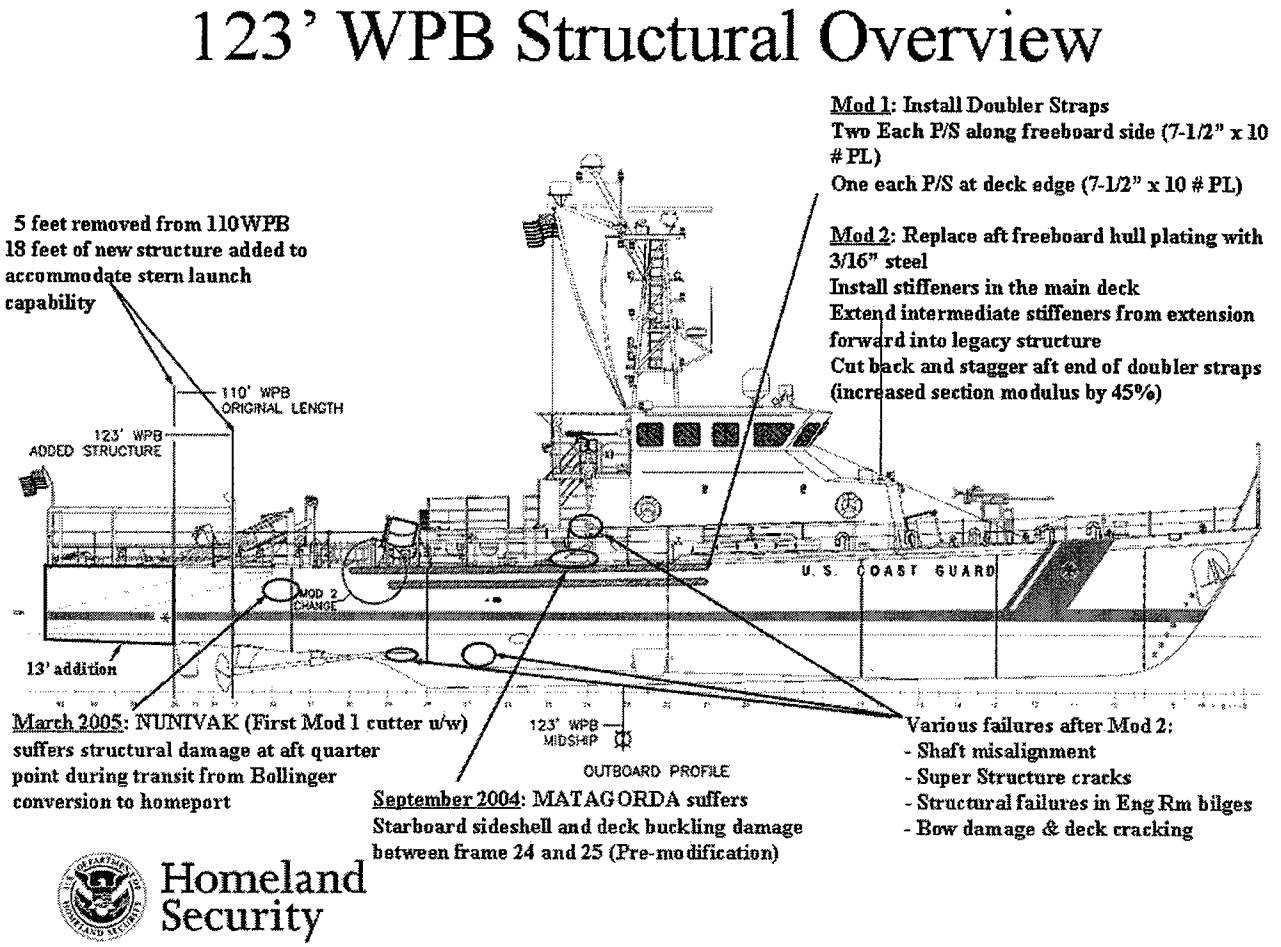
Last November, new problems were discovered and I made the decision to suspend operation of our 123-foot patrol boats until we determine whether a technical fix is possible and economically prudent. Removing these boats from service was a difficult decision and has added to our critical gap in patrol boat hours. I know that this is of great concern to each of you. I assure you that I, too, am concerned – my highest priority is to mitigate and fill this gap as quickly as possible with the most capable assets.



To that end, I have directed my senior staff to aggressively examine and recommend ways we can use current resources to mitigate the loss of the 123-foot patrol boats. In response and as partial mitigation of the impact, we:

- began multi-crewing eight of our existing 110-foot patrol boats;
- increased their operational tempo;
- redeployed and surged assets to areas of greatest need, based upon risk;
- secured continued use of three PC 179s from the Navy;
- are aggressively examining the purchase of four 87-foot patrol boats; and
- are compressing the 110' WPB Mission Effectiveness Project (MEP) schedule to reduce operational impacts.

The Coast Guard will do whatever is necessary to ensure that our maritime borders are secure and we can respond to existing and emergent requirements.

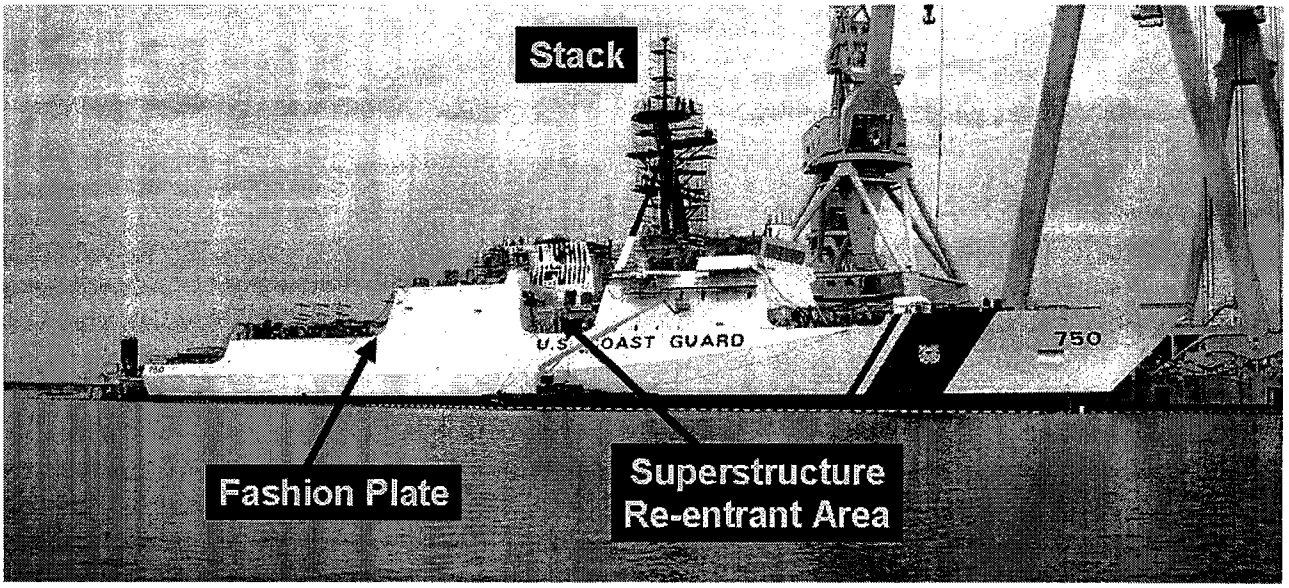
The failure of the 123-foot patrol boat project is unacceptable. I have established a group of legal, contracting, and engineering experts to examine the process at all stages, from beginning design work until we tied up the boats. I have directed this group to establish responsibility and propose measures to prevent similar problems in the future. We will work aggressively with ICGS to reach resolution and put this behind us.

When problems arose with the 123-foot patrol boats, the Coast Guard realized a need for additional patrol boats sooner than the original plan called for. After examining a series of options, we decided to move construction of the FRC forward on the overall Deepwater timeline. However, early tank testing showed technical risks with the initial FRC composite hull design; prudence required suspending the design and development while we considered the way ahead.

Ultimately, we decided to implement a "dual path" approach to acquire a fully capable patrol boat while expediting delivery. First, we took a step back from the initial FRC design to more thoroughly examine both its design and the composite hull technology that the design incorporated. We are completing a bottom-up business case analysis on what we have termed the "FRC-A Class" to provide an "apples to apples" look at composite versus steel hulls. Results from this analysis should be available the next month. Additionally, we had a technology readiness assessment performed to review critical technology elements associated with a composite-hulled design. Initial findings from this assessment indicate that necessary critical technology elements do not yet support immediate production of a composite-hulled patrol boat.

Clearly with this design review, the FRC-A Class path doesn't get boats into the fleet as quickly as needed. As an interim solution, the Coast Guard is simultaneously working to acquire a "parent craft" design based on a vessel already in operation; one that will require minimal modifications to meet our basic mission requirements. We call this our Replacement Patrol Boat or "FRC-B Class." After a good, hard look at the market to determine whether adequate boats exist to support a parent craft approach, we issued a Request for Proposal for such a vessel to ICGS. We expect a design proposal no later than March 31st of this year that will support delivery of the first FRC-B Class in the first half of FY 2010 and will incentivize schedule where possible.

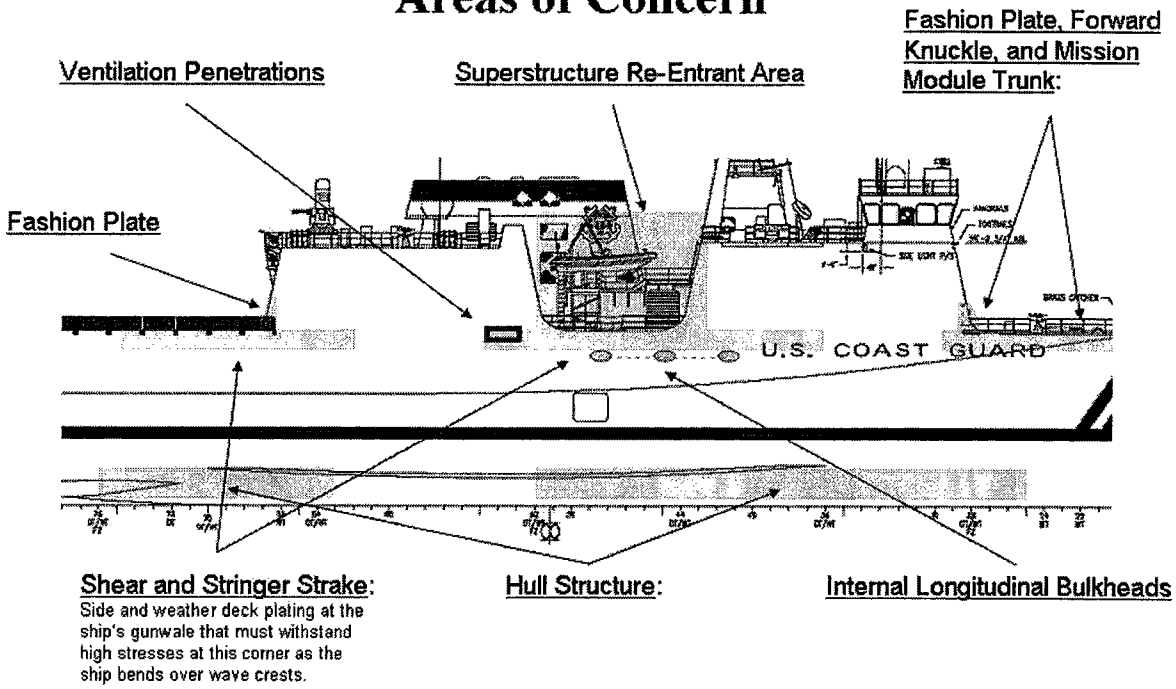
NSC Security Cutter (NSC)



Turning to the National Security Cutter (NSC), I would like to clarify recent reports of structural problems. The DHS OIG recently concluded an audit of the NSC which highlighted concerns with our approach to potential structural integrity issues with the NSC hull. The issue here, which we have communicated to 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. There has never been a question of 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.

NSC Inadequate Fatigue Life Confirmed by Fatigue Analysis Spring 2006 Areas of Concern



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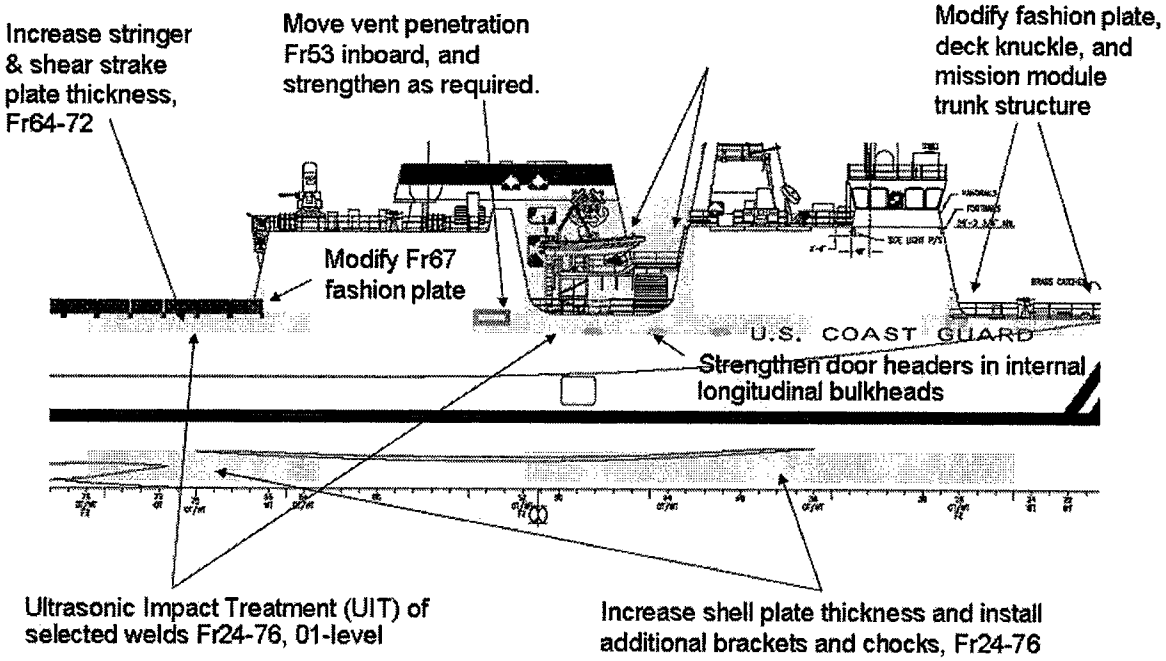
Some have wondered why we didn't suspend construction of the first NSC when we learned of these concerns. The Coast Guard's decisions to continue production of the NSC reflect more than simply the naval engineering perspective. They also encompass considerations of cost, schedule, and performance. After extensive research and deliberation and with all of these considerations in mind, the Coast Guard decided that the need for enhancements to NSC #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 #1 and 2 and design the fix into future hulls' production.

NSC Hulls 3-8 Structural Enhancements



NSC Hulls 1 & 2 will be retrofitted during first drydock availability

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To minimize future delays and disruption resulting from these kinds of design and technical concerns, I:

- reaffirmed in writing the role of the Coast Guard's chief engineer as the technical authority for all acquisition projects;
- directed independent, third-party design reviews as new assets are developed or major modifications to assets are contemplated; and
- am cultivating a more robust relationship with the Naval Sea and Air Systems Commands to leverage outside technical expertise.

We've learned from this experience. Adjudication of technical concerns within the Coast Guard could have been accomplished more efficiently. Existing organizational barriers made it harder for us to jointly address concerns and develop mutually acceptable solutions. We also could have been more proactive in informing Congress–and this Subcommittee–about fatigue concerns. One of my axioms is that "transparency of information breeds self-correcting behavior;" I assure you that as we move forward that transparency will be my watchword.

The Way Ahead

The Deepwater Program Executive Officer, Rear Admiral Gary Blore, has already undertaken a number of independent reviews, including the comprehensive business case analysis and technology readiness assessment for the FRC-A Class just mentioned. We have contracted with Defense Acquisition University 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 government/industry "partnership" contract. The USCG Research and Development Center is conducting a study and will provide recommendations for the way ahead on the planned Deepwater Vertical-Launch Unmanned Aerial Vehicle (VUAV), and we've initiated an independent review of workload and workforce management issues. Based on these findings and recommendations, we will make "course corrections" where needed in order to lead an efficient organization and guarantee successful execution of the Deepwater Program.

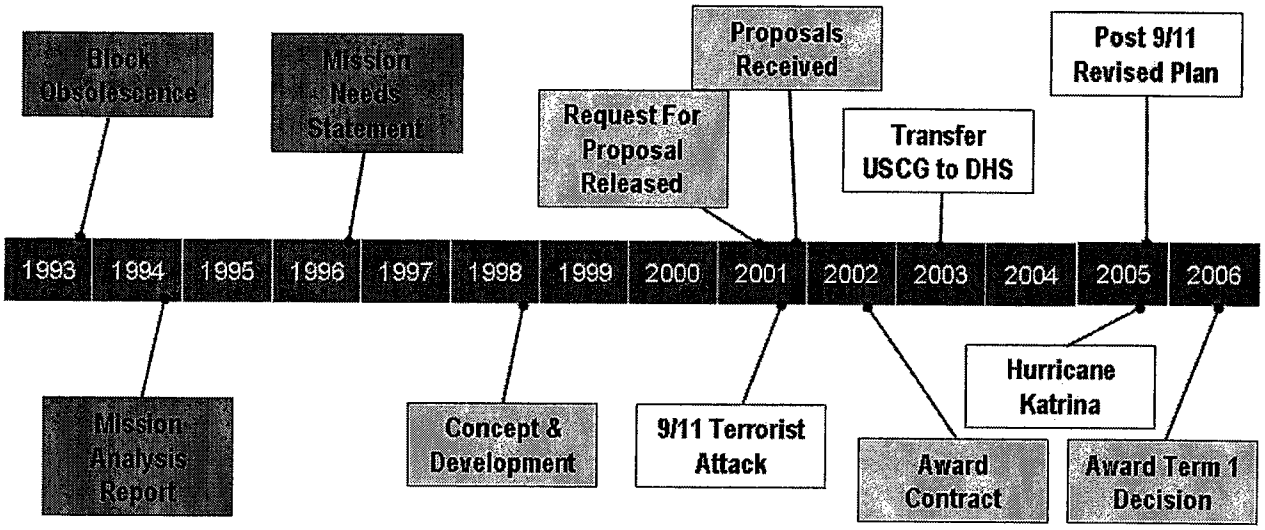
As I mentioned earlier, many of the challenges within the Deepwater Program stem from the lack of an integrated Coast Guard acquisition program to manage this system-of-systems acquisition, as well as to conduct effective of oversight to Integrated Coast Guard Systems. In the coming months, you will see significant changes inside the Coast Guard's acquisition directorate to bring all acquisition efforts - traditional as well as system-of-systems - under one organization. Rear Admiral Blore will become the Coast Guard's Chief Acquisition Officer, with responsibility over all procurement projects. The Program Executive Officer for Deepwater will work within the new organization. I have asked Rear Admiral Ron Rabago, a naval engineer, former Commanding Officer of the Coast Guard Yard, and a technical expert on naval engineering issues to take Deepwater's "helm." Consolidating our acquisition efforts will provide immediate benefits, including better allocation of contracting officers and acquisition professionals, and an integrated product line approach to our management of acquisitions, thereby allowing projects to be handled by the same people, with the same expertise and the same linkages to the technical authorities.

Additional efforts are underway within Deepwater and the Coast Guard to develop more appropriate staffing in order to efficiently obligate program funding and ensure successful delivery of needed assets to the fleet. We're reinvigorating our acquisition training and certification process to ensure that Deepwater staff, program managers and contracting officers have the requisite skills and education needed to manage this complex program. Our desired end state is to become the model for mid-sized federal agency acquisition and procurement.

Cost Change and Contractor Oversight

In discussing these challenges and my actions to address them, I need to mention two concerns raised in recent media coverage of the Deepwater program: the first is cost growth, the second is contract oversight. Much of what's been reported in the press as "cost overruns" simply does not tell the full story. There is obvious truth to claims of programmatic cost increases. As noted, the original Deepwater plan was estimated to cost $17 billion and now we're projecting a $24 billion cost over 25 years. However, it is imperative to understand that the main driver of these cost increases was the complete revision of the original plan to meet post 9/11 mission requirements. New missions meant that we needed more capable assets which cost more to acquire and build.

Deepwater History/Timeline



In addition to improved mission capabilities, Hurricanes Katrina and Rita hit the Gulf Coast shipyard industry hard during production of the first National Security Cutter, flooding the hull and causing extensive damage to the facility. The impacts to industry—even just in terms of rebuilding a skilled, sufficient workforce—should not be underestimated. The tragedy was real (I can personally attest to this) and contributed to cost increases and some schedule slippage for the cutter. That these impacts were not greater speaks volumes about the dedication of the shipbuilding industry and its employees along the Gulf Coast, and to the support of this Subcommittee in providing supplemental funding.

Of course, we must remain vigilant regarding cost growth, but we also know empirically that rising costs are an economic fact in shipbuilding, for a variety of reasons that are beyond our complete ability to control. However, I am committed to working with industry to develop and promote cost reduction measures and am personally engaged with the CEO's of Lockheed Martin and Northrop Grumman regarding my concerns.

I've also read that the Coast Guard is not in control of the Deepwater Program; that we've somehow abrogated our oversight responsibilities and handed industry the "keys to the vault." That is not true. The Coast Guard has been and remains fully involved in the management of this program and has made all final and critical decisions. When appropriate, the issues are briefed all the way up the chain of command to me and I make the decision myself. And following recommendations from DHS auditors, we have taken steps to ensure that we accurately and thoroughly document such decisions for future reference.

We've redefined our award term and award fee criteria, making them more objective in order to improve contractor performance. As resources allow, the Coast Guard will assume greater responsibility as the system integrator, a role we now feel better positioned to take on.

Industry is on board with these improvements in program management. On 19 January 2007, I met with Lockheed Martin CEO Robert Stevens and Northrop Grumman CEO Ronald Sugar to discuss near and long-term objectives and goals for Deepwater. During the two-hour meeting at Coast Guard headquarters, we focused on the most important issues related to Deepwater, including recent Coast Guard initiatives to strengthen program management and oversight--such as technical authority designation, use of independent (third party) assessments, and consolidation of Coast Guard acquisition activities under one directorate. We also discussed ways to capitalize on proven, first-article Deepwater successes, to sustain momentum in recapitalizing the Coast Guard through the Deepwater program, and determine the most viable way forward in resolving outstanding challenges associated with some projects within Deepwater.

It is critical that the senior leadership in each of our organizations meet regularly to be informed of the progress of this program so we can provide executive level oversight at all times, and specific direction when warranted. As a result, I am personally committed to doing all that I can to make this a successful starting point for further improvement in both the performance and relationships that exist within the Deepwater program, which is so vital to Coast Guard readiness.

We're on the Path to Change

In conclusion, we have learned some hard lessons and are implementing recommendations from the GAO and OIG to keep Deepwater moving forward. We are making significant progress and outfitting our fleet to meet 21st century threats and requirements.

I am confident the NSC is on the correct course, I'm convinced our FRC "dual path" approach is the best and fastest way to address the patrol boat gap, and I'm pleased that our Deepwater aviation assets are already making real contributions within the fleet. I look forward to the delivery of additional assets and the operational capacity they will bring. They will close the existing aircraft and patrol boat gaps so that we can best protect our maritime borders and tend to the nation's business at sea.

I know you're anxious for results; I am too, and I assure you nobody is as anxious as the men and women of the Coast Guard. We are on the path to change and we will not stop until Coast Guard has the tools it needs to protect America.

I am the Commandant of the Coast Guard, I am responsible, I will do this right.

Thank you for the opportunity to testify before you today and for all you do for Coast Guard men and women. I'm happy to answer any questions you may have.